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AIRWAYS

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Fight Between Pilot, Mechanic Halts Flights

Up to 500 passengers were stranded on American Samoa, some for more than a week, after a pilot reportedly flattened a mechanic and the airline they were contracted to, South Pacific Express, suspended flights. According to the e-Travel Blackboard an altercation between the two on Dec. 21 ended with the mechanic laid out. The pilot, a first officer, was immediately fired. The mechanic and the airline's chief pilot were "recalled" by the owner of the aircraft, Freedom Air, which forced the airline to suspend service. That left 500 holiday visitors to the tropical island without a way home. The pax were rebooked on other airlines but their flights were already packed with holiday travelers. By Dec. 28, there were still about 100 South Pacific Express pax waiting for flights. According to Radio New Zealand International South Pacific Express has announced a new flight crew will be sent to Samoa today to resume regular service.

Video Captures 737 Striking Runway Obstruction

A 737-300 collided with a car on the runway on its takeoff roll Sunday morning, and the crash and the aftermath were caught on video by a passenger in a window seat just above the wing. The video, posted on YouTube, records a loud smashing sound and apparent turmoil in the cabin. The airplane was stopped on the airport and passengers were evacuated with no reports of injuries.

 "This was a serious incident in which the plane was damaged," said Valentin Iordache, a spokesperson for Bucharest's Otopeni airport, according to news24.com. The aircraft, operated by the Romanian airline Tarom, was carrying 120 passengers bound from Romania to a resort area in Egypt.

It apparently struck a car that had been driven onto the runway to check the lighting. Visibility was poor due to thick fog. "A disaster was avoided thanks to the crew's professionalism," Tarom spokesman Gheorghe Barla told news24. He said the vehicle left on the runway was privately owned and had been "forgotten" there, and the control tower was unaware of its location.

The accident is under investigation and no official cause has been determined.

Video: http://www.avweb.com/eletter/archives/avflash/1026-full.html#196874

Runway accidents linked to 'human factor'

Najmedin Meshkati, professor, Viterbi School of Engineering, University of Southern California - Los Angeles

As a professor of engineering and an aviation safety researcher and instructor, I disagree with the Opposing View on the airline industry by Nicholas A. Sabatini and Hank Krakowski ("Safety project working," Air travel debate, Dec. 28).

They write: "Any look at aviation safety in America — specifically on our runways — has to start with the numbers. Those numbers tell us the Federal Aviation Administration's aggressive efforts in the past decade to make our airports safer are delivering significant results."

But I do not think the "numbers" are doing justice to the complex problem of runway collisions. Based on my research and teaching aviation safety for the past 20 years at the University of Southern California, and as one of the 25 experts who participated in the Government Accountability Office's recently released study on "Aviation Runway and Ramp Safety," I have found that human factors are the most important contributor to runway incursions. According to the FAA's Runway Safety Blueprint 2002-04, human factors are "the common denominator in every runway incursion." Some of the most notable causes of incursions are poor visibility, fatigue, air traffic controller's workload, deficient radar systems, pressure on cockpit crews and inconsistent communication practices.

There also are strong indications that air traffic controllers are increasingly suffering from cumulative fatigue, the term given to the condition workers face after working long hours for consecutive days.

This critical issue prompted the National Transportation Safety Board to update its "Most Wanted List" of safety improvements by adding recommendations addressing fatigue. Throwing more technology onto the runway problem does not address human factors.

To change this terrible situation, the FAA needs to seriously consider human factors. It needs the genuine cooperation and coordination of manufacturers, air traffic controllers and other industry officials. The Transportation Department, with the help of the National Research Council, needs to develop a scientifically sound plan to deal with human factors.

Congress should make sure this new plan, unlike the FAA's 1990 plan launched in the wake of the 1988 Aloha Airlines accident, stays on the front burner.
(USA Today)

Plane-crash survivor says door opened after takeoff

ANCHORAGE (AP) — A chartered plane that crashed into a shallow harbor after taking off from Kodiak Island, killing six people, was carrying a group of fishermen from a dissident sect of the Russian Orthodox Church home for Christmas.

Four people survived the crash last Saturday, and one told investigators the door to a baggage compartment in the nose of the small plane had popped open after takeoff.

