

# Aviation Human Factors Industry News

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

Hello all,

In this weeks edition of *Aviation Human Factors Industry News* you will read the following stories:

- ★ Notifying key personnel of imminent lightning strikes
- ★ Cause behind Medical Flight's crash
- ★ The Blue Zones: Lessons for Living Longer From the People Who've Lived the Longest
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WSI's Hubcast allows you to **notify key personnel of imminent lightning strikes** long before they pose a threat.

Keeping complex airport ground operations running smoothly just got simpler with WSI's Hubcast. This new product delivers comprehensive, easy-to-interpret forecasts for improved evaluation and management of inclement weather events and **sends lightning strike warnings** (by text message or email) to designated personnel for **enhanced ground worker safety**. All information can be accessed via any internet-connected PC, so there's no hardware to install and minimal training to operate.

<http://www.wsi.com/aviation/products/hubcast/alerting/>

## Cause behind Medical Flight's crash

One of the six NTSB teams has claimed that an **error** whereby the co-pilot activated the autopilot instead of the yaw damper may have led to the Medical Flight's Crash Michigan, April 13: According to a federal safety agency's report, **an inadvertent activation of the autopilot** by a co-pilot may well be the reason behind the June 4, 2007 Medical Flight's Crash.

The possible cause of the crash has been arrived at from the simulation report of the flight's final minutes.



The said report has been made by one of the six National Transportation Safety Board (NTSB) teams looking into the crash. The report is from the Recorded Radar and Airplane Performance Study Group of the NTSB.

The University of Michigan Survival Flight that took off from the General Mitchell International Airport in Milwaukee was carrying donated organs. Under a light rain, it banged into Lake Michigan, proving **fatal for both its pilots and the four-member medical team** on board.

The report noted that the results of the simulation “are consistent with the co-pilot **inadvertently hitting the autopilot button**”. The report claims that the co-pilot intended to activate the yaw damper in order to trim down the side-to-side oscillations of the aircraft.

However, **by mistake**, he pressed the autopilot button. This meant that the plane resisted any human adjustments that were different from the autopilot's settings.

The cockpit voice recorder had the sounds of the turned over switches and the words, “lights off yaw damper on” exchanged between the two-man crew.

Capt. Steve Jones, head of operations at the College of Aviation at Western Michigan University, **noted that both the buttons**; the yaw damper and the autopilot, **were next to each other, therefore the probability of the error is pretty high**. In fact, aircraft makers have now **redesigned** the consoles to steer clear of such confusions.

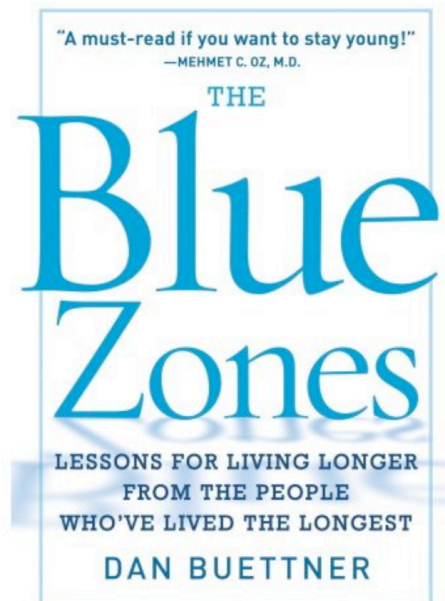
Other NTSB teams are investigating into the operations of the plane's owner, the weather, the plane's air worthiness, its **maintenance records** and cockpit voice recordings. The findings are to be submitted to five-member board later this year which will then pinpoint a probable cause.

"There's **rarely one factor that causes an accident**. There may be a primary reason, but **there are usually multiple secondary reasons**," said Phil Frame, a former spokesman for the NTSB.

## The Blue Zones: Lessons for Living Longer From the People Who've Lived the Longest

New York Times Bestseller

With the **right lifestyle**, experts say, chances are that **you may live up to a decade longer**. What's the prescription for success? National Geographic Explorer Dan Buettner has traveled the globe to uncover the best strategies for longevity found in the **Blue Zones**: places in the world where higher percentages of people enjoy remarkably long, full lives. And in this dynamic book he **discloses the recipe**, blending this unique lifestyle formula with the latest scientific findings to inspire easy, lasting change that may add years to your life.

