

Aviation Human Factors Industry News October 09, 2007

Vol. III. Issue 37

Aviation operators cut corners at expense of safety'

Nigeria - Senate President, David Mark, has alleged that aviation operators cut corners at the expense of safety of lives of passengers.

Mark, who stated this at the inauguration of Senate Committee on Aviation, noted that operators in the aviation sector have put the lives of Nigerians at risk saying "the lives of Nigerians cannot be put at risk just because some few persons want to cut corners.

"The air industry is not an industry you can cut corners. There is no way you can manage anything, anyhow. We should not waste life for the sake of making profits by the operators", he said.

Also speaking at the event, the minister for transportation, Deziani Allison-Madueke, said that if Nigeria was to continue to attract foreign investors and boost her economy, then the country must remain in category A of ICAO.

The minister who witnessed the inauguration of the committee along with her counterparts in education and foreign affairs, Aja Nwachukwu and Ojo Maduekwe respectively, added that unless the country got air security right, commerce would not grow.



Crane Operator Mistaken for Marshaller

Gulfstream Commander 690C

After landing at Fairoaks Airport in Surrey, England, on January 23, 2007, the pilot began taxiing toward the apron, where construction was in progress. "As he approached the apron, the pilot noticed a large crane to his left and some ground obstructions cones to his right," the AAIB report said. "He reported that he stopped the aircraft before reaching the crane and was then aware of someone in a yellow jacket, whom he presumed was a marshaller, appearing ahead of him."

The pilot continued taxiing while watching for adequate clearance from the crane on the left and also watching the "marshaller," assuming that he would ensure that the Commander was clear of the warning cones on the right. The pilot then heard a noise and shut down both engines. He found that the right propeller had struck a cone and a concrete block

"Discussion with the "marshaller" revealed that he was working with the crane and had come out purely because he was worried that the aircraft was going to contact the crane," the report said.

California Court Approves Lycoming Class Action

A California judge has approved the case for a class action suit filed by owners of aircraft with Lycoming engines who will be required to replace, at their own cost, the crankshafts, by Feb. 21, 2009, in those engines because they might be flawed. Under Mandatory Service Bulletin 569a), Lycoming is selling the crankshaft kits at the reduced cost of \$2,000 but labor is up to the owner.



That's in stark contrast to an earlier crankshaft recall in which the replacement was not only free, but owners were given credit for aircraft rental and other expenses related to the loss of use of their aircraft. Senior Judge Lawrence Karlton approved the class action after the original plaintiff, Richard Bristow, found a couple of other owners who met the "typicality" standards of a class action.

"The certification of a class action is a big step forward in the quest by affected aircraft owners to hold the manufacturer accountable for the damages incurred." he said.

FAA Promotes "Arrestor Beds" to Stop Runway Overruns

Commercial airports should have **runway overrun areas** 500 feet wide that extend 1,000 feet off the runway end, but in cases where that isn't practical, the agency is **now promoting the use of a new technology called EMAS**. An Engineered Materials Arresting System (EMAS) uses materials placed at the end of a runway to stop or greatly slow an aircraft that overruns the runway.



The best material found to date is a lightweight, crushable concrete, the FAA said. When an aircraft rolls into an EMAS arrestor bed, the tires of the aircraft sink into the material and the aircraft is decelerated by having to roll through it. **This technology is now in place at 18 airports with installation under contract at six additional airports.** A standard EMAS installation extends 600 feet from the end of the runway.

To date, there have been four incidents where EMAS has kept aircraft from overrunning the runway and in several cases the technology has prevented injury to passengers and damage to the aircraft, the FAA said.

Cessna Makes Emergency Landing on Warehouse Roof

Three people walked away from the emergency landing of a Cessna Cardinal **on the roof of a warehouse** in Columbia, S.C., on last Sunday. And it appears that in this case, hitting power lines actually helped.



Pilot Larry Ross and passengers James and Joanne Keisler had just taken off from Owens Field in Columbia when the engine failed. With little wiggle room, they headed for the first flat surface. "We hit the power line and dropped right onto the roof," Keisler told WLTX News. The three had some bumps and bruises but were not seriously hurt. Keisler credited Ross with the successful outcome. "Larry did a great job. I told him I would fly with him anytime," Keisler said.

