

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:

★Is There A (757) Doctor On Board?

★CAA UK publishes Aircraft maintenance incident analysis 1996-2006

★NTSB Delivers 2008 Annual Report to Congress

★Nuts and Bolts Newsletter

★Baggage handler to jail for embezzlement

★The 52nd Annual Air Transport Association (ATA) Non-Destructive Testing (NDT) Forum

★Penlight

★Safety Talks Keep Your Workers Involved

★ And Much More!

Is There A (757) Doctor On Board?

Vacationing **Mechanic** Prevents 8 Hour Delay

When a Thomas Cook Airline 757-200 experienced a mechanical difficulty departing Menorca, Spain, passengers were told to expect an **8 hour delay** while a mechanic was flown in from the Manchester, England. But instead, **a qualified mechanic** who happened to be one of the passengers identified himself to the crew, and asked if they wanted him to look at the problem.

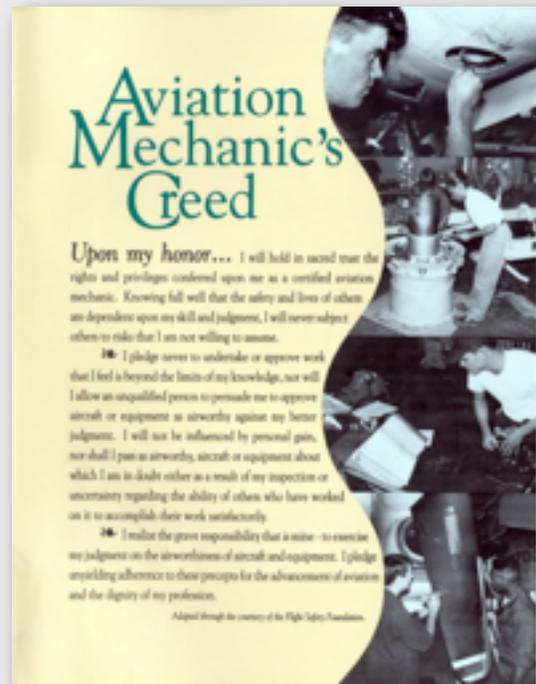
After **thoroughly checking his credentials**, he was a mechanic for Thomson Airways, which has a reciprocal maintenance agreement with Thomas Cook, was allowed to make the repairs and the plane got on it's way, landing in Glasgow only 35 minutes late.

The BBC reports that the mechanic, who was not identified, received a round of applause from the passengers when he came back on board. Fellow passenger Kieth Lomax told the news service "A stewardess told us there was **an engineer** on board and they were checking out to see if he could work on it. He was obviously successful. It was reassuring to know the person who had fixed it was still on the airplane. What are the odds of something like that happening?"

Thomson Airways managing director Chris Browne, said she was "delighted" that one of the company's **engineers** was able to help, "even when the flight was that of a competitor".

She added: "This kind of initiative exemplifies Thomson's company philosophy of exceeding customer's expectations and it makes all of the team at Thomson Airways extremely proud."

A spokeswoman for Thomas Cook said **strict procedures were followed** to be sure the man was qualified to work on the aircraft. "We checked his



license and verified he was who he said he was, and he was able to fix the problem to avoid the delay. We are very grateful that he was on the flight that day."

CAA UK publishes Aircraft maintenance incident analysis 1996-2006

The objective of the CAA U.K. study was to analyze a selection of **related events** on jet aircraft above 5,700 kg MTOW, captured and stored under the requirements of the CAA's Mandatory Occurrence Reporting (MOR) scheme to **identify trends, themes and common causes or factors**

A total of **3,982 maintenance related MORs** for the period January 1996 to December 2006 was studied. In the results, **just over half** of the occurrences analyzed were attributed to incorrect maintenance actions, a quarter to **ineffective maintenance control and a fifth to incomplete maintenance.**

The data showed that the vast majority of MORs were related to ATA Chapter 25 (Equipment and Furnishings), **escape slides in particular.** (CAA)

