# Aviation Human Factors Industry News

February 15, 2007

**Vol. III, Issue 06**

## *COULD THIS HAVE BEEN YOU?*
## *AIRPLANE PROPELLER CLAIMS LIFE*

**A worker in the air transport industry was riding as a passenger in a ground service vehicle. The driver parked the vehicle parallel to a stationary twin-engine airplane which still had both engines running. The worker dismounted from the service vehicle and reached for a chocking block for the wheels of the aircraft.**


**Proceeding diagonally from the service vehicle towards the nose of the aircraft, he crossed the path of a rotating propeller. The worker died of massive blood loss caused by amputation of an upper limb and numerous other lacerations.**

**This dreadful incident carries a safety lesson which applies to all work situations. The victim was new and his training had consisted of an hour of orientation and another hour observing a crew at work. On the day he died he had the equivalent of about 18 days experience in the air transport industry.**

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**The employees' handbook, which could have provided vital safety information and specific ground handling procedures, was in the process of being written. Moreover, the young man in question seemed totally unaware of the very real dangers of his new job.**

**Any time you work around machinery or equipment, you must remain alert to the potential for injury. Engines may start or stop unexpectedly. Conditions can change suddenly. You must remain alert to what you are doing and where you are going. If you are unsure about any procedure or policy – find out about them. If you are requested to perform a task which you think is unsafe – check with your supervisor. You must take responsibility for your own safety.**

## ***3 workers injured at Fort Lauderdale airport***

**Fort Lauderdale-Hollywood International Airport officials have identified three maintenance workers injured this morning while changing tires on a jetway.**

**Kevin Scott, 52, of Hollywood and Richard "Rick" Hernandez, 49, of Davie were critically injured when a tire they were working on exploded. They both remain hospitalized at Broward General Medical Center, the Broward Sheriff's Office said.**

**A third worker, Jeff Jugis, 47, of Hallandale Beach suffered minor injuries in the explosion.**

**BSO said the accident happened at 9:51 a.m. on Jetway C2, a Continental jetway.**

**The three men -- all of them longtime airport employees -- were working on a wheel for the jetway that connects the terminal to the aircraft, said Greg Meyer, an airport spokesman.**

**"This is a standard procedure," he said. ``They were doing routine work on the expandable piece that connects the airport to the plane. Somehow a tire exploded."**

**Scott and Hernandez were rushed to the hospital. Jugis refused treatment.**

**Meyer said an investigation will be launched by Broward County Aviation and the Occupational Safety and Health Administration to determine what caused the accident.**

**Glen Fisher, who arrived at the airport on a flight from New York, saw the commotion outside the terminal soon after the accident.**

"They looked bloody," Fisher said of the injured workers. ``It was two guys laying on the ground."

## *JAL no longer to punish staff for fatalities*

Japan Airlines Corp. will introduce a watershed policy in the transport industry to exempt pilots and maintenance workers from punishment if their errors result in a fatal accident, JAL officials said Friday.

Such exemptions have been the norm with U.S. and European airlines in order to focus on determining the cause of accidents to prevent their recurrence.

Japan's public transport industry has not followed that course.

The officials said JAL wants to prioritize investigating the cause of serious accidents and believes the new policy will foster confidence between the company and its employees and help produce swift and accurate reports on problems.

The troubled airline says it expects the new policy -- to take effect Tuesday as part of JAL's midterm management reform plan -- to generate debate and provoke criticism from survivors and the next of kin of previous accidents.

Analyses by Boeing Co., the world's largest aircraft manufacturer, show that 70 percent of aviation accidents since 1996 were due to human error.

JAL will no longer punish personnel with pay cuts or suspensions and instead try to gather accurate information about the causes of accidents.

In certain cases, employees linked to accidents will be temporarily relieved and will undergo re-education or counseling, the officials said.

"We can't reduce human error to zero," a senior JAL official said. "In many cases, there are organizational or operational problems. So in order to take effective measures, we need to build a relationship with our employees that is based on trust."