As of Monday, the plane remained on the roof as insurance adjusters and authorities figured out what to do next. The plane poked a hole in the roof and leaked some fuel but judging by the photos it doesn't appear to be badly damaged.

AAIU: pilot misidentifies building lights for approach lights; descends below M

On 16 August 2007, 23:34 a serious incident occurred to McDonnell Douglas MD-83, G-FLTM, while on approach to Dublin Airport (DUB). The aircraft had earlier departed Lisbon as flight FLT344E with the co-pilot acting as Pilot Flying (PF). As a result of maintenance on the main runway (RWY 10/28) at Dublin Airport, RWY 34 was the active runway. Weather conditions were good at the time of the incident.



At approximately 5NM from touchdown on RWY 34 the aircraft began to deviate left of the approach course. The aircraft continued to descend below the MDA without proper visual identification of the runway in use.

On the instruction of ATC the aircraft turned right and climbed to a safe altitude. The aircraft was given radar vectors by ATC to an approach on RWY16 and landed without further incident.

It was found that lighting from a 16-storey building situated at Santry Cross appeared, at night, to resemble the red and white lights of a runway approach light system. The building is equipped with four fixed red obstacle lights situated on the roof. (AAIU)

Airbus Lands With Parking Brake Set

British authorities say an airline's procedures have changed, and Airbus is installing a warning system on its aircraft after the pilot of a A319 landed the aircraft with parking brake set.

All four mains blew after the landing but the aircraft stayed on the runway and no one was hurt in the incident at Leeds

Bradford Airport, according to the Air Accidents Investigation Branch report.



The report says the aircraft commander was the non-flying pilot and was **preoccupied with tower weather reports**. When the flying pilot called for flaps, the **captain mistakenly hit the brakes**. **The first officer called a second time for flaps** after they didn't come down the first time and the captain got the right control.

The report says **both pilots missed procedures and visual cues** that would have alerted them to situation. **After the aircraft skidded to a halt, the captain then asked the first officer to set the parking brake and he discovered it was on.** There's no word on discipline for either pilot.

[NTSB: Lack Of Weather Info Doomed Scott Crossfield](#)

The NTSB on Thursday released its final report on the plane crash that killed famed aviator Scott Crossfield last year, with an unusual **dual finding of blame**, citing both Crossfield's **failure to ask for weather updates**, and **air traffic control's failure to give them to him**. Crossfield crashed on the morning of April 19, 2006, in Ludville, Ga., while flying alone in his Cessna 210.



The safety board's determination of probable cause is: "The **pilot's failure** to obtain updated en route weather information, which resulted in his continued instrument flight into a widespread area of severe convective activity, and the **air traffic controller's failure** to provide adverse weather avoidance assistance, as required by Federal Aviation Administration directives, both of which led to the airplane's encounter with a severe thunderstorm and subsequent loss of control."

[AOPA Air Safety Foundation Offers New Course in Aging Aircraft](#)

It's well known that the general aviation fleet is aging, and while older aircraft can be safe to fly, they do demand a certain amount of care. **AOPA's Air Safety Foundation** addresses all of the issues that pilots should know about in a **new course, Aging Aircraft**, **offered free online**. This interactive course discusses factors that affect the rate of aging, such as storage, use, abuse, **and maintenance**; offers suggestions for proactive inspection and maintenance practices, and explains the difference between chronological and true age.



Specific tracks can be chosen that focus on Beechcraft, Cessna, Mooney, or Piper models. Advice is offered for those thinking about buying or renting an older aircraft.

The course takes about an hour to complete.

"The average general aviation aircraft is more than 30 years old," says Bruce Landsberg, executive director of ASF. "Our online program contains valuable, potentially life-saving information for anyone who owns or flies a GA airplane."

https://www.aopa.org/asf/osc/loginform.cfm?course=agingaircraft&project_code=

[U.S. changes runway incident definition](#)

U.S. aviation regulators on Monday adopted the broader definition for a "runway incursion" used overseas to make it easier to determine common causes for such incidents.

