



# Aviation Human Factors Industry News May 5, 2008

Vol. IV. Issue 17

### Airport failed to spot jet damage

A HOLIDAY jet was allowed to take off twice after engineers at two airports - including Manchester - failed to spot its landing gear was damaged.

The problem with the Thomas Cook Airbus A320 was first missed before take-off at Bristol airport and the flight, carrying 185 people to Lanzarote, had to be diverted to Manchester.

An air accident report reveals that the engineers at Manchester also failed to find the damage and passed the jet fit for take-off again so it could fly back to Bristol the next day.



But when the pilot was unable to raise the wheels after take off, the jet had to turn back and land at Manchester a second time.

The report by the Air Accidents Investigation Branch says the plane's landing gear had been damaged when it landed in strong crosswinds at Bristol the day before on November 15, 2006 carrying 179 passengers from Cyprus.

The report says the problem could only have been spotted by an engineer using a jack and that guidance on this in the aircraft manual was `unclear'.

It says: "Substantial damage had occurred to the landing gear, but this damage was not detected before the aircraft was cleared for a further flight.

"On that flight the crew experienced landing gear problems after take off, together with other warnings, and diverted to Manchester Airport."



The report reveals a tube in the A320's landing gear was ruptured when it made the `hard' landing at Bristol .

A signal was sent to the crew while they were shutting down the engine and they gave a report to an engineer, who then carried out checks.

The engineer thought he had done the correct checks, but was not made aware of a more up-to-date procedure, which would have called for the aircraft to be placed on a jack.

He released the aircraft back into service, but the flight crew experienced problems in raising the landing gear when they took off the next day and had to divert to Manchester.

The report says engineers maintaining the aircraft at Bristol had not received adequate training in the use of computer software supporting the operator's aircraft manuals.

Following the aircraft's arrival at Manchester, the engineers found a fault with a sensor. But no link was made between the sensor fault and the earlier problem.

The report recommended that maintenance documents be amended.

A spokeswoman for Thomas Cook said all the recommendations in the report `have been or are in the process of being, implemented'.

#### FedEx Grounds a Cargo Carrier

Issues surrounding improperly certified parts in some General Electric Co. jet engines prompted FedEx Corp. to temporarily take one of its widebody McDonnell Douglas MD-11 cargo aircraft out of service two weeks ago, according to a FedEx spokesman.

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The move comes a day after both General Electric

and the Federal Aviation Administration indicated that questions about problematic parts in dozens of GE jet engines were slated to be resolved in the next two months without any anticipated groundings or disruptions of flight schedules. The parts are used worldwide in various Boeing Co., Airbus and McDonnell Douglas jets. GE has said up to 50 engines may be affected, without identifying any carriers.

Earlier this week, GE said the problems all related to paperwork lapses and didn't pose any safety issues.



GE said at the time that it had "conducted a detailed analysis" of hundreds of different parts and expected all issues to be resolved without taking any engines out of service. A company spokesman couldn't be immediately reached Friday.

The FedEx spokesman said GE altered the cargo carrier about problems related to engine parts Friday afternoon while the three-engine MD-11 jet was going to Anchorage. The plane was "grounded" after landing, according to the FedEx spokesman. He said the plan is to "replace the engine and put the aircraft back into service as soon as possible."

An FAA spokeswoman didn't have any comment on the FedEx incident. She said the agency has no plans to issue mandatory safety directives dealing with the engine-parts matter.

The problem stems from installing parts in certain upgraded versions of GE engines without the required federal authorization or supporting engineering data.

#### Warning issued on planes mechanic inspected, fixed

Federal officials said improper inspections and repairs could lead to safety hazards in airplanes worked on since 2002 by a mechanic at the Northumberland County Airport near Elysburg.

The Federal Aviation Administration warning Wednesday followed a guilty plea in U.S. Middle District Court by the mechanic of Selinsgrove.



The mechanic, 27, who operated Always Airborne and Smooth Landings at the airport, pleaded guilty to charges that cover the period from November 2002 to January 2008.

They involve 66 airplanes, some of which are owned by Dauphin County residents, an investigator said. The agency is trying to contact the owners of the planes and said anyone who has not received notification should contact FAA inspectors.

The mechanic pleaded guilty to charges of fraud involving aircraft parts and interstate transportation of stolen property. He admitted stealing a Piper PA-32 single-engine airplane in Fort Lauderdale, Fla., last May, flying it to Elysburg and selling it for \$60,000.