Experts generally welcomed the new policy but said it has been too long in coming. "This policy was adopted in the United States and Europe in the 1970s. It has come much too late," said Akira Maene, a former All Nippon Airways pilot who is now an aviation commentator.

"The new policy is based on the premise that there is trust between the company and its employees, but at Japan Airlines, there is way too much mistrust between the two sides," he said. "The move could be seen as a gesture aimed at JAL's financial revitalization."

Kuniko Miyajima, secretariat chief of a group formed by relatives of people who died in the August 1985 JAL crash in Gunma Prefecture, was optimistic about the new policy.

"I don't feel like punishing someone," she said. "If a crash occurs, the airline should focus on investigating its cause. It will be much more frightening if the move is delayed for some reason."

On Aug. 12, 1985, a JAL Boeing 747 en route from Narita airport to Osaka crashed into a mountain in Gunma, and more than 500 crew members and passengers ultimately died.

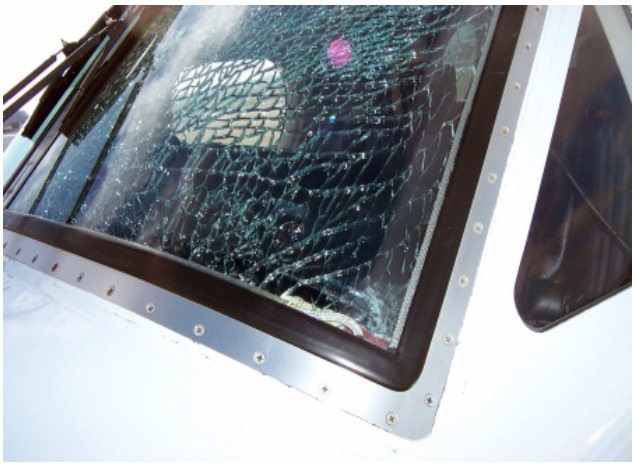
The world's worst single-aircraft disaster was basically blamed on faulty repairs that caused part of the jetliner's tail section to fall off in flight, resulting in a loss of control.

## *NTSB Releases Preliminary Report On Harrowing King Air Incident*

### Says O2 System Functioned Normally When Checked

Editor's Note: The National Transportation Safety Board has released its preliminary report on a February 2 incident involving a Beechcraft B200 King Air that suffered a cracked windscreen and loss of cabin air pressure at FL270.

**As Aero-News reported, the plane's pilots put on their oxygen masks as the cabin lost Pressurization, but were unable to begin the flow of oxygen before passing out. Fortunately, the pilot's regained consciousness as the aircraft descended, and they were able to land the plane, as the Board notes dryly, "without further incident."**



**In the report -- which is presented, unedited, below -- the NTSB notes the aircraft's oxygen system operated normally when investigators engaged its controls as defined by the plane's flight manual.**

**NTSB Identification: CHI07LA063**
**14 CFR Part 91: General Aviation**
**Accident occurred Friday, February 02, 2007 in Cape Girardeau, MO**
**Aircraft: Raytheon Aircraft Company B200, registration: N777AJ**
**Injuries: 2 Uninjured.**

**This is preliminary information, subject to change, and may contain errors. Any errors in this report will be corrected when the final report has been completed.**

**On February 2, 2007, about 1030 central standard time, a Raytheon Aircraft Company B200, N777AJ, sustained substantial damage during an uncontrolled descent and recovery from cruise at flight level 270. Visual meteorological conditions prevailed at the time of the accident.**

**The flightcrew reported that they depressurized the airplane after noticing cracking of the airplane windshield.**

**They then donned their oxygen masks but were unable to obtain oxygen from the oxygen system resulting in their loss of consciousness. They later regained consciousness, recovered from the descent, and landed without further incident at Cape Girardeau Regional Airport, Cape Girardeau, Missouri.**