Report: http://www.caa.co.uk/docs/33/2009_05.pdf



NTSB Delivers 2008 Annual Report to Congress

The National Transportation Safety Board today released its annual report Congress, providing a summary of accident investigations and **safety recommendations** in the past calendar year. 2008 highlights include:

19 major accident investigations, including 7 aviation, 3 highway, 3 marine, 4 rail, and 2



pipeline

221 regional accident investigations, including 206 aviation, 7 highway, 4 marine, and 4 rail

18 international aviation accident investigations in which support was provided in accordance with international treaty

34 major reports and accident briefs adopted, including 13 aviation, 7 highway, 3 marine, 10 rail and 1 pipeline

129 safety recommendations issued

67 safety recommendations closed

"The calendar year 2008 was an extremely active one" remarked Acting Chairman Mark V. Rosenker, "as Board staff traveled to accident sites all over the U.S. involving every mode of transportation, lending their expertise and investigative skills." Rosenker continued, "We also completed a number of significant accident investigations, including the August 2007 collapse of the Minneapolis I-35W bridge, and issued numerous safety recommendations in our continued quest to facilitate improvements in transportation safety throughout the entire nation." Rosenker concluded, "I am especially pleased that the Partnership for Public Service rated the NTSB as one of the top ten federal government workplaces in its 2009 rankings, as a clear indication of the satisfaction all of us here at the Board receive from the important work we do here every day."

The 2008 report includes several new sections, including a review of agency accomplishments in the areas of international outreach, information technology, and planning and performance. The 2008 report also includes enhanced graphics, maps and statistical charts to provide readers with greater detail and clarity on all Board activities.

A copy of the 2008 Annual Report to Congress may be found at www.nts.gov/publictn/2009/SPC0901.htm.

Nuts and Bolts Newsletter

Notice Number: NOTC1745 Nuts and Bolts Newsletter 09-02 has arrived.

You may also visit FAASafety.gov to obtain this issue and past issues by linking from Maintenance Hangar on left, Toolbox Tab, Nuts & Bolts Newsletter link.

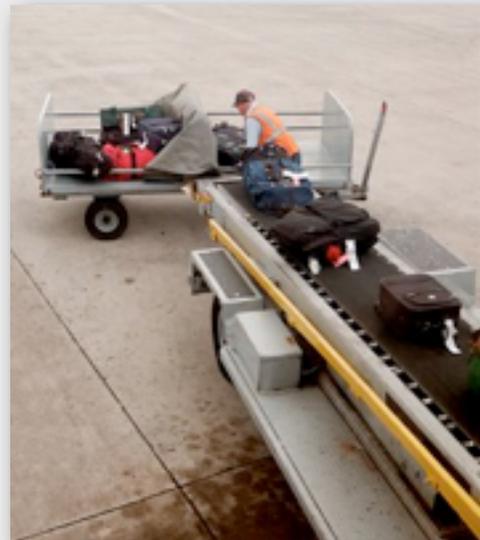


Follow the link https://www.faasafety.gov/files/notices/2009/Jul/Nuts_and_Bolts_Issue_09-02.pdf

Baggage handler to jail for embezzlement

One of three baggage handlers **accused of stealing** items from luggage at San Francisco International Airport — including a retired police sergeant's custom-made weapon — was sentenced Friday to 90 days jail after pleading no contest to embezzlement. The trio were arrested last fall after a retired San Francisco police sergeant reported having his custom gun stolen out of his checked baggage. On Sept. 10, Delta Airlines' security, airport police and the Sheriff's Office set up a **series of controlled bags** on flights to New York. One held a video game system and an Apple computer. Another had a gold watch and foreign currency. After the items turned up missing, authorities executed search warrants on the defendants who were employed by Servisair baggage company.

Authorities reported finding the money, game system and watch in a workers locker and the gun in his home. The laptop computer was



reportedly found in another home although the employee was not working at the time of the thefts.