The Piper PA-31 Navajo Chieftain, operated by Kodiak-based Servant Air, crashed about 50 yards off the end of a runway after taking off, according to the Federal Aviation Administration and the National Transportation Safety Board. The wreckage was recovered last Sunday.

The passengers had been fishing in Kodiak and were taking a short flight north to Homer to celebrate Eastern Orthodox Christmas at home today.

Dean Andrew, pilot of a float plane, was taxiing nearby when he heard the Piper pilot — Robin Starrett, 50, of Kodiak — on the radio saying he needed to return to the airport. Andrew could tell by his **voice that something serious** was going on.

Soon after, he pulled the four survivors aboard his plane, a difficult job in winds estimated at 25 mph. The survivors, hypothermic and hysterical, pointed out that family members were in the submerged fuselage, Andrew said.

"Once I got the four in, I could see down into the fuselage, but I couldn't see any signs of life," Andrew said.

Clint Johnson, an investigator with the NTSB, said survivor Karnely Ivanov, 32, told investigators that just as the Piper got airborne, **the baggage-area door opened at the nose of the plane on the pilot's side.** That prompted the pilot to try to return to the airport.

Starrett was killed along with five passengers from Homer: Stefan F. Basargin, 36; Pavel F. Basargin, 30; Zahary F. Martushev, 25; Iosif F. Martushev, 15; and Andrian Reutov, 22, officials said.

Beside Ivanov, the survivors were identified as Feodot Basargin, 33; Andrean V. Basargin, 25; and Anton Rijkoff, 30.

Australian Government Lobs Shot At Engine Manufacturers

In a 269-page report released last month (**28.5 MB PDF**), the Australian Transport Safety Bureau (ATSB) took a thinly veiled stab at reciprocating engine manufacturers, alleging that industry-wide **"poor communication, complacency, lack of knowledge, distraction, lack of teamwork, fatigue, lack of resources, pressure, lack of assertiveness, stress, lack of awareness, and accepted norms"** contributed to **20 engine-failure-related aircraft accidents** reported to the ATSB between January 2000 and December 2005. The report, titled "Aircraft Reciprocating-Engine Failure: An Analysis of Failure in a Complex Engineered System," states that 1,270 reciprocating multi-engine aircraft flew a total of about 220,000 hours during the study period. The events detailed in the report "are dominated by combustion chamber component melting, plain bearing breakup or movement, and the initiation and growth of fatigue cracking in components that are designed to have a life not limited by fatigue."

Engine reliability has declined, the report suggests, because manufacturers have **failed** to effectively gather and act upon information on the performance of engine sub-systems and components. "Recurrent propulsion system failures suggests that system adjustment or correction, through an effective feedback process, is **not occurring**," the report states.

Malibu Loses Prop, Landing Successful

With no prop, no forward visibility and three people in his charge (one of them, his daughter), 7,400-hour pilot Barry Cox landed a 1988 Piper Malibu at Aspen-Pitkin County Airport last Thursday after suffering catastrophic engine failure just minutes into his flight. Offering up a late nomination for understatement of the year, "It was exciting," Cox told the Aspen Times. The incident unfolded around 10 a.m., about ten minutes into the flight and only 147 hours after the Malibu's Continental had been remanufactured. Cox had piloted the Malibu out of Aspen-Pitkin to 16,000 feet and about eight miles north of the airport. It was then and there that oil suddenly turned the windshield an opaque brown, a sight that was followed by a loud sound that likely signified the propeller's departure from the aircraft. Cox radioed the Aspen tower to inform them of his situation and impending return before offering calming words to his frightened daughter, "I was just saying, 'We're OK, we can glide from here and make it.'"

Cox told the newspaper that he managed to line up intentionally high and fast, waiting to lower the gear, and landed before the tower-summoned fire department and police arrived. Cox won handshakes from those present on the ground and accolades from at least one witness who told the paper the landing was "one of the more tremendous things I've seen."

Safer Skies – the numbers tell the tale

The trend towards safer skies continues - both the long-term and short-term trend. That's the good news from a new report by Ascend, a global aviation consultancy.

The headline: passenger fatalities fell 20 percent in 2007, a full fifth. Both passenger fatalities, as well as the number of fatal accidents, were what Ascend terms "well below" long-term trends.