**The 14 CFR Part 91 flight was operating on an instrument rules flight plan. The pilot and copilot were uninjured. The flight originated from Rogers Municipal Airport-Carter Field, Rogers, Arkansas, at 0939.**

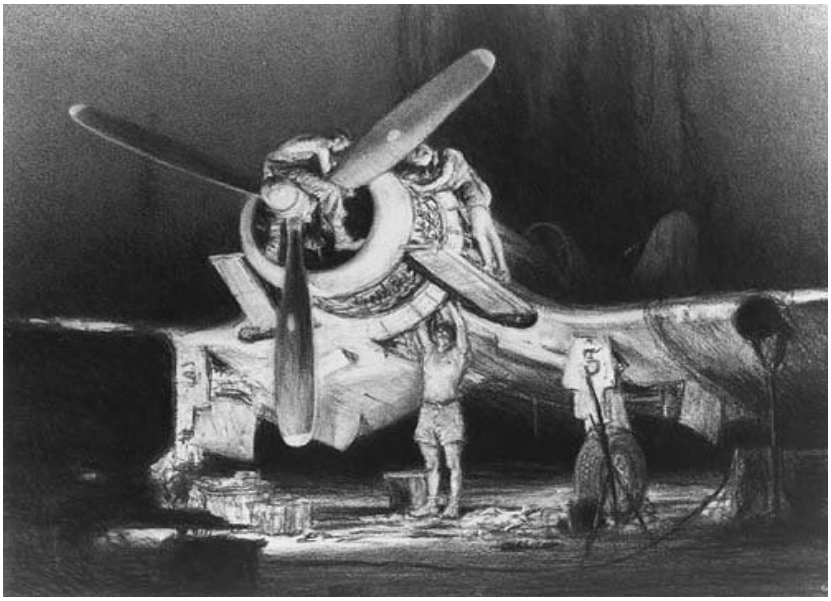
**On-scene inspection of the airplane noted that approximately 2/3 of the left horizontal stabilizer and elevator were separated from the aircraft and 2/3 of the right elevator was separated but attached at the inboard hinge. The left and right wings were wrinkled. The left pilot windshield outer and inner ply was intact.**

**The inner ply exhibited a shattered appearance with a crack at the lower right hand corner of the windshield. The cabin pressurization dump switch was in the dump position.**

**The oxygen system worked when it was functionally tested in accordance with Airplane Flight Manual.**

## ***Night Shift on the Ramp***

**Protecting third shift ramp workers from injury and limiting human factors mistakes.**



**When passengers arrive at the airport at 5 a.m. for a 7 a.m. departure you can hear them complaining to each other before they are even out of the car park.**

**But on the other side of the security fence there is a dedicated group of professionals that have already been working for many hours to make sure their flight makes it from the gate on time.**

**Airport ramps are busy and dangerous places to work, and when the sun goes down, the stress level increases. The harsh, direct, ramp lighting leaves dark shadows that can hide dangerous situations. Night weather changes can be very dramatic and don't forget human factors like fatigue.**

**The lighting is the biggest change that you will notice. Close to the terminals, the ramps are generally very well illuminated, but the connecting vehicle corridors and taxiway intersections can be very dangerous at night. In many cases you will hear an aircraft engine before actually seeing the aircraft sitting in the darkness. Keeping a window open and constantly scanning the area around you will help you see potential dangers and avoid them. I know from personal experience that a 757 can be hidden from view by a door post. Only by leaning forward in my seat was I able to see the aircraft moving towards me.**

**Pushbacks at night require much more care and attention to safety. Wing walkers with safety vests and illuminated wands must walk through busy vehicle corridors to stop traffic and help guide the tug driver to position the aircraft correctly for engine startups.**

Drivers must be constantly watching for workers walking across the ramp. Workers must be on constant alert and assist each other in staying out of dangerous situations as the shift advances and fatigue sets in.