Senior Judge James F. McClure, who accepted the guilty plea, previously issued a preliminary injunction to prevent the mechanic from performing aircraft mechanic work because the FAA revoked his certifications on Oct. 2, 2006.



A court document listing reasons for the revocation stated that the mechanic defaced a global positioning system unit he took from one plane and put in another, did not enter maintenance records after he repaired a plane and forged the names of other mechanics on records.

In pleading guilty, the mechanic admitted he forged the name of a certified FAA inspection mechanic on 141 documents, forged the names of other certified mechanics 28 times, backdated and illegally signed maintenance logs 27 times after his licenses were revoked, and falsified records to conceal that 48 times he used parts stolen from other aircraft.

The mechanic admitted he agreed to buy the Piper in Fort Lauderdale for \$55,000 but the owner canceled the deal when a \$35,000 down payment check bounced. The plane was stolen May 18, but the owner did not discover it missing until August, Assistant U.S. Attorney Bruce Brandler said.

The mechanic is free on personal recognizance until sentencing July 22. He could receive a maximum of 25 years in prison, but a probation officer told the judge the guidelines will suggest at least a 2-year term.

# A Bad Sign



Sign language is one of the oldest forms of communication, but even hand signals can be misinterpreted, especially when they are intended for someone else.

• The ground marshaller signaled for us to start our taxi out from the gate. During turnout the Captain stopped the aircraft midway through the turn. When I asked him if there was a problem, he replied that the marshaller "had an odd look on his face" so he elected to stop the aircraft.... The marshaller then gave the stop signal and notified us that the left wingtip had contacted the jetway, causing a slight indentation on the left wingtip and breaking a fiberglass panel on the jetway. The aircraft was shutdown where we stopped, the flight was cancelled, and the passengers were offloaded.



After the incident, we learned that the jetway was not fully retracted away from the aircraft. A wing walker had been motioning to the jetway operator to retract the jetway. Our marshaller saw the wing walker's hand motions and interpreted them to mean that it was OK for the aircraft to move and directed us to begin taxi out.

Lessons learned: 1. Everyone in the ground crew was trying to do a good job, turn the aircraft quickly, and not inconvenience the passengers. 2. Lack of proper communication between the wing walker and the marshaller led to the mixed signals that caused the incident.

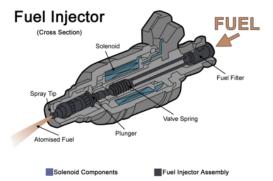


# Fuel injectors Blocked by Rust Particles

#### Piper Aztec, Destroyed. One Fatality

The aircraft had been stored outside at Bagby Airfield near Thirkelby Hall, England, with no engine runs conducted, for nearly five years before the pilot bought it in February 2006, the AAIB report said. Water was found in the fuel system during maintenance and inspections conducted before the sale; the system was flushed, and the fuel filters were cleaned.





maintenance inspection. A fuel injector in the left engine was found blocked; all the fuel injectors were cleaned, and the fuel system again was flushed.

Winds were from 250 degrees at 5-8 kt when the pilot arrived at the airfield to pickup the airplane on June 29, 2006. Bagby is an unlicensed airfield with two grass runways. The main runway is 2,300 ft long.

Witnesses saw smoke emerging from both engines as the Aztec departed. The pilot radioed that the aircraft was not climbing properly and then flew a tight pattern to return for a landing. The aircraft touched down hard and bounced several times before the pilot conducted a go-around. The aircraft was observed climbing slowly before it banked steeply left, stalled and spun to the ground.

"The examination of the engine revealed that two different types of corrosion debris had affected many of the fuel injector nozzles," the report said. One of the fuel injectors on the left engine was totally blocked, and those on the right engine had flow rates reduced by 55 to 91 percent. The report said this indicated "that despite the cleaning and flushing of the fuel system, not all of the corrosion debris had been removed from the system".

#### Air show accident blamed on 'curiosity'

A "mindless act of curiosity" by a member of the public led to an accident in which an escape hatch fell from a British military helicopter in flight at the Salthill airshow last year, injuring two spectators, an official report has found.

The hatch fell some 46m (150ft) from the Royal Air Force Merlin helicopter, which had taken off from the promenade at about 6pm on June 24th last year.





Spectators below were seen to "scatter in different" directions in an effort to avoid the 7kg aluminum door as it fell to the ground, according to the report by the Air Accident Investigation Unit (AAIU) of the Department of Transport.