In 2007 there were 631 passenger fatalities worldwide. That's 159 fewer than in 2006. The average number for the decade is 718.9 per year, and even that is an improvement over the average count per year during the 1990s. In the last decade of the 20th century, an average of 954.4 passengers died per year in commercial air crashes.
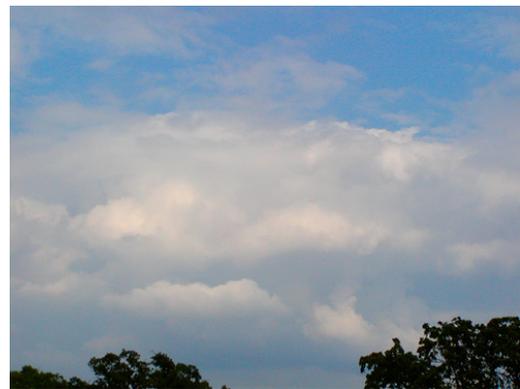
As for the number of fatal accidents, Ascend says there were 15 worldwide in 2007, **the worst** of which occurred in July in Sao Paulo when a TAM Airbus A320 overran a short runway and struck a building. In that accident, 181 passengers and crew died as well as a dozen on the ground.

Still, for a moment, focus on the average. Since 2000 there has been an average of 16 fatal crashes per year. By contrast, during the 1990s that figure was 24.2 per year. A significant change for the better.

These figures are especially impressive in light of the extraordinarily rapid growth in the number of airlines, and the volume of flights they field. In India and China, flight operations are burgeoning.

However, Ascend's director, Paul Hayes, **cautions against complacency.** "Work is far from complete," says the global safety expert. "The challenge for aviation is to keep **setting itself higher standards** and to keep improving."

FAA Exceeds Annual Goal for General Aviation Safety

The number of fatal general aviation accidents **declined by 5 percent** this year, the Federal Aviation Administration (FAA) announced last week.

The FAA's goal was to have no more than 331 fatal general aviation accidents during the 12 months ending Sept. 30. The actual number was 314. Fatalities in general aviation accidents also declined significantly,

from 676 in fiscal 2006 to 564 in fiscal 2007. For these calculations, "general aviation" includes not only privately flown planes but also non-scheduled air taxi flights.

"This record is due to a **dedicated commitment to safety** by everyone in general aviation," said FAA Associate Administrator for Aviation Safety Nicholas A. Sabatini. "In particular, manufacturers are providing sophisticated technology like GPS and glass cockpits - and the training to go with them - and the FAA is vigorously encouraging adoption of these **safety enhancements.**"

In October 2006, the FAA ushered in a new effort to help aircraft owners, pilots and **aviation maintenance technicians** avoid mistakes that lead to accidents. Called the **FAA Safety Team**, the program is devoted to decreasing aircraft accidents by promoting a **cultural change** in the aviation community toward a higher level of safety. The program features data mining and analysis, teamwork, instruction in the use of **safety management systems** and **risk management tools,** and development and distribution of educational materials.

For more than 37 years, the FAA has pursued a comprehensive program to improve the safety of the general aviation community.

The original program introduced the concept of a joint effort sponsored by the FAA and the aviation community to reduce the aviation accident rate. Over the years, the endeavor evolved into the Aviation Safety Program, and demonstrated that the general aviation accident rate could be reduced. In the 1990s, the program expanded to include aviation maintenance technicians.

OSHA Unveils Its Top 10 List

Every year, OSHA announces its top 10 list of most frequently cited violations for the year. Let's take a look at the numbers for fiscal year 2007 (October 2006 through September 2007). Note that the numbers are for federal OSHA and don't include citations by states that have their own state occupational health and safety plans.

Total Citations for the Year

Continuing a five-year pattern, the number of all Top 10 citations for FY 2007 was below previous year's totals. The 34,098 citations in the Top 10 for FY 2007 was 2,787 fewer than in FY 2006 and 6,365 below FY 2005 totals. Here's the entire Top 10:
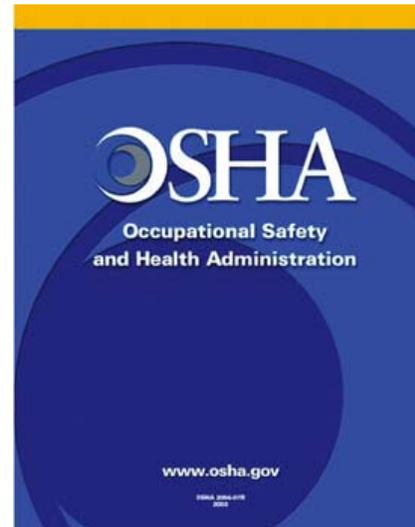
Number 1: Scaffolding, General Requirements - 7,592 citations (2006: 7,895)

Comment: Scaffolding was the most cited standard for the fifth year in a row. And it wasn't even close. Scaffolding beat second place Hazard Communication by almost 2,500 violations, or roughly 33%.