The 52nd Annual Air Transport Association (ATA) Non-Destructive Testing (NDT) Forum

ATA is proud to host the **52nd Annual NDT Forum** in Atlanta, Georgia on Sept. 21-24, 2009 at the Westin Peachtree Plaza in downtown Atlanta. The ATA NDT Forum annually presents NDT developments specific to the aviation industry. **Aviation professionals** from around the world are invited. The forum provides excellent opportunities to share knowledge, facilitate business and network with peers and experts in the NDT profession.

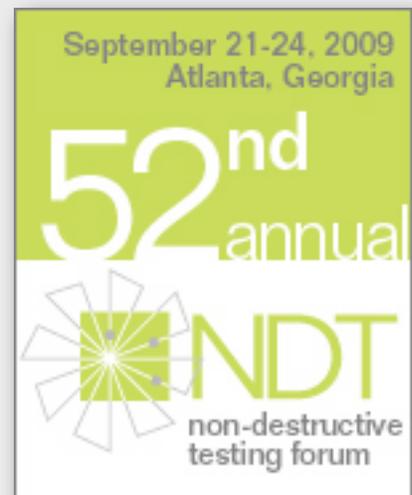
ATA is excited to have as the keynote speaker, Mr. Tony Charaf, President of Delta TechOps.

Mr. Charaf is responsible for all maintenance, engineering, and the MRO business for Delta Air Lines Worldwide. He joined Delta in 1996 as Director of Engine Maintenance. He became Senior Vice President - Delta Air Logistics in September 2000, returned to TechOps in August of 2004 as Senior Vice President and was named President Delta TechOps in March of 2008.

Mr. Charaf understands first-hand, the challenges airlines and MROs face in today's business climate, and will no doubt share his wealth of wisdom and knowledge with the Forum audience.

For all the latest information on the Forum, including registration please visit:

<http://www.airlines.org/operationsandsafety/events/2009+NDT+Forum.htm>



Penlight

Maxxeon Inc. offers a virtually unbreakable WorkStar 220 penlight-style light. It uses the HPLighting Rambo LED to provide up to 70 lumens of light with a life expectancy of more than 50,000 hours. The penlight is six inches long and weighs 1 ounce. The body is constructed from T6 anodized aluminum and the joints are O-ring sealed to prevent contamination.



<http://www.maxxeon.com/>

Safety Talks Keep Your Workers Involved

While **tens of thousands of workers are killed and injured** each year, many believe these incidents “just happen”. Well, **they don't “just happen”**. Usually, an **error** that is within the control of one or more people is responsible for what happened. Often, **several errors** take place at the same time for an injury or fatality to occur.

Eliminating those errors, learning to recognize hazards and how to deal with them, planning a job properly, avoiding haste and shortcuts ... these are some of the important reasons **to hold safety meetings**.

For the person charged with holding these meetings, a big challenge is to encourage participation in both **body and spirit**. It's one thing to simply show up and another to actually get involved. Your crew needs to not only understand the need to work safely but to be enthusiastic about doing so.



Regular safety talks should be seen as a great way for employees to communicate any ideas or concerns they may have. They should know that by not participating, chances are their ideas or concerns will never be heard - and that their contribution may very well **save a co-worker's life or even their own.**

Top 10 Ways to Keep Your Young Workers Safe

Young workers. They are the lifeblood of the workplace and the most likely all **workers to be injured** on the job.

- 1. Get acquainted with your new recruits before training begins. Take a relaxed tour of the workplace and introduce trainees to coworkers and key people including the health and safety manager.**
- 2. Have new and young workers shadow a more experienced worker to learn from watching others. Provide new workers with a **mentor** they can bring their questions and concerns to.**
- 3. Don't mistake silence for quiet understanding. Few young workers will voluntarily ask questions or seek clarification so it is your job to pull those questions from them.**
- 4. Encourage and reward questions from new workers, making it clear that feedback from new and young workers is always valued.**
- 5. Vary your instructional techniques to ensure all workers absorb your message. People learn in different ways so it is important to do more than simply show and tell. Ask workers to demonstrate what they've learned or to provide a verbal or written explanation.**
- 6. Explain why specific procedures are in place. Workers who understand the rationale behind a policy or procedure are more likely to observe it.**
- 7. **Lead by example.** Your actions must match your words every time.**
- 8. Make yourself available to answer questions before, during and after training.**



9. Provide examples of unsafe equipment and work conditions and explain why it is important workers report safety concerns to you or another supervisor.