Night brings other changes as well. The temperature steadily drops as the evening shift progresses and can drop below the dew point—at which time everything becomes wet, including the workers. In the spring and fall heavy fog can form, closing runways and changing your work schedule dramatically, thunder and lightning storms can clear the ramp of all personnel for hours at a time and even mid-summer, hot, humid nights can be difficult. You need to drink plenty of water and watch for signs of dehydration.

But I am sure that anyone who has worked the ramp in winter will agree that sometimes you just don't want to be there.

The heavy labor of loading bags can cause workers to sweat and rapidly lose body heat in the cold air. In this kind of environment, workers need to adjust their clothing as needed and eat properly during their shift to stay healthy.

Fatigue can have serious consequences in a job like this, a good shift lead will monitor the team and schedule breaks when possible. Rotating difficult jobs around the team members will make sure that people don't burn out, and be aware of the team morale—some of the most productive teams are also having the most fun.

Remember that after your shift is finished you still need to prepare for the drive home. Tests have proven that a tired driver can be as dangerous as a drunk driver. There are several techniques you can use to help you stay alert on your drive home. Change the temperature in your car as you drive. Open and close the window, change the radio station, car pool so you can talk to someone. Drinking water and eating a light snack while driving can also keep you alert. If you have had a hard shift and you don't feel safe to drive then have a nap before you start home. Some companies provide a crew rest area with couches or reclining chairs. Many now provide "Human Factors" training courses to help you understand the dangers of fatigue.

You are no good to your company or your family if you get hurt driving home because you fell asleep, so don't relax until you are safe at home and ready for bed.

The battle against fatigue starts at home. Make one room in your house a dark, quiet sleeping room. Use ear plugs if necessary and don't drink coffee close to the end of your shift. Try to get to bed as soon as you get home so that you don't get over tired and don't drink alcohol, it will disrupt your sleep cycle. Don't forget that you should be sleeping during the day. If you try to burn the candle at both ends your body won't let you do it for long and you could be putting yourself and your team at risk.

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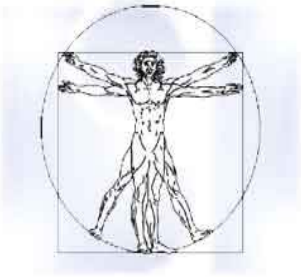
**Night shift can be hard on your body, but like anything in life, it's going to be what you make it. Night crews usually get closer than day shift crews because you depend on each other to get the job done and stay safe in a more stressful work environment. I have found that I only really get to know my crew when we all face the hardships of night shift together. It helps to build a good strong team and that helps get the job done and reduce the extra stress.**

**Be proud of the work you do as "Night Crew" and smile at those passengers you hear in the parking lot complaining about their 7 a.m. flight, because you know that they have no idea what it takes to make that flight leave on time.**

## *Comair Flight 5191 Crash Report Reveals System Design Flaws*



**Comair's Flight 5191 took off from a runway that was too short in Kentucky last summer and crashed, killing 49 people. The National Transportation Safety Board (NTSB) investigation yielded more details about the August 27**

**crash, but found no definitive reason for it. Pieced together from transcripts and experts interviewed after the report was released, the details yield a host of ergonomic issues that are likely to be cited as contributing factors in inquiries yet to come.**

**The jet was supposed to take off from the 7,000-foot main runway, called runway 22, but instead used 3,500-foot runway 26, which is meant only for smaller planes.**

**Many ergonomics studies highlight the dangers of distractions during operations of any kind, and Comair transcripts revealed several. In particular, the pilots, Jeffrey Clay and James Polehinke, were heard chatting about everyday things as the plane taxied from the gate, just four minutes before the crash. A 1981 "sterile cockpit rule" forbids, among other things, extraneous conversation during taxi, takeoff and landing to prevent distractions.**

**Peter Goelz, the former managing director for the National Transportation Safety Board, said in a Washington Post article about the report that the chatter prior to Comair Flight 5191 was so excessive it might have contributed to the crash.**