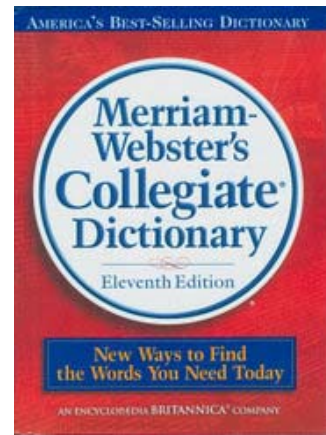
The Federal Aviation Administration adopted the International Civil Aviation Organization's standard, which defines a runway incursion as "any unauthorized intrusion onto a runway, regardless of whether or not an aircraft presents a potential conflict."

The FAA previously defined a case without another aircraft, such as one crossing an empty runway, as a "surface incident."

Some former surface incidents will now be classified as low-risk runway incursions, in which there was ample time or distance to avoid a collision, according to the FAA.

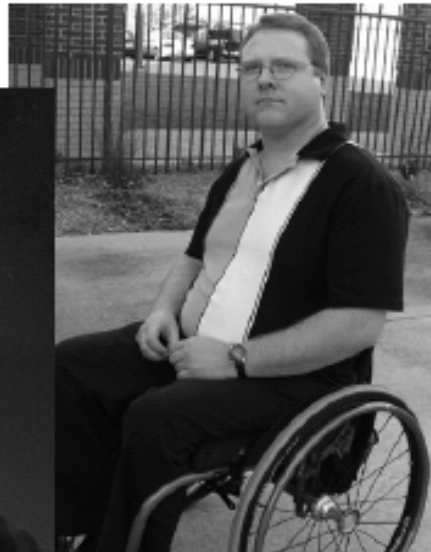
There have been a total of 24 incidents previously defined by the FAA as runway incursions through Sept. 9. The total fell to 31 last year from 53 in fiscal 2001, according to the FAA. All incidents will continue to be tracked.

Before ICAO adopted its definition in November 2005, countries used at least 20 different definitions for a runway incursion.



Drowsy Driving Toll

Rusty had everything
going for him...



...except
enough SLEEP.

Having been awake for more than 36 hours, Rusty Burris, 18 and a recent high school graduate, knew he was sleepy as he drove home after a day of visiting friends. He was just one mile away from home when he dozed off and crashed his car, leaving him paralyzed from the mid-chest down.



NATIONAL SLEEP FOUNDATION
Drive Alert...Arrive Alive®

www.DrowsyDriving.org

Midnight Shift Nugget

The Magic Power of Sleep

How it makes you happier, healthier, sexier, even thinner

Enhance Your Life with Sleep

When did 24-7 become a way of life? The massive decline in sleep happened so slowly and seamlessly that few seemed to notice the trend. Was it because of the baby boomlet and all those 2 a.m. feedings? The growing seduction of the Internet, video games and endless TV channels? Never disconnecting from work? No matter how it happened, millions of chronically sleep-deprived Americans are putting their health, quality of life and even *length* of life in jeopardy. New evidence shows why getting enough z's may trump all your other priorities.



Magic Power #1. Live Longer and Healthier

Some 40 percent of Americans get less than seven hours of shut-eye on weeknights, and for many of them, it's taking a toll. "The link between sleep and health, and bad sleep and disease, is becoming clearer and clearer," says Lawrence Epstein, MD, author of *The Harvard Medical School Guide to a Good Night's Sleep*. For example, sleep duration has declined from a median of eight hours in the 1950s to seven in recent years. At the same time, high blood pressure has become an increasing problem. Blood pressure and heart rate are typically at their lowest levels during sleep; people who sleep less tend to have higher blood pressure. The association between hypertension and sleep duration could explain other research findings linking lack of sleep to increased risk of heart attack, diabetes, weight gain and other problems.



Sleeping better may help you fight off illness. "When people are sleep-deprived, there are higher levels of stress hormones in their bodies and an increase in inflammation, both of which can decrease immune function," says Phyllis Zee, MD, associate director of the Center for Sleep and Circadian Biology at Northwestern University in Chicago.

In fact, bed rest may make your flu shot work better as well. In a University of Chicago study, men who were vaccinated while being deprived of sleep (they were not allowed to sleep more than four hours a night) produced less than half the antibodies to the flu virus as vaccinated men who got a full night's sleep.



Simply stated, people who sleep well live longer. So say good night sooner, and it may help you stay active and vital to a ripe old age.