10. Start all over with your training when a young worker returns to the job for a second summer. The workplace may have changed, and your young employee has had most of a year to forget everything you taught him in 2008.

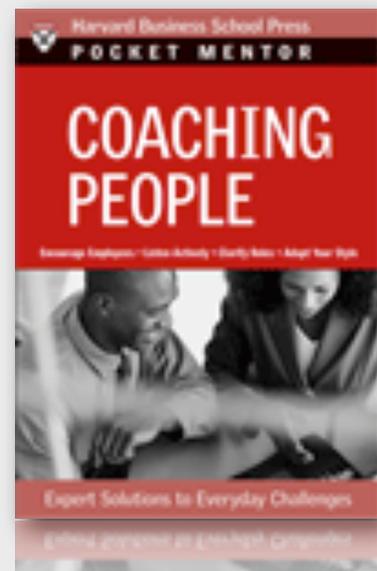
Coaching People (Pocket Mentor Series)

Coaching is the interactive process of guiding others towards achieving new skills and knowledge. Effective managers coach employees and even to **improve individual and team performance**. Order this concise, practical guide to improve employee encouragement, active listening, and role clarification.

Description:

The Pocket Mentor Series offers immediate solutions to common challenges managers face on the job every day. Each book in the series is packed with handy tools, self-tests, and real life examples to help you identify your strengths and weaknesses and hone critical skills. Whether you're at your desk, in a meeting, or on the road, these portable guides enable you to tackle the daily demands of your work with greater speed, savvy, and effectiveness.

All managers engage in some kind of coaching relationship with direct reports and other people in their organizations. An **effective manager understands the importance of coaching** in helping others improve their performance. Though similar to evaluating performance or even giving feedback, the act--and art--of coaching is not the same. Coaching is a more interactive process of developing and guiding others in achieving new skills and knowledge. Concise, user friendly, and packed with expert advice and tools, this portable guide helps managers **improve the performance of their people**. Learn to encourage employees, listen actively, clarify roles, and adapt your style.



http://harvardbusinessonline.hbsp.harvard.edu/b02/en/common/item_detail.jhtml?id=13273&cm_mmc=hbd_-_Syndication_-_SmartBriefs_-2008&requestid=116337

Drowsy Driving: Detection and Prevention

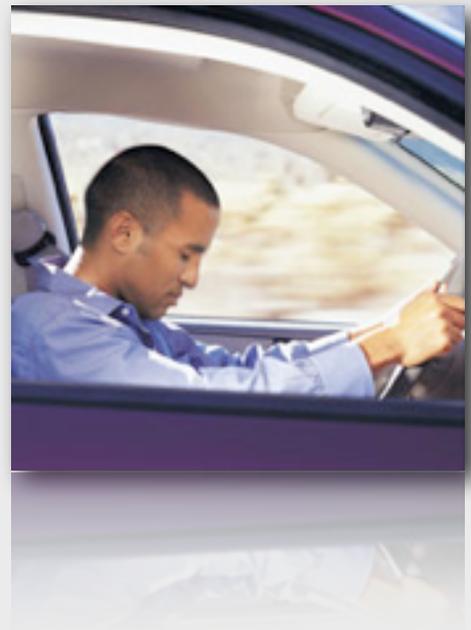
How to Tell if You Are "Driving While Drowsy" Here are some signs should tell a driver to stop and rest:

- * Difficulty focusing, frequent blinking, or heavy eyelids* Daydreaming; wandering/ disconnected thoughts
- * Trouble remembering the last few miles driven; missing exits or traffic sign
- * Yawning repeatedly or rubbing your eyes
- * Trouble keeping your head up
- * Drifting from your lane, tailgating, or hitting a shoulder rumble strip
- * Feeling restless and irritable

Are You at Risk?