**"I think that when the human factors experts at the NTSB analyze the transcripts, they will identify this extraneous conversation as a contributing factor," he said.**

**John Goglia, a professor of aviation science at St. Louis University and a former NTSB member, told the Cincinnati newspaper, The Inquirer, that conversation between the pilots about other pilots' looking for jobs as they taxied away from the gate was careless. "That's a real problem - it's called distraction, more than one accident has been caused by it," Goglia said.**

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**And it appears the lone air traffic controller on duty in the tower, Christopher Damron, was handling two other flights at the time. The transcript notes that he was distracted from Flight 5191 and looking away from it at the critical moment. According to an account of the report by Associated Press and the television network CBS, investigators said the controller did nothing wrong but his actions eliminated any chance he had to warn the pilots of their fatal mistake.**

**The investigation also showed Damon had worked for almost 15 hours and slept for two. An operator's sleep deprivation is often a factor in accidents, and as often the result of shift patterns and employment practices that are designed without any thought to the principles of ergonomics.**

**The May 2005 issue of The Ergonomics Report™, a publication for professionals in human factors disciplines, presents scores of accidents involving fatigued operators. "Shaping Night Work for a Better Fit With Workers" also lays out the importance of designing shifts around the body's natural Circadian rhythms to help prevent fatigue.**

**The Comair transcripts threw a spotlight on systems in which ergonomic principles designed to make them more efficient – and safer – were poorly designed or ignored. For one thing, small regional airports, like the Lexington city airport where the crash occurred, are sometimes manned by a single air traffic controller even though federal rules require two. And the NTSB's investigation teams showed that Comair didn't have procedures for a crew to verify it was on the proper assigned runway before takeoff.**

**There was also confusion about rules. Other Comair crews interviewed after the crash said they weren't sure whether the carrier's rules allow for nighttime takeoffs from unlit runways. In studies, confusion is often traced back to poorly designed communications systems.**

**A crucial notice, filed August 20, alerted pilots that part of the taxiway to Runway 22 - the one the Comair jet should have taken - was closed. But the crew of Flight 5191 didn't get that notice, possibly adding to their confusion.**

**The investigators found that Comair had a less than effective method for distributing the latest notices about airport conditions to its crews.**

**The dispatches were not sent directly to crews in an automated way; they first had to go to a vendor.**

**There is no shortage of useful research into factors that contribute to human error. And predictably, NASA employs many experts in related fields who have published significant and useful research into runway and routing problems. The question is whether the Kentucky accident report and the details that emerge in the courts as lawsuits proceed will prompt the authorities and aviation industry to employ more of this research in designing systems that make flying safer.**

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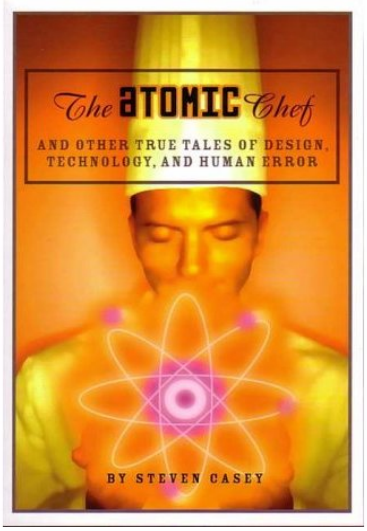
# *Murphy's Law in Action*

Scott Shappell




***The Atomic Chef and Other True Tales of Design, Technology, and Human Error*. Steven Casey. 286 pp. Aegean Publishing Company, 2006.**