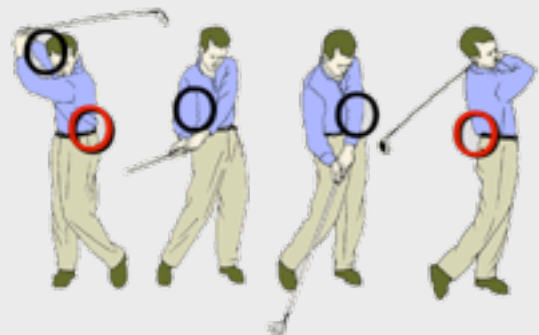


<http://www.amazon.com/Blue-Zones-Lessons-Living-Longest/dp/1426202741>

### Fact Check

**9,400,000** Total number of workers injured off the job in 2007.

Source: National Safety Council. "Injury Facts," 2009



## Midnight Shift Nugget

### Strategies for Better Sleep

#### Recommendations to optimize sleep opportunities

- Wake up and go to bed about the same time every day.
- Use the sleep area only for sleep — not for chores.
- Establish a consistent bedtime routine — for example, read and take a hot shower, then go to bed.
- Perform aerobic exercises every day but not within two hours of bedtime.
- Keep the sleep area dark, quiet, comfortable and relatively cool.
- Move the alarm clock out of sight.
- Avoid caffeine in the afternoon and evening.
- Avoid using alcohol to promote sleep.
- Avoid cigarettes, especially before bedtime.
- If you can't sleep, leave the sleep area and do something relaxing. When you become sleepy, go back to bed.

#### Recommendations for rotating shift schedules

- When rotating onto night duty, avoid morning sunlight.
- To promote daytime sleep, keep the sleep area dark and cool; use eye masks and either earplugs or a "masking noise" to limit interference from light and noise.
- Comply with the "Recommendations to optimize sleep opportunities," above, with adjustments for daytime sleep.
- Before night duty, take a short nap.
- After waking from daytime sleep, expose yourself to at least two hours of sunlight or artificial bright light in the late afternoon or early evening.

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- Comply with the "Recommendations to optimize sleep opportunities,"



**Global Jet Services Inc., located in Weatogue, CT, offers technical maintenance and maintenance management training classes. The focus is on improving practical knowledge and safety for maintenance operations.**

**Aircraft training includes Bombardier Challenger, Learjet, and Global Express; CASA; Cessna; Dassault Falcon; Eclipse; Embraer; Gulfstream; and Hawker Beechcraft aircraft. Other classes include avionics, safety programs including **human factors**, **safety management systems**, OSHA/EPA, Federal Aviation Regulations (FAR), and maintenance resource management. Classes can be scheduled according to your needs and schedule, on-site or online. Instructors have years of experience in the industry.**

**Global Jet Services developed AIMM for Aviation Business Success as an NBAA PDP approved five-day course for A&Ps that need management training. FlightSafety International has developed programs to utilize Global Jet's courses for its Master Mechanic and Event Base Agreement (EBA) training programs.**

**Tel. 860-651-6090 Fax 860-651-3618**

[www.globaljetservices.com](http://www.globaljetservices.com)

**See Attachment for class schedules**

## New iPhone App Puts You In The Control Tower

**FlightControl 1.0 Offers Simple Premise... But It's Not Easy!** A brand-new iPhone application from Firemint gives users a taste of what it's like to work as an air traffic controller, sequencing and directing aircraft in your airspace to safe landings.

The "playing field" is an overhead view of an airport traffic area. As aircraft enter your airspace, you are to direct their flight path to a runway for landing: airliners to the long runway, small planes to the short runway, and helicopters to the helipad.

The game starts out on a fairly simple level, but of course **things quickly get more challenging** as the amount of air traffic on your screen soon increases dramatically. The game ends with the first mid-air collision.

Firemint provides background to the game's origin on its website: "Flight Control started as a personal project for Firemint CEO, Robert Murray, but was soon followed up with assistance from Firemint developers Jesse West and Alexandra Peters.

"The game began as a design and development exercise over Rob's Christmas break. Christmas holidays are one of the few times of the year when the entire studio shuts down for a week or so and it's a great time to get creative. Sometimes you even stumble on something really cool!

"The game has obsessed much of the Firemint studio, along with their significant others and friends. When we saw the buzz it was creating in the studio, we couldn't wait to share it with everyone else."