Number 2: Hazard Communication - 5,099 citations (2006: 5,586)

Comment: Last year, Haz Com fell to number 3 on the Top 10 list after holding the second position the previous two years. This year, Haz Com leapfrogged back over Fall Protection to reclaim the 2 spot. Even so, total Haz Com citations for the year were almost 500 less than last year.

Number 3: Fall Protection - 5,095 citations (2006: 5,746)

Comment: Fall Protection fell back to the third spot that it had occupied in FYs 2004 and 2005. And after actually rising in FY 2006, the number of Fall Protection citations decreased by about 700 (roughly 15%).

Number 4: Respiratory Protection - 3,145 citations (2006: 3,410)

Comment: Respiratory Protection remained in the fourth spot for the second year in a row. Total citations in the category were down about 300 from last year.

Number 5: Lockout/Tagout - 2,973 citations (2006: 3,068)

Comment: Lockout/Tagout remains locked in at number 5. Total Lockout/Tagout citations for the year were down by fewer than 100 (95).

Number 6: Powered Industrial Trucks - 2,577 citations (2006: 2,582)

Comment: Powered Industrial Trucks first cracked the Top 10 in 2004. In 2005, it jumped two places from 8 to 6. It seems to have settled in at number 6. Note that total citations were almost identical to last year.

Number 7: Electrical Wiring Methods, Components, and Equipment for General Use - 2,412 citations (2006: 2,396)

Comment: This is the third year in a row that wiring has occupied the seventh position. But wiring bucked the trend and actually had slightly more citations than last year.

Number 8: Ladders - 2,113 citations (2006: 2,115)

Comment: In 2005, Ladders cracked the Top 10 for the first time. In 2006, it advanced from 10 to 9. This year, ladders maintained the pattern, moving up one place to eighth.

Number 9: Machine Guarding, General Requirements - 2,054 citations (2006: 2,296)

Comment: Machine Guarding fell back one place from seventh to eighth. Machine guarding violations are down by almost 33% in the past two years.

Number 10: Electrical, General Requirements - 1,848 citations (2006: 1,790)

Comment: Electrical, General finished at number 10 for the second year in a row. But total citations for the year actually increased by 58.

What Does It Mean?

The fact that scaffolding was OSHA's most frequently cited standard isn't surprising when you consider:

- The disproportionate number of construction sites on OSHA's list of priority enforcement targets;
- The high incidence of fall injuries; and

- The complexity of the scaffolding standard itself.

The most striking observation we can make from this year's Top 10 list is how similar it is from last year's. In fact, all 10 of the standards are holdovers from last year; only the positioning has changed.

And even those changes were miniscule. Two sets of standards swapped one spot (Haz Com replacing Fall Protection at number 2; and Ladders supplanting Machine Guarding, General at number 8); all of the other standards remained in the same position as last year.

The other aspect of this year's Top 10 that stands out is the continued drop in the overall numbers of citations. Eight of the 10 standards in the Top 10 had fewer citations than they did last year at this time. Critics will point to the decline as evidence of OSHA's relative lack of interest in enforcement. Defenders will claim that citations are down because workplace injuries have fallen. And so it goes.

Alteon Maintenance Human Factors Program Training for Managers

Alteon offers free seats in the 2-day seminar **Maintenance Human Factors Program Training for Managers.** This seminar is designed for airlines, heavy maintenance outfits or other organizations that desire to implement a maintenance human factors error-reduction program. This training is based on the widely-used Boeing MEDA program.

The Seminar answers these three questions:
*   What is "human factors"?
*   Why should I care?
*   How do I get an effective HF error-reduction program started in my organization?

Maintenance organizations may send up to three (3) people to attend at no charge. Seminars are held at our Seattle Training Center.