**The Embryo Imbroglio," "Out of Synch," "Event Horizon," "The Perilous Plunge," "Titanic's Wake," "End Game": These may sound like the names of amusement-park rides or science fiction movies, but they're actually the titles of chapters in Steven Casey's latest book, *The Atomic Chef and Other True Tales of Design, Technology, and Human Error.*Casey, the author of *Set Phasers on Stun* (1993), has once again vividly demonstrated how design and technology all too often leave unwitting humans on the brink of disaster. Written in the style of a thriller by Tom Clancy or Dan Brown, these vignettes skillfully draw the reader into the world of human error and design flaws. But Casey isn't writing fiction—these 20 stories and the characters involved are all too real, and some of the facts he reports are chilling.**

**Consider "Rhymes and Reasons," the chapter in which Casey explains what led to the tragic demise of singer-songwriter John Denver at the controls of a state-of-the-art experimental aircraft he had recently purchased. This high-tech plane, a LongEZ designed by the legendary Burt Rutan, had unfortunately been modified by its original owner, who had built it from a kit. A modified home-built plane may sound unusual, but Federal Aviation Administration inspectors come across them all too often in the course of investigating real-world accidents.**

**The builder of the plane Denver bought had made a seemingly benign alteration: He had moved a lever that controls the flow of fuel from the aircraft's two fuel tanks. He shifted it from the front of the cockpit, where it could be easily seen and manipulated with either hand, to a somewhat awkward spot behind the pilot's left shoulder. In the original design, the switch position was intuitive: Turning the valve handle to the left drew fuel from the left wing tank, turning it to the right drew from the right wing tank, and the "off" position was straight back.**

**But the changed location and orientation of the valve meant that now the pilot was required to engage the autopilot, let go of the control stick with his right hand, twist around and reach over his left shoulder for the valve handle, and then move it to the right to draw fuel from the left tank, down to draw fuel from the right tank, or straight up to stop the flow altogether. For a pilot of average height, such a design might not have posed a great problem.**

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**But Denver's short stature meant that to reach the rudder pedals he had to sit forward in the pilot's seat and was thus even farther away from the valve. The modification proved lethal: On only his second solo flight in the aircraft, Denver plunged to an untimely death just off the coast of Monterey, California, presumably while trying to switch to an alternate fuel tank.**

**Not all of the chapters have tragic endings. Indeed, some are quite humorous, such as the one involving an unsuspecting customer trapped inside the glass enclosure of an automatic teller machine on Thanksgiving. I won't spoil the story, but what made that particular tale painfully funny to me was that something similar happened to a close friend of mine on a U.S. Navy base in Pensacola, Florida. Perhaps that is what makes this book a "must read"—these short stories of design-induced error will have you recalling similar situations in your own life and realizing that if not for the grace of God and a little bit of blind luck, you too might have become the subject of a cautionary tale.**

**There are lessons to be learned from all of these accounts, from the chapter about a California freeway driver fed up with traffic to the story of a near-catastrophic nuclear explosion. Casey doesn't offer remedies for the design and technological flaws he presents. But that may not be a failing at all—in some dark and twisted way, leaving the reader to ponder how to fix things may make the book even more compelling and useful. After all, real life doesn't hand us easy solutions.**

***The Atomic Chef* has something to offer readers of all stripes. Everyone who wants to improve the safety of everyday life should read this book—anyone from the generally curious to professionals concerned with human factors, whether they work on the shop floor or in academia. After all, do you really want Casey's next volume to have a chapter devoted to some mishap of your own?**

***Reviewer Information***

**Scott Shappell is a professor in the Department of Industrial Engineering at Clemson University. Before moving to Clemson, he managed research on human factors for the Federal Aviation Administration.**

## *FAA to air tours: Tighten safety*

**WASHINGTON — A series of deadly crashes prompted the Federal Aviation Administration to impose tighter restrictions Thursday on companies that fly sightseeing tours over the nation's most scenic areas.**

**The rules were issued after years of contentious opposition from the industry and are less rigorous than the Federal Aviation Administration originally proposed in 2003.**

**"These new standards will increase overall air tour safety, improve the FAA's ability to track and monitor commercial air tour flights, and help us identify and address operational trends that could lead to accidents," FAA Administrator Marion Blakey said.**