[Look Better and Stress Less](#)

[Magic Power #2. Look Better, Feel Better](#)

People limited to only four or five hours of sleep a night for several nights not only experience more physical ailments, such as headaches and stomach problems, but also undergo changes in metabolism similar to those occurring with normal aging. It's no wonder we look terrible after a sleepless night.

One of the reasons may be growth hormones. They're essential to keeping us looking good as we get older. Levels of the hormone drop dramatically between the ages of 20 and 60, says heart surgeon Mehmet C. Oz, MD, coauthor of the [You](#) health books. "Growth hormones are rejuvenating," he says. "When you have high levels of the hormone, you have muscle mass, better skin—you look sexy. You want to keep your growth hormones as high as possible, and the number one best way to do that is sleep." When you don't look good, you don't feel sexy, and your relationship can suffer. So getting more sleep can rev up your love life too.

[Magic Power #3. Be Happier, Less Stressed](#)

More than half of adults surveyed by the National Sleep Foundation in 2005 said they experienced insomnia at least a few nights a week. People with insomnia produce higher rates of stress hormones than others, according to new research. This puts their bodies in a hyperaroused state that can make it difficult for them to wind down and sleep. The inability to sleep causes more stress, which can have a devastating impact.

"You're depressed, you keep forgetting things—not sleeping was the most horrible thing that ever happened to me," recalls Paul Nielsen, 42, of Niles, Illinois, who says that when his insomnia was at its worst, he went 30 days with only about 30 hours of sleep. "I missed days of work. I even drove my car onto the lawn and into some bushes because I just couldn't focus anymore."

"People who don't sleep get depressed, and depression causes insomnia, so it's a vicious cycle," says Dr. Oz. "But we know the inverse is true: that more and better sleep can make you feel happier."

Smarten Up and Slim Down

Magic Power #4. Build a Better Brain

Not only does sleep deprivation lead to poor health, it also affects concentration, problem-solving skills, memory and mood. “Anything that disturbs the quality and quantity of sleep can have long-term consequences for both body and mind,” says Gerard T. Lombardo, MD, director of the Sleep Disorders Center at New York Methodist Hospital in Brooklyn.

Lack of sleep can have cognitive and physical effects similar to those brought on by overindulging in alcohol. The performance of someone who’s been awake for 17 hours straight is about the same as if she had a blood alcohol level of 0.05 percent (about two drinks in an hour).

And night owls, beware: A new study shows that people with two copies of a gene variant that helps control our body clocks tend toward a “late to bed, late to rise” sleeping pattern. They may suffer worse cognitive deficits after sleep deprivation, such as forgetfulness and trouble concentrating.

Some 1,500 deaths a year result from car accidents caused by people driving while fatigued. And a disturbing new study conducted by the Walter Reed Army Institute of Research in Maryland shows that lack of sleep can affect people’s moral judgment. This finding has obvious implications for people like doctors and soldiers, whose decisions have life-and-death consequences. But think what could happen if sleep-deprived teachers, businesspeople, lawyers, homebuilders and others were more subject to moral lapses. Better sleep may equal better decision making.

Magic Power #5. Lose a Few Pounds

It should come as no surprise that the trend toward shorter sleep duration in this country has coincided with an increasing trend toward obesity. Recent studies suggest that people who get inadequate amounts of sleep are more likely to gain weight. “With sleep deprivation, we see a reduction in metabolism and an increase in appetite,” explains Michael Breus, PhD, author of [*Good Night: The Sleep Doctor’s 4-Week Program to Better Sleep and Better Health*](#). Inadequate sleep lowers levels of leptin, the hormone that causes you to feel full, while increasing levels of ghrelin, the hormone that makes you feel hungry.

“What’s also fascinating,” notes Breus, “is that sleep deprivation influences your food choices, making you crave high-carb and high-sugar foods.” This is because sleep loss decreases insulin sensitivity, putting the sleep-deprived at higher risk for developing type 2 diabetes. So sleep more and it may be easier to fight that cookie craving, and wake up a whole new you.

FIRE SAFETY

A Kids' Checklist for the Home

October is Fire Safety Month. And it's also the month in which Major League Baseball conducts its post-season. The National Fire Protection Association (NFPA) has combined both commemorations into one home fire safety checklist. The checklist is designed for kids to fill out. It's kinda' corny, but it's full of sound advice and is well worth giving to your workers so they can take it home to their families.