Upcoming seminar dates are:
February 12-13, 2008
May 13-14, 2008
August 5-6, 2008 (proposed)
November 4-5, 2008 (proposed)

**Seating is limited.** For further information, or to reserve seats, contact:

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Controversial aviation study released by NASA

The National Aviation Operational Monitoring Service
(NAOMS) research document on air traffic safety was
released by NASA on Monday, December 31, 2007.

Media sources are already claiming that the
sixteen-thousand page document is difficult to
understand and it does not make any
conclusions or does not contain any suggestions
on the current state of air traffic safety, such as
runway congestion.
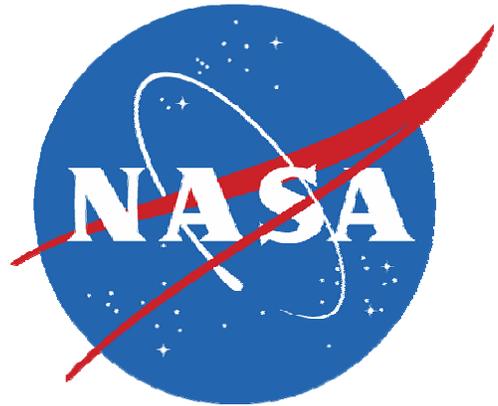
On the other hand, NASA states that it followed
standard procedures for the release of such documents. Its rules prevent any
alteration of the information. According to a January 1, 2008 Houston Chronicle
article ("NASA releases a cryptic study of air traffic safety"): *"NASA offered no
documentation on how to use the findings, nor did it explain how to unlock cryptic
coding found throughout the data."*

Within the *Chronicle* article NASA administrator Mike Griffin states, "*We've gone
the extra mile with this data. Well beyond our original intensions.*"

The document is based on telephone interviews with 30.5 thousand pilots as part
of an $11.3 million study taken between April 2001 and December 2004.

Within the document, NASA found numerous complaints from pilots (airline and
general aviation) including concerns about airport security, air-traffic controllers,
and their own fatigue and well-being.

NASA has been criticized in the past for not releasing the document, claiming that
the agency feared the airline industry would suffer from the adverse information
inside the document.

When the report was released, according to a Washington Post article ("**Redacted Air-Traffic Safety Survey Released**"), Griffin stated, *"It's hard for me to see any data the traveling public would care about or ought to care about. We were asked to release the data, and we did."*

Information from NASA on NAOMS (National Aviation Operational Monitoring Service) can be found at **http://www.nasa.gov/news/reports/NAOMS.html**.

The NASA NAOMS website states, *"This Web site contains responses collected from the air carrier and general aviation pilot surveys as part of the NASA National Aviation Operational Monitoring Service (NAOMS) project from April 2001 through December 2004. Relevant information is contained in the accompanying documentation. In the interest of timeliness, this first release is by nature conservative to ensure the responses do not contain confidential commercial information or information that could compromise the anonymity of individual pilots. Efforts will be made in 2008 to release additional NAOMS information that was redacted for this release."*

Based on the following statement by Griffin, it is quite possible that the controversial survey, and resulting document, was not conducted in a valid way. Griffin states (bolds added for emphasis), *"The fundamental concern I had at the time of my testimony and still have is that this research work was not properly peer reviewed at its inception, and the data extracted from the survey was not properly validated at its conclusion."* [CNN article "**Report containing thousands of pilot complaints is released**"]

Unmanned aircraft will challenge air traffic control

While the skies aren't exactly buzzing with **unmanned aerial vehicles** (UAVs) just yet, experts are warning their explosive growth will require military and public officials to address the issue **sooner** than they might think.

According to **Aviation Week**, the four chiefs of service aviation and intelligence, surveillance and reconnaissance (ISR) branches told the **Army Aviation Association of America's** unmanned aircraft symposium last week that the military should crystallize combat air control regarding UAVs, while domestic authorities must work out access and use of UAVs in **domestic airspace.** "I'm surprised we haven't had a collision yet," said Rear Adm. Joseph Aucoin, director of the Navy's aviation plans and requirements branch.

The opinions come after the deputy defense secretary recently ruled that the Air Force will not become the executive agent for high-flying unmanned aircraft, although the armed services were ordered to work together under a Pentagon-led task force to better align disparate programs and efforts, Aviation Week stated.