Safety recommendations made by the air accident investigators to the Irish Aviation Authority on its guidelines for airshows were accepted by that body following the incident.

About 400 members of the public entered the interior of the helicopter while it was on display on the ground during the day.

It appeared a handle was interfered with by a member of the public, switching it to a position which caused the emergency escape hatch to eject from a sliding cargo door when the helicopter took off, the report found.

A woman injured by the falling hatch said she and her sons were getting ready to leave the airshow when she heard people screaming.

"I looked up and saw an object, which I now know to be a door coming towards me. I moved backwards to avoid the object, but it struck me on the chin and knocked me backwards," she said.

The woman was taken to University College Hospital Galway by ambulance and was given medical attention.

"I was later discharged from hospital, but am still feeling the affects of the impact," she said.

Air accident investigators found that the locking mechanism for the emergency hatch was serviceable.

However, a seal which would not normally be moved except in the case of an "intentional emergency jettison" or during maintenance was found to be broken.

"Photographic evidence shows that the hatch handle was interfered with by an unknown member of the public while the helicopter was positioned at the static display park. The helicopter took off with the hatch handle in the open/jettison position. As it transitioned away, the hatch ejected from its stowed position and fell to earth," the report said.

"The investigation does not consider this event to be the result of a malicious act, but more a mindless act of curiosity on the part of an unknown spectator."

The report said the crew of the Merlin should have been more alert to the possibility that the helicopter could have been interfered with in the circumstances that existed on the day.



# Nigeria: Poor Aircraft Maintenance Hinders Aviation Safety

The air transport sector plays a crucial part in the world economic activities and has been identified as the fastest growing sector of the global economy.

In like vein, a safe system of operation is an essential requirement in the aviation industry, because airlines' safety records facilitate passengers' confidence in their operations, thereby boosting the airlines' profitability.



Whatever the case may be, safety is paramount to the aviation industry and this why good maintenance of aircraft is required to make it airworthy for safe flight operations.

However, aircraft maintenance is not just carried out by engineers at any workshop, and the parts are not something available as auto spare parts that could be found in market closed by.

It has been discovered that most the airlines operating in Nigeria always face problems when it comes to carrying out major checks on their aircraft as the country lacks a standard hanger for these checks much less overhaul.

The Director General of the International Air Transport Association (IATA), Giovanni Bisignani, disclosed last week that in 2007, African airlines recorded losses amounting to US\$400 million compared to \$5.6 billion profit made by airlines globally.

The IATA chief also foresees a tougher situation in 2008. While world aviation industry profit are expected to drop by US\$4.5 billion this year, the African region, Bisignani said, will witness immense losses.

In a lecture recently organized by Finum Aviation and the Licensed Aircraft Engineers in Lagos, an aviation engineer, Godwin Jibodu, attributed flaws in the Nigerian aviation sector to lack of maintenance culture and the training of professional engineers.



He explained that acquiring aircraft is not as relevant to the industry as good maintenance of the existing ones, adding that a well maintained ageing aircraft is as good as a poorly maintained new aircraft.

Jibodu noted further that the chief executive officers of airlines focus more attention on maximizing profit with little interest on maintenance engineers who are in charge of the safety of their operations.

He expressed concern on how aircraft could efficiently and economically maintained in Nigeria when minor and overhaul activities are carried out abroad. He lamented that the spare parts are bought in foreign currencies and that it takes about 21days to source and receive them from foreign vendors.

He also said that unless the country puts up a national hanger as was done in the past, operators will continue to face maintenance problems. He added that in the next three years, aviation in Nigeria will totally collapse if nothing is done to train more engineers.

The aviation engineer said that most of his colleagues are now above 55years old and if nothing is done, there will be serious crises in the industry.

"In the 1960s, aircraft maintenance exhibited a lot of promise. We had fleets of airplanes which we were able to maintain with resources available in-house. F27, our biggest airplane at the time, was maintained locally up to overhaul level .There were spare parts when needed to effect maintenance/repairs, there were enough tools/jigs for the use of the maintenance staff", he said.

Speaking further, he said the problem began when the airlines purchased larger machines for flying in the name of modernization without adequate corresponding workshops for maintenance.

"Therefore, the hanger meant for F27s became inadequate for the maintenance and repairs of new generation airplanes", he said.

Since that time, he said, maintenance and aircraft repairs in Nigeria have been carried out abroad, a development which placed too much burden on operators because activities done abroad are paid for in foreign currencies.