NFPA HOME FIRE SAFETY CHECKLIST SCORE A FIRE SAFETY HOME RUN — DO A HOME FIRE SAFETY INSPECTION!

Instructions: Striking out fire in your home requires a little homework. Take about 20 minutes to inspect your home. As you go from room to room, answer the questions below. For each question you answer “yes” to, give yourself a point. When you're finished, add up the points to find out your score. ***Kids, ask a grown-up to help you complete this checklist!***

FIRST BASE - COOKING SAFETY

Does a grown-up always stay in the kitchen when food is cooking on the stove? Yes ___ No ___

Are stove tops and counters clean and uncluttered? Yes ___ No ___

Are there pot holders within easy reach of the stove? Yes ___ No ___

Are pot handles turned inward so they can't be bumped? Yes ___ No ___

Are curtains and other things that can burn well away from the stove? Yes ___ No ___

Is there a “kid-free” zone of three feet (one metre) around the stove when grown-ups are cooking? Yes ___ No ___

SECOND BASE - HEATING SAFETY

Are portable space heaters always turned off when adults leave the room or go to sleep? Yes ___ No ___

If space heaters are used in your home, are they at least three feet (one metre) away from anything else that can burn, including people, furniture and pets? Yes ___ No ___



Does your fireplace have a sturdy screen to catch sparks? Yes ___ No ___

Has your chimney been inspected and cleaned during the past year? Yes ___ No ___

Has your furnace been serviced by a professional in the past year? Yes ___ No ___

Are propane tanks and other fuels stored outside your home? Yes ___ No ___

THIRD BASE - ELECTRICAL SAFETY

Are extension cords used safely? (Not under carpets or across doorways?) Yes ___ No ___

Are electrical cords in good condition, without cracks or frayed areas? (A grown-up should unplug lamps and appliances before inspecting the cords.) Yes ___ No ___

Are kitchen appliances, such as the coffee-maker, toaster oven and microwave plugged into separate receptacle outlets? Yes ___ No ___

HOME PLATE - SMOKE ALARMS/HOME FIRE ESCAPE

Does your home have smoke alarms on every level, including the basement and outside each sleeping area? Yes ___ No ___

Are the batteries working in all your smoke alarms? (A grown-up should help by pushing the test button to find out.) Yes ___ No ___

Are all the exits in your home clear of furniture, toys and clutter? Yes ___ No ___

Does your family have a home fire escape plan that includes two exits, usually a door and a window, from each room? Yes ___ No ___

Has your family picked a safe place to meet outside after you exit your home? Yes ___ No ___

Have you and your family practiced a home fire drill within the last six months? (Why not do one tonight?) Yes ___ No ___

Do you know the fire department's emergency phone number (which should be called from a neighbor's or nearby phone once you get outside)? Yes ___ No ___

WHAT'S YOUR FIRE SAFETY BATTING AVERAGE?

If you answered "yes" to all of the checklist questions above, congratulations! You scored a fire safety home run!

If you answered “yes” to 15 to 20 questions, you’ve made it to third base. Just make a few adjustments, and you’ll easily hit a fire safety home run.

If you answered “yes” to 10 to 14 questions, you’ve hit a double. You’re going in the right direction, but you’ve got some work to do before you get to home plate.

If you answered “yes” to fewer than 10 questions, you’ve reached first base, but you need to make many changes around your home in order to reach home plate.

For all questions to which you answered “no,” make sure your family takes the steps needed to make them a “yes” so you can all score a fire safety home run!

Source: NFPA, Quincy, MA

10 steps to a pain-free back

Low back pain has many different causes, including the normal wear and tear that comes with aging. While you can’t turn back the hands of time or prevent every type of painful back disorder, in most cases there are things you can do to help keep your back healthy.

Stay fit

Staying active and in good physical condition is probably the most important thing you can do to maintain a healthy back. This strategy becomes even more important if you want to protect yourself from a relapse following an initial episode of acute back pain. Experts believe that regular exercise helps prevent back pain by strengthening your back and abdominal muscles.

Bicycling (either stationary or regular), swimming, and walking lead the list of low-risk, high-benefit activities for most people’s backs. All are low- or minimal-impact exercises that strengthen the erector spinae and abdominal muscles and stimulate secretion of endorphins (hormones that act as the body’s own painkillers). None involve awkward or stressful actions that are detrimental to back muscles — for example, requiring them to exert a lot of force. Since they put little burden on your back, these exercises also offer activity’s other benefits without placing your back at undue risk.





Maintain a healthy weight

Although carrying too much weight per se has not been proven to be a primary cause of back pain disorders, being overweight or obese can slow your recovery. Those extra pounds also increase the risk that back pain will return.

The heavier you are, the greater the load your spine must carry. To make matters worse, if the bulk of your weight comes in the form of abdominal fat, rather than muscle, your center of gravity can shift forward — a condition that puts added pressure on your back. By maintaining a healthy weight, you can ease the burden on your spine.

Kick the habit

In addition to contributing to a host of other health hazards, research has shown a link between smoking and back pain. Scientists believe that the nicotine in cigarettes contributes to low back pain in two ways.

First, nicotine hampers the flow of blood to the vertebrae and disks. This impairs their function and may trigger a bout of back pain. Second, smokers tend to lose bone faster than nonsmokers, putting them at greater risk for osteoporosis, another common cause of back pain.

Lighten your load

An overstuffed backpack can signal more than a healthy workout at the gym: It can be a harbinger of back pain. If you use a backpack, you can take steps to protect yourself. For starters, use both the pack's straps instead of slinging one strap over a shoulder, try to carry only the essentials, and lighten your load whenever possible. Opt for backpacks that have different-sized compartments to help distribute weight more evenly. And look for wide, padded straps, as well as a padded back.

When carrying a heavy load, put the heaviest items as close as possible to the center of the back, and use the hip strap for support. For very heavy loads use a backpack with wheels. Above all, remember to bend from your knees when picking up your pack.



Develop back-saving habits

You can take some of the pressure off your back by following these simple tips:

1. While standing to perform ordinary tasks like ironing or folding laundry, keep one foot on a small stepstool.
2. Don't remain sitting or standing in the same position for too long. Stretch, shift your position, or take a short walk when you can.
3. When bending from the waist, always use your hands to support yourself.
4. When sitting, keep your knees a bit higher than your hips and bend them at a 90-degree angle. Sit with your feet comfortably on the floor. If your feet don't reach the floor, put a book or a small stool under them.
5. Because vacuuming can take a toll on your back, tackle rooms in chunks, spending no more than 5–10 minutes at a time doing this task.
6. Choose an office chair that offers good back support (preferably with an adjustable backrest, lumbar support, armrests, and wheels) and set up your workspace so you don't have to do a lot of twisting.
7. Try not to overload briefcases or backpacks (see "Lighten your load").
8. Make frequent stops when driving long distances.
9. While driving, sit back in your seat, and if your seat does not provide sufficient support, place a rolled blanket or some towels behind your lower back. Try to shift your weight occasionally. If you have cruise control, use it when you can. Also consider using a foam seat cushion to absorb some of the vibration.

Sleep on your side if you can, and curl your body up a bit. Also, choose a pillow that keeps your head level with your spine; your pillow shouldn't prop your head up too high or let it droop. Choose a mattress that's firm enough to support your spine (so that it doesn't sag into the bed) and that follows your body's contours.

I Choose To Look the Other Way

I Could Have Saved a Life That Day

I could have saved a life that day,
But I chose to look the other way.
It wasn't that I didn't care;
I had the time, and I was there.

But I didn't want to seem the fool,
Or argue over a safety rule.
I knew he had done the job before.
If I called it wrong, he might get sore.

The chances didn't seem that bad.
I've done the same; he knew I had.
So I shook my head and walked on by.
He knew the risks as well as I.

He took the chance; I closed an eye.
And with that act, I let him die.
I could have saved a life that day,
But I chose to look the other way.

Now every time I see his wife,
I'll know I should have saved his life.
That guilt is something I must bear,
But it isn't something you need to share.

If you see a risk that others take,
That puts their health or life at stake,
The question asked or things you say
Could help them live another day.

If you see a risk and walk away,
Then hope you never have to say:
I could have saved a life that day,
But I chose to look the other way.

– Anonymous