"I downloaded this game a week ago, and I still keep coming back to try to get a new high score," Cnet blog author Jason Parker wrote. "Flight Control is both incredibly challenging and very addicting, and definitely **worth the 99 cent price tag.**"



## Good Skills, Bad Attitude

The case for dismissal is pretty clear when a bad attitude is combined with poor work. But what about someone who's innovative, works well and quickly and follows the safety rules, but has a cynical, uncooperative approach to work life? Here are some suggestions to help your worker achieve an attitude adjustment:

1. **Talk to the worker.** Personal problems, such as financial worries, poor health or drug or alcohol abuse, can cause difficulties at work. If this is the case, you can suggest where to seek help. Some possibilities include your company's human resource department and community organizations dealing with family problems or addictions. Don't attempt to make a diagnosis on the worker and don't label the problem. Keep the conversation strictly confidential.
2. **Maybe the problem is** the worker finds it difficult to take supervision from you because you're a newer or younger worker. You might be able to tap this person's experience by consulting with him on problems or putting him in charge of special projects.
3. **Find out if the worker is bored.** See if you can arrange some cross-training on other jobs or further education.
4. If, despite your best efforts, the worker's attitude doesn't improve, you may choose just to live with the bad attitude, as long as no one's safety is jeopardized. Keep your own temper and stay cheerful for your own sake and that of your other workers. **Don't develop a bad attitude of your own!**





## Attitude is King!

It's not so much your aptitude but your attitude that will determine your **altitude in life!** If each letter of the alphabet corresponds to a number then A=1, B=2, C=3 all the way to Z=26. Now with that information, add up the following words:

Skill = 63

Training = 92

Education = 92

Knowledge = 96

Aptitude = 96

Attitude = 100



## WEEKLY SAFETY MEETINGS

### How to Involve Your Crew

A **good leader** helps others to develop leadership qualities. One way you might do this with your workers is to get them more involved in putting on the weekly safety meeting. Look for ideas from your workers about meeting topics. Ask them what safety concerns they would like to have discussed. What topics need to be reviewed? What off-the-job safety concerns do they have?

Then give them some homework researching these topics. Direct them to sources of information in your company's safety intranet, safety office or the Internet. **Encourage them** to find examples, statistics, illustrations and handouts to go with the safety talk.

Worker involvement can extend outside the safety meeting. Interested



workers can prepare bulletin board displays and break-room reading materials related to important safety topics.

As the safety leader, you have to keep the safety meetings on track and make sure everyone gets the training and information needed to work safely. But you can use all the help you can get. Encourage all your workers **to take part** in the safety meetings and to take a turn at safety leadership.

## **Red Meat will kill you!**

The more steak, burgers and bacon you eat, the **sooner you'll die** says a new study of more than 500,000 people. Researchers at the National Cancer Institute in Maryland compiled data on the intake of **red and processed meats** over a 10-year period, then cross-referenced data on deaths over the same decade. They found that both men and women who ate a lot of red meat and processed meats such as **hot dogs and bacon** were more than 30 percent more likely to die than people who rarely consumed these foods. 'You eat a hot dog a week you're going to up, quite a bit your risk of death in a 10-year period,' epidemiologist Barry Popkin tells The Washington Post.



Most of the premature deaths were the result of **heart disease and cancer**. Red meat contains high levels of saturated fat, which pushes up levels of bad cholesterol, and cooking red meat is known to produce **carcinogenic compounds**. Hot dogs, salami, and other processed meats contain **enormous doses of salt** and are preserved with **nitrites, a known carcinogen**. Health experts recommend that you eat red meat **no more than once a week**, and that you eliminate processed meats from your diet completely.

## Healthy Eating: A guide to the new nutrition!



Some foods are good for you, some are bad. **But which are which?** The answers, according to the latest nutritional science, are not the same as previously thought. While some age-old advice like “eat your vegetables” still holds true, many early assumptions have turned out to be wrong. Scientists have learned much more about why some foods help prevent disease and why others promote it. The Healthy Eating report describes the food-health connection and takes on controversial topics like food additives, cooking methods, the role of carbohydrates and more.

Prepared by the editors of Harvard Health Publications with Medical Editor, Frank M. Sacks, M.D., Professor of Cardiovascular Disease Prevention, Nutrition Department, Harvard School of Public Health. 48 pages. (2008)

[https://www.health.harvard.edu/special\\_health\\_reports/Healthy\\_Eating.htm](https://www.health.harvard.edu/special_health_reports/Healthy_Eating.htm)

## Use Best Practices