**The National Transportation Safety Board (NTSB), which investigates aviation accidents but has no regulatory power, originally called for improved safety for air tour operators in 1995 after two crashes occurred in Hawaii on July 14, 1994.**

**Three people drowned in one of the crashes after their helicopter, which was not equipped with floats, lost power and put down in the ocean. The NTSB found that occupants had not been wearing life vests and were not told about them before the flight. The NTSB investigated 139 air tour crashes from 1988 to 1995.**

**The FAA's rule, which will take effect next month, appears to fall short of one of the NTSB's key recommendations. The accident investigation agency called for all air tour companies to be regulated under one set of safety standards.**

**However, the FAA's new rule sets up three tiers of tour operators that will receive different levels of oversight.**

**NTSB spokesman Ted Lopatkiewicz said the agency couldn't comment until it has time to review the FAA's rule. The agency will hold a hearing on Tuesday into two air tour accidents in Hawaii that killed eight people in 2004 and 2005.**

**Changes include:**

**•Within 18 months, helicopters flying over water must have floats that prevent the craft from sinking in an emergency landing. Three passengers died off Kauai on September 23, 2005, when their tour helicopter sank without floats.**

**•Thousands of small tour operators will have to register with the FAA and follow safety rules such as the float requirement and drug and alcohol testing. After widespread opposition from the industry, however, small operators won't be subject to the higher regulatory standards that large operators must meet.**

**•Pilots who give sightseeing tours at charity events must have 500 hours of experience or a commercial pilot's license, up from 200 hours.**

**The large air tour operators are based at the Grand Canyon and in Hawaii and Alaska. Steve Bassett, president of the U.S. Air Tours Association, said his members were largely satisfied with the new rule.**

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**Smaller operators were pleased that the rule did not mandate that they submit to tough FAA oversight, said Chris Dancy, spokesman for the Aircraft Owners and Pilots Association. A poll of its membership identified 1,500 members who performed some sightseeing flights for hire, Dancy said.**

**However, the organization was upset at the new standards for pilots and charity events.**

## ***Don't get PuNC'd***

Joy Finnegan –Editor of Aviation Maintenance Magazine –Feb. 2007


**It is imperative that the maintenance industry embrace the need for procedural compliance.**

**I had a terrific fourth grade teacher. Her name was Mrs. Brunt and she called us Brunt's Bunch. She was one of those once-in-a-lifetime teachers that made an impact and made learning fun and interesting.**

**One day, as the school day was coming to an end, Mrs. Brunt said she had a special assignment for us to complete before we left school. She said that the assignment shouldn't take us long to complete and to turn it in as soon as we were finished. Once we were finished, she said, we could have free time to do as we pleased for whatever time remained of the day. Since the classroom was tightly structured in those days, the offer of free time was very enticing. She handed out the assignment. We looked at it and groaned. There were 50 questions! How could we possibly complete the assignment before the bell rang or have any time left to do as we pleased?**

**As my classmates and I began, we felt as if we had been tricked. She had lured us into thinking we would have time left over but the questions contained such difficult things as writing out all the eight's times tables, and writing the abc's forward and backward in cursive. We realized it would take all the time left in the day to complete.**

**The questions were hard, but we started to slog through them. At some point I began to think about the assignment, Mrs. Brunt's promise of free time, and her nonchalant comment that it shouldn't take us long to complete. I went back to the instructions at the beginning. This is what it said, "Please read every question thoroughly before beginning." Something clicked in my mind and I raced to the last question. It said, "Please do not answer questions 1-49. Simply write your name on the front and turn the paper in." Ha! I put my name on the front and ran to give it to the teacher.**

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That assignment taught me several lessons. Maybe it is one of the reasons I so love aviation with all its checklists and procedures. One of the lessons I learned relates to procedural compliance. The "procedure" in that assignment was to read every question thoroughly before beginning. Not many adults, never mind fourth graders, would take the time to do that, but it saved time and effort in the long run and I have to say that fourth grade lesson has stayed with me to this day.