The need for better air traffic control of the aircraft will be driven by the phenomenal growth of the UAV. For example, researchers at the Teal Group said in their 2008 market study estimates that UAV spending will more than double over the next decade from current worldwide UAV spending of $3.4 billion annually to $7.3 billion, totaling close to $55 billion in the next ten years.

Add to that UAVs are becoming smaller and less expensive. That has sparked many new uses of the aircraft outside the military. For example, The Washington State Department of Transportation, is looking at a UAV for data collection and aerial surveillance in difficult geographic locations as well as part of its avalanche control program and search and rescue operations. The University of Florida has been toying with a traffic surveillance system using unmanned aircraft as well. And The Los Angeles County Sheriff's Department thinks UAV's will be useful for traffic watching but also as a crime fighter. The list goes on and on.

Last month America's National Transportation Safety Board (NTSB) completed its first-ever investigation into an unmanned-aircraft accident. Pilot error was blamed for the crash in Arizona in April 2006 of a 10,000lb Predator B, the type of UAV used by American forces in Iraq and Afghanistan, according to an article in The Economist. It was being operated by Customs and Border Protection when its engine was accidentally turned off by the team piloting it from a control room at an army base. No one was hurt, but the NTSB issued 22 recommendations to address "a wide range of safety issues involving the civilian use of unmanned aircraft."

Boeing celebrated the 50th anniversary of the first flight of the 707 jetliner last month

The 707 is not to be confused with the earlier Model 367-80, the "Dash 80" that Boeing intended as a prototype for a U.S. military program competition and which ultimately was the aircraft from which the KC-135 series of military tankers and transport aircraft was derived.

Three and a half years before the 707 first flew, the Dash 80 made its first flight on July 15, 1954. During an early demonstration flight, its pilots famously threw the huge Dash 80 into a barrel roll in front of many industry witnesses. The event was **caught on film**.

However, the Dash 80 directly led to the development of the 707 and the two aircraft are very similar in configuration, both having swept-back, low-mounted wings and horizontal stabilizers, and four under-wing jet engines.

Dec. 20, 1957, the day of the 707's first flight, was a cold and rainy Friday in the U.S. Northwest. As noon passed, Boeing's chief of flight test Tex Johnston, his co-pilot Jim Gannet and flight engineer Tom Layne sat on the drenched runway at Renton Municipal Airport in the first production 707, checked weather reports and waited for the chance to take off.

At 12:30 p.m., the decision was made to take off and the 707-120 powered into the sky. But as it climbed over the city of Renton, the unpredictable weather immediately closed in around the airliner and forced a landing at nearby Boeing Field after just seven minutes in the air.

However, later in the day, the sky cleared enough for the crew to take the 707 up for a 71-minute flight. The day was the culmination of **five years of hard work** and momentous decisions. With the 707, Boeing's president William Allen and his management team had pinned the company's future firmly to the vision that jets represented the future of commercial aviation.

707 not the first jet airliner

The Boeing 707 was not the first jet airliner to see service, or even the first to fly the Atlantic. The **de Havilland Comet** was the world's first production jet airliner to fly (in 1949), the first to enter service (in 1952) and the first to operate transatlantic flights (also in 1952).

But early fatal break-ups of Comets at high altitude -- which investigators found were caused by **cabin-pressurization-induced metal fatigue** -- led to the larger Boeing 707 and its rival, the Douglas DC-8, quickly becoming the standard Western aircraft for long-haul air travel.

Since the 707 was the first of the two big U.S. jets to fly, the first flight of the prototype 707 effectively represented the point in commercial aviation history when propeller-driven aircraft (whether piston- or turboprop-powered) gave way to the jet age on transatlantic and U.S. transcontinental routes.

Allen and his managers had made the right decision. Production of commercial 707s ended in 1978 after 878 had been built.

However, production of 707s as for military uses as E-3A AWACS airborne early warning and control aircraft and E-6s -- which the U.S. Navy used for communications with submarines -- continued at low levels until 1994, and the total number of 707s manufactured was 1,010.

Most civil 707s left in service today have been converted to freighters, while a number are used as corporate transports. Approximately 130 remain in commercial service.

Various Boeing 707 models produced

The first commercial 707s, labeled the 707-120 series, had a longer, wider cabin and other improvements compared to the prototype Dash 80. Powered by early Pratt & Whitney JT3C turbojet engines that were based on military J57s, these initial 707s had range capability that was barely sufficient to cross the Atlantic Ocean.