# Officials: Runway Incursions Remain Top Safety Concern

Despite the FAA's recent to-do over skipped fuselage fatigue inspections... and the cancellation of over 3,300 commercial airline flights due to (barely) out-of-spec wiring harnesses... officials say the agency shouldn't lose sight of real problems in the face of its headline-making crackdown on airline safety.

In other words, according to those authorities... and we're paraphrasing here... it's the runway incursions, stupid.



"Where we are most vulnerable at this moment is on the ground," NTSB Chairman Mark Rosenker recently noted. "To me, this is the most dangerous aspect of flying."

According to The New York Times, in a six-month period ending March 30 there were 15 serious incursions at US airports, compared with eight for the same period a year earlier. A 16th incursion occurred at Dallas-Fort Worth International on April 6, when a tug operator failed to hold short of an active runway... and pulled a Boeing 777 into the path of a landing airliner, which reportedly missed the tug by about 25 feet.

That incident is particularly egregious, given the FAA's much-touted 2005 installation of a runway lighting system intended to curb such incidents at DFW. Following successful trials at DFW and San Diego, the so-called Runway Status Lights are due to be installed at LAX and Boston's Logan International Airport later this year.

As ANN reported, such incursions were the topic of an industry hearing before the House Subcommittee on Aviation. The February meeting included representatives from the FAA and the air traffic controllers' union, as well as industry groups including the Aircraft Owners and Pilots Association and Airports Council International-North America.

Those in attendance suggested a number of possible remedies, some more hightech than others. ACI-NA noted close to 200 airports planned to repaint runway markings by the end of 2008, making runway hold-short lines more visible.



There are other solutions, including sophisticated in-cockpit warning systems. Such warning devices aren't required by the FAA, however, and some fear the agency's intent to vastly upgrade the nation's air traffic control network (NextGen) will delay widespread adoption of such technologies.

"You can fly an aircraft across the Pacific or across the Atlantic, and at any point in that journey you know where you are within about three meters, until you get on the ground," notes Randy Babbitt, former president of the Air Line Pilots Association. "If you've got a GPS in your car, you have infinitely more detailed information about where you are than in the cockpit of an airplane on the ground at Kennedy."

Others say it's just as well such advanced systems aren't mandated... as current devices aren't failure-proof, and most are prohibitively expensive. Nearly all runway incursions are the result of human error, not equipment faults -- leading many to suggest if humans were more vigilant on the ground, there would be fewer problems.

#### **Report: DFW Tracon Managers Lied About Errors**

Management at the Dallas-Fort Worth Tracon investigated operational errors and deviations, but routinely and intentionally misclassified them as pilot errors or non-events, the FAA said late last week. That conclusion was reached after an investigation by the Department of Transportation's Office of Inspector General. The OIG report, prompted by whistleblower allegations, found that between November 2005 and July 2007,



Tracon managers misclassified 62 air traffic events as pilot deviation or nonevents when it fact there were 52 operational errors and 10 operational deviations.

In response, the FAA removed both the facility manager and assistant manager at the Dallas-Fort Worth Tracon from their positions. Additional personnel actions may be taken, the FAA said. "I am deeply disturbed by the findings in this report," said Hank Krakowski, chief operating officer of the FAA's Air Traffic Organization. "I am personally committed to making sure the IG's recommendations are implemented and that managers are held accountable."

The OIG report will be investigated further by the U.S. Office of Special Counsel. The FAA said it will accelerate deployment of the Traffic Analysis Review Program (TARP) -- software that automatically detects losses of aircraft separation at terminal facilities. The program will be implemented at the DFW Tracon by the end of fiscal year 2008, and nationwide by the end of next year.



### **Boeing CEO admits 787 Dreamliner errors**

Boeing Co's chief executive has admitted that the company's ambitious plan to outsource most of the production of its new 787 Dreamliner jet has not been completely successful and could lead to a re-evaluation for future programs.



The admission is the clearest indication yet that Boeing's revolutionary plan to parcel out

production of most of the carbon-composite aircraft to suppliers around the world has aggravated problems on the program, which is now running 15 months behind schedule.

"The global-partnership model of the 787 remains a fundamentally sound strategy," said Boeing CEO Jim McNerney in a memo circulated to employees on Monday. "But we may have gone a little too far, too fast in a couple of areas. I expect we'll modify our approach somewhat on future programs -- possibly drawing the lines in different places with regard to what we ask our partners to do."