Before you drive, check to see if you are:

- * Sleep-deprived or fatigued (6 hours of sleep or less triples your risk)
- * Suffering from sleep loss (insomnia), poor quality sleep, or a sleep debt
- * Driving long distances without proper rest breaks
- * Driving through the night, mid-afternoon or when you would normally be asleep
- * Taking sedating medications (antidepressants, cold tablets, antihistamines)
- * Working more than 60 hours a week (increases your risk by 40%)
- * Working more than one job and your main job involves shift work
- * Drinking even small amounts of alcohol
- * Driving alone or on a long, rural, dark or boring road



Specific At-Risk Groups

The risk of having a crash due to drowsy driving is not uniformly distributed across the population. Research has identified young males, **shift workers**, commercial drivers and people with untreated sleep disorders or with short-term or chronic sleep deprivation as being at increased risk for having a fall-asleep crash.

Young people—especially males under 25 years old.

Shift workers and people with long work hours— working the night shift increases your risk by nearly six times. Rotating-shift workers and people working more than 60 hours a week need to be particularly careful.

Commercial drivers—especially long-haul drivers. At least 15% of all heavy truck crashes involve fatigue.

People with undiagnosed or untreated disorders—People with untreated obstructive sleep apnea have been shown to have up to a seven times increased risk of falling asleep at the wheel.

Business travelers—who spend many hours driving or may be jet lagged

Adequate Sleep and Planning

Before hitting the road, drivers should:

- * Get a good night's sleep. While this varies from individual to individual, sleep experts recommend between 7-9 hours of sleep per night for adults and 8 1/2-9 1/2 for teens.
- * Plan to drive long trips with a companion. Passengers can help look for early warning signs of fatigue or switch drivers when needed. Passengers should stay awake to talk to the driver.
- * Schedule regular stops, every 100 miles or two hours.
- * Avoid alcohol and medications (over-the-counter and prescribed) that may impair performance. Alcohol interacts with fatigue, increasing its effects — just like drinking on an empty stomach.
- * Consult their physicians or a local sleep disorders center for diagnosis and treatment if they suffer frequent daytime sleepiness, often have difficulty sleeping at night, and/or snore loudly every night.

Preventing Drowsy Driving

Here are some suggestions

- * Take a 15 to 20-minute nap. More than 20 minutes can make you groggy for at

least five minutes after awakening.

* Consume the equivalent of two cups of coffee. Caffeine is available in various forms (e.g. soft drinks, energy drinks, coffee, tea, chewing gum, tablets) and amounts; remember, caffeine takes about 30 minutes to enter the blood stream and will not greatly affect those who regularly consume it. For best results, try taking caffeine and then a short nap to get the benefits of both.

Fooling your body clock

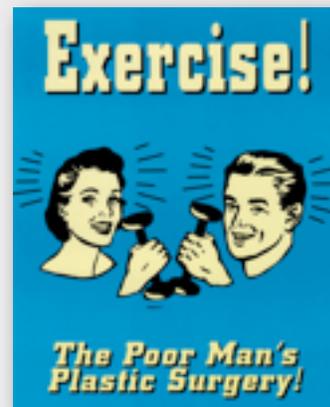
Jet lag can last for days, ruining a vacation and turning a business trip into. Researchers working with mice say they have found a quick way of **the body clock: starvation**. When your body is deprived of its usual meals at its usual times, your internal clock goes into pause mode, waiting for instructions. When you eat your next meal, it starts up again, with the assumption it's now breakfast time.

Researchers Clifford Saper of Harvard Medical School tells *BBCnews.com* that 'a period of fasting with no food at all **for about 16 hours** is enough to engage this new clock. When traveling, he suggests that "simply avoiding any food on the plane, and then eating as soon as you land, should help you to adjust and avoid some of the uncomfortable feelings of jet lag."



Life Philosophy

If you keep all moving parts **moving** and feed yourself the right **fuel**, the body can do **amazing things**.



Picture This!

If this ladder topples, what's the worst that can happen? Perhaps a twisted ankle? Some sore ribs? In reality, a fall from this height can easily **be fatal** or it can cause debilitating injuries. This photo was snapped by an occupational safety and health inspector.