Boeing soon introduced the long-range 707-320 Intercontinental that in May 1959 flew 5,382 miles nonstop from Seattle to Rome in 11 hours and 6 minutes. A number of variants were developed for special use, including shorter-bodied airplanes and the 720 series (originally called the 707-020), which was lighter and faster and had better runway performance than the basic 707-120.

Pan American World Airways was the first 707 customer, signing up for 20 Boeing 707-120s in October 1955. In 1962, Pan Am also took delivery of the last 707-120 series airplane, an improved 707-120B.

Other early 707 variants included the JT4A-powered 707-220, only five of which were manufactured, for long-haul flights to hot-and-high South American airports by Braniff; and the 707-138, a short-fuselage, long-haul version for Australia's Qantas, one of which is now flown by John Travolta as a personal airliner. Both variants were made obsolete by the 707-120B, which flew for the first time in June 1960.

The 707-320, 707-320B and 707-320C, all of which had a 100-inch longer fuselage than the 707-120, were the most-produced 707s. Production of the basic 707-320 Intercontinental began in 1958 and the final, improved 707-320C was completed in 1978.

Another relatively late-model 707 variant was the 707-420, a version specially produced for British Overseas Airways Corporation (a state-owned precursor, along with British European Airways, of today's British Airways) with Rolls-Royce Conway 508 turbofan engines. Lufthansa and Air-India also operated this version of the 707.

Boeing's jet transport success

If one considers the Dash 80 as the forebear of all Boeing jet transports, it was easily the most far-sighted innovation in which the company ever invested. Not including Douglas-heritage jet transports (Boeing bought McDonnell Douglas in 1997), the company has won orders for more than 17,000 large transport jets, from the 707 to the 787, in the last 53 years. In that time, Boeing has become by far the world's largest producer of commercial and military jet transport aircraft.

More than 730 KC-135s, directly developed from the Dash 80 prototype along with the 707, were produced for the U.S. Air Force and France's Armee de l'Air. The KC-135 was actually the original Boeing 717, a model number which was soon forgotten as a result of its more widely used military designation.

In the late 1990s, Boeing applied the 717 model number retroactively to the MD-95 t-tail twinjet design, based on the MD-90, that it had inherited in its takeover of McDonnell Douglas.

Study: Sleeping Seven to Eight Hours Optimal for Good Health

Most people agree that getting the right amount of sleep is essential to feeling one's best. Now a new study finds that sleeping too much or too little may increase the risk of death. A team of researchers in the UK followed more than 8,000 people for 12 to 17 years. Among participants who slept six to eight hours at the start of the study, a decrease in sleep duration was associated with a 110 percent higher risk of cardiovascular mortality. Similarly, among participants who slept seven to eight hours at the start of the study, an increase in sleep duration was associated with a 110 percent increase in non-cardiovascular mortality. Based on these results, the authors suggest that sleeping seven to eight hours on a regular basis may be optimal for good health.

Midnight Shift Nugget

The National Library of Medicine, Patient Educational Institute has made this program available to help you understand information about sleep and sleep disorders and their treatments. Subjects addressed are sleep, sleep disorders and their treatment, insomnia, sleep apnea, RLS, narcolepsy and sleeping well. There are 68 slides with audio to this presentation.

http://www.nlm.nih.gov/medlineplus/tutorials/sleepdisorders/htm/video.htm

Health Care Workers Record Highest Absenteeism Rates

For 20 years, health care workers have had the highest average of lost work days compared to the rest of the Canadian population, according to a report from the Canadian Institute for Health Information. Among health care professionals, nurses had the highest number of days lost with a national average of 14.4 days – almost twice the average for all occupations. Reasons cited for the higher numbers in the nursing population include shortage of workers, work schedules, high overtime levels and stress. (CBC News, "N.B. tops absenteeism list for Canadian health-care workers" December 5, 2007).

The current nursing shortage, as well as the increased cost of health care, has affected staffing levels. Combine this with the challenges associated with working in an extended hours workplace and it is not so surprising that nurses have some of the highest absenteeism rates among all professions. Many of the solutions that could help nurses are the same ones that can help all shiftworkers: implementing better work schedules and staffing levels, and providing training and education material on managing a shiftwork lifestyle. These practices will not only improve the health and wellness of nurses, but they will also serve to create a culture of retention that empowers nurses.