McNerney's message, entitled "Time to deliver on the 787," comes shortly after Boeing announced the third major delay on the aircraft, which has not yet left the ground for tests almost a year after major assembly of the first plane started.

The Chicago-based company shook up the industry and upset some of its own employees five years ago when it announced a plan to hire outside companies to build most of the 787 and ship the parts to its Seattle-area plant for assembly, instead of making more of the plane itself.

### Airbus: China Needs 190 A380s

Airbus forecasts that demand for passenger aircraft in China will weigh in at 2,800 aircraft through the year 2026. The forecast need translates to \$329 billion worth of aircraft and represents more than one tenth of the world's total forecast demand for the period. China's passenger fleet is expected to triple in size over the next



20 years to meet passenger and cargo traffic, which are expected to grow five to six times, respectively. China's mainland traffic is expected to require nearly 700 large passenger jets and, Airbus forecasts, 190 VLAs ... or, very large aircraft like the double-decker A380. Airbus has already increased its market share in China to nearly 38 percent (up from 7 percent in 1995) and is shooting for control of 50 percent of the market by 2011. For 2007, Airbus delivered about 15 percent of its new aircraft to China. The company is reportedly considering a joint venture in China that would produce composite aircraft components for the manufacturer.



# HondaJet Dealership For Albany

If you needed further proof (besides the funky engine configuration) that Honda is approaching its entry into the aviation industry a little differently than most start-ups, consider the news from Albany, N.Y. Before the first HondaJets roll off the Greensboro, N.C., assembly line sometime in 2010, a network of five full-service dealerships, with



maintenance and repair facilities, will be ready to receive them. Earlier this week, HondaJet East announced that the key Northeastern market will be served from a new facility to be built at Albany International Airport.

"After almost a year of research and analysis for the home of our HondaJet East facility, we are excited to be a part of the Albany community," said HondaJet East President C. Daniel Langston. HondaJet East is owned by Florida-based Flightline Group. HondaJet East isn't waiting for the building to be finished to move into Albany, however. Staff will work out of the existing FBO at the airport until their new quarters are finished.

#### Shear and Utility Snip can cut through sheet metal.

Shop/Electrician Shear and Utility Snip features needle-nose blades with 2 in. cut length that provide access to confined areas. It features textured plastisol grips and hot drop-forged blades manufactured of high

carbon steel. Able to shear various materials, snip wire and cable ties, and strip coated/insulated wire, compact, multipurpose tool can cut through 26 ga cold-rolled sheet metal, 18 ga copper wire, and 22 ga soft steel wire.

Related categories: Portable Tools



#### Work Hassles and Conflict Impact Sleep

There are countless studies suggesting that long work hours, shift work and job insecurity contribute to sleep problems among Americans. Now a new study finds that common work hassles, stress and conflicts with one's boss and coworkers are more likely than long hours, shift work or job insecurity to impact a good night's sleep. The study was based on survey responses of about 2,300 American adults who were monitored for more than a decade.



According to the results, respondents who frequently felt upset or bothered at work, or had ongoing conflicts with bosses or co-workers, were about 1.7 times more likely than others to experience sleep problems.

"Physical strain at work tends to create physical fatigue and leads to restorative sleep, but psychological strain has the opposite effect, making it more difficult for people to sleep," study author Dr. Sarah Burgard told U.S. News and World Report.

The researchers did not find evidence of a link between poor sleep and working long hours or working nights or weekends. Dr. Burgard presented the findings last week at the annual meeting of the Population Association of America. Read the full U.S. News and World Report article.

# **Midnight Shift Nugget**

#### **Running on Empty**

The best antidote for a midnight slump is a cold energy drink, right? Not so fast.

You may be so tired that you could fall asleep right here,

right now, on your keyboard. But before you pop open another energy drink, read the list of ingredients on the label. Some so-called "energy" drinks are high in sugar and low in caffeine, a combination that, according to research, could actually have you crashing even harder about 70 to 80 minutes later. A better remedy: a cup of coffee (not decaf) or a 20-minute nap. You'll feel like a new person.

High-sugar drinks make your blood glucose rise -- and fast. Your body's response? Pump out massive amounts of insulin to handle the load. Your system metabolizes all that sugar just as quickly as it entered your system, leading to a big drop in blood glucose about 70 to 80 minutes after you consumed the beverage. Essentially, you crash -- hard. In fact, you'll feel worse than you did before you had the drink, and you'll probably be mentally slower. That's what happened to a small group of sleep-deprived people who performed a computer test to determine their reaction times after drinking a high-sugar, low-caffeine energy drink. Participants performed

much worse on the test 70 to 80 minutes after consuming the drink than they did just 10 or 20 minutes after downing it. In other words, they were bum-rushed by the sugar. Power up with a nap, a walk, or a cup of joe instead.