This month we have a feature article called "Why Good Employees Violate Procedures" (see page 20). The FAA has determined that procedural non-compliance is the number one cause of maintenance-related incidents and accidents. This is a serious problem. It has been evidenced time and time again in high profile accidents such as the Air Midwest Flight 5481 accident in Charlotte, North Carolina. That flight crashed as a result of an incorrectly rigged elevator control system. The misrigging was due, in part, to the failure of the technician to remove the floorboards during the rigging procedure as specified in the maintenance manual, thus making it impossible to visually confirm proper installation of the rig pin. Among the NTSB report conclusions was, "Both the QA inspector and the mechanic skipped steps that would have helped detect the misrig."

It is imperative that the maintenance industry and the professionals within our industry embrace the need for procedural compliance, even when it is seemingly quicker or easier to skip steps or disregard the procedure. Please read Ed Mitchell's piece in this month's magazine and the follow-up piece that will appear in the March issue. The acronyms he uses, PiNC and PuNC, denote variations in the types of non-compliance with PiNC being intentional, and PuNC being unintentional.

Just as we wouldn't want our surgeon to skip steps in a complicated surgical procedure, it is logical that the flying public wouldn't want their mechanic to skip steps in a complicated maintenance procedure. As a hands-on mechanic, set your personal standards for procedural compliance high.

As a supervisor of mechanics, require procedural compliance from your charges. As a company, demand it.

## *FACT OF THE WEEK*

### Ethics of Working Teens

More than 40 percent of U.S. teens surveyed said they would act unethically if their boss told them to. In addition, more than one third said they'd be prepared to lie to cover up a mistake they made at work.

Source: Poll by JA (Junior Achievement) Worldwide and Deloitte & Touche USA LLP

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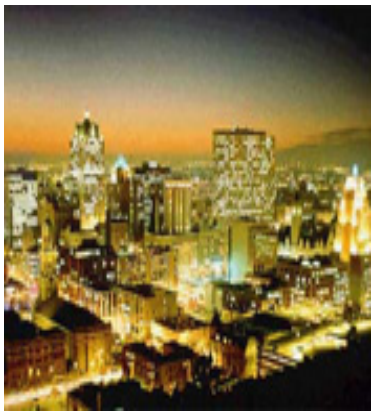
# ***FAT CITY***



**Milwaukee, WI: Named America's Most Athletic City**
**Fitness & Fatness in U.S. Cities**

**The annual "Fattest and Fittest Cities" survey can be found in this month's Men's Fitness, a monthly magazine devoted to fitness and health issues for men. The magazine crunched numbers to find out how well people eat, how much exercise they get and how much extra weight they're carrying. The survey looked at how long people spent in traffic jams and on treadmills, and researchers canvassed city authorities to see what initiatives were in place to encourage people to get moving and stay healthy.**

**Some of the results of this year's survey are surprising. For example, Milwaukee, home of America's breweries, came in as Most Athletic City. The Best Eating Habits were found in Oakland, California. Folks in Memphis, Tennessee, watch the most television. And the Junk Food Capital of the USA is … drum roll please:**

**Cleveland, Ohio.**

**The dark horse healthiest city in America turned out to be Albuquerque, New Mexico, up a whopping 13 spots from last year. Then came Seattle, Colorado Springs, Minneapolis (last year's number 21!) and Tuscon.**

**And what was Fat City, USA? With almost as many fast food restaurants as Cleveland, and residents so inactive that doctors say 70 percent of them are putting their health at risk, it's... another drum roll please:**

**Las Vegas.**

**In the race for Fat City, both San Antonio and Miami were up over a dozen spots, and then came Mesa, Arizona, and Los Angeles.**

**So if you're living in Las Vegas, you may want to consider moving to Albuquerque. If nothing else, moving furniture is good exercise.**

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## ***Picture This!***


**END**