Cold and flu survival guide

Ah-choo! You're bound to hear that sound — along with sniffling, coughing, and nose-blowing — every winter when cold-and-flu season sprinkles its misery on just about everyone. Up to 20% of Americans get the flu every year, and Americans suffer one billion colds. Children get colds and the flu more often than adults. Some kids get as many as 12 colds a year, while adults average 2 to 4.

A cold and the flu are both caused by viruses, tiny infectious agents that can survive only by getting inside the cells of animals or humans. Learning more about the viruses that cause colds and the flu can help doctors figure out how to prevent and treat these illnesses. For most people, however, the most important thing to know is that viruses are to blame for both colds and the flu. This fact has very important implications for treating — and preventing — these illnesses. Because colds and flu are caused by viruses, antibiotics are ineffective as they work only on bacterial infections, not viral infections.

Here are the answers to six commonly asked questions about colds and the flu.

1. **Why do colds and the flu increase in the winter?**
   The reason has nothing to do with the temperature, at least not directly. Cold weather itself does not cause these illnesses, but people are more likely to stay indoors and spread germs to one another when it's cold outside.

2. **When should I stay home from work or keep my child home from school?**
   It is important to stay home when you are most contagious. For colds, you are contagious the entire time you have symptoms, but you are most contagious right after you contract the cold, before you even have symptoms. For the flu, adults are most infectious from the day before symptoms start until about the fifth day of symptoms.

3. **When should I see my doctor?**
   If you experience complications such as high fever, shaking chills, chest pain with each breath, coughing that produces thick, yellow-green mucus, or if your symptoms do not go away as quickly as you would expect them to, see your doctor.

4. **How can I avoid passing my cold or flu on to my family?**
   There are many steps you can take to try to avoid spreading germs to the people around you. Always cover your mouth and nose when you sneeze or cough. Throw used tissues away immediately. Wash your hands often, especially after you sneeze, cough, or touch your eyes, nose, or mouth. Keep your distance from others — don't kiss, hug, or stand so close to someone that saliva might get on them when you talk. Make sure someone is disinfecting household surfaces and items frequently, including children's toys.

5. **Is there any truth to the old saying, "Feed a cold; starve a fever"?**
   No. When you have a cold or the flu, you should be sure to eat healthful foods and drink plenty of fluids, but there is no need to eat more or less than usual.

6. **Is it okay to get a flu shot when I have a cold?**
   Yes, you can get vaccinated when you have a cold as long as you are not feeling very sick and do not have a fever.

10 FACTS ABOUT DRINKING & DRIVING

Here are 10 interesting things that you ought to know about drinking and driving. If you like these, there are literally a couple hundred more statistics and tidbits like them available on the MADD (Mothers Against Drunk Driving) website.

1. Alcohol-related fatalities are caused primarily by the consumption of beer (80%) followed by liquor/wine (20%)

2. There is considerable evidence that laws that lower the illegal BAC limit from .10 to .08 can reduce alcohol-related fatalities by an average of 7%. [ref.]

3. Access to an unlimited amount of alcohol for a flat fee increases the number of drinks in a sitting by 1.6 drinks on average.

4. From 1975 through 2005, it is estimated that safety belts saved 211,128 lives, including 15,632 lives saved in 2005. If all passenger vehicle occupants over age 4 wore safety belts, 20,960 lives (that is, an additional 5,328) could have been saved in 2005.

5. A standard drink is defined as 12 ounces of beer, 5 ounces of wine or 1.5 ounces of 72-proof distilled spirits, all of which contain the same amount of alcohol – about .54 ounces.

6. The average person metabolizes alcohol at the rate of about one drink per hour. Only time will sober a person up. Drinking strong coffee, exercising or taking a cold shower will not help.

7. The rate of alcohol involvement in fatal crashes is more than 3 times higher at night than during the day (59% vs. 18%). For all crashes, the alcohol involvement rate is 5 times higher at night (16% vs. 3%).

8. Impairment is not determined by the type of drink, but rather by the amount of alcohol ingested over a specific period of time.

9. There is evidence that heavier drinkers prefer to drink at bars and other persons' homes, and at multiple locations requiring longer driver distances. Young drivers have been found to prefer drinking at private parties, while older, more educated drivers prefer bars and taverns.

10. Among persons aged 12 or older, males were nearly