### How Light Workouts Can Beat Hard Ones

We know how it is. The thought of sweating through a workout can turn couch gravity into an absolutely irresistible force.

But here's some good news for slackers: Easy, breezy, light exercise may do more for your energy levels than the hard stuff. So go ahead, put your workout on cruise control. Just this once.

#### Get up and go ...

Research shows that a program of low intensity exercise training -- like light cycling on a stationary bike

for 30 minutes three times a week -- can reduce tired-all-the-time feelings by as much as 65 percent. And it only takes 6 weeks of light workouts to feel pepped up. Moderate-intensity exercise programs boost energy levels, too, but not as much. (Know what the easiest workout in the world is? <u>It's this</u>.)

#### ... got up and went

One possible explanation for the better energy boost from lighter workouts: More vigorous workouts shape you up but also tire you out. So if you're just trying to get off the couch for a change, start slow. Go at whatever pace is comfortable for you -- in a few weeks, you'll feel your tiredness fade. Then you can think about kicking things up a notch.

#### **SAFETY CULTURE**

"Safety culture" generally refers to what the people within an organization think about safety and how much they value it as an organizational goal. According to most accounts, the term was first used by the International Nuclear Safety Group (INSAG), a sub-agency of the International Atomic Energy Agency, in its 1986 report on the Chernobyl accident. INSAG cited the lack of a safety culture as a leading cause of the disaster:

"The accident can be said to have flowed from deficient safety culture, not only at the Chernobyl



**Chernobyl: Crucible of the Culture Concept** 

plant, but throughout the Soviet design, operating and regulatory organizations for nuclear power that existed at the time. . . . Safety culture. . . requires total dedication, which at nuclear power plants is primarily generated by the attitudes of managers of organizations involved in their development and operation."





Safety culture has been the subject of numerous studies in recent years. But there's still no consensus on exactly what the concept means. One of the more prominently used definitions comes from the U.K. Health & Safety Commission: Safety culture is "the product of individual and group values, attitudes, perceptions, competencies and patterns of behavior determine the commitment to, and the style and proficiency of, an organization's health and safety management."

### **Bad Design**

One human factors problem involves walking in from the bright outdoors into a dark building and encountering an almost invisible step. This example comes from a library lobby. The warning sign isn't a very elegant solution.

#### **Design suggestion**

One possible solution would be to use <mark>lighting</mark> along the step to make it visible



### **SEASONAL SAFETY**

#### **10 Spring Cleaning Safety Tips**

It's important to note that household cleaning substances are among the most common poison exposures for children. So, here are 10 tips to prevent poison exposures during Spring cleaning:

1. Never mix household and chemical products together; this may create a poisonous gas.



What's your poison?

2. Read the labels of household and chemical products before you use them.

**3. Follow safety recommendations when using household cleaning products or other chemicals, such as wearing gloves, long sleeves and masks.** 

4. Properly ventilate the area when using household cleaning products or other chemical products. Turn on the fan and open the windows.



5. Don't leave chemical products unattended. If you must leave the room in the middle of a task, either put the product away or take it with you.

6. Properly mark and store under lock and key all household and pool chemicals, paints and poisons. Keep these on a high shelf, out of children's reach.

7. Store household products in original containers and never put cleaning solutions in food containers.

8. Dispose of household and chemical products that are leaking, expired or that look bad.

9. Know how to properly dispose of chemical products. Never put them in the trash or pour them down the drain. If you don't know how to dispose of the products, contact your local waste management authority.

10. Post the poison control center number near every phone. (In the US, it's 1.800.222.1222. In Canada, provincial poison control centers are listed on the Emergency page of the phone book, or you can visit the <u>SafeKids website</u>, which provides a list of provincial poison center phone numbers.)

# The second

#### **PICTURE THIS!**

The driver of this vehicle seems totally oblivious to the fact that no matter how you slice it, an SUV just isn't a pickup truck. He also seems unaware that twine, no matter how much you use, isn't a cargo strap or a rope. And he probably doesn't know how close he is to treating his fellow road users to some flying plywood as he drives merrily off in his own little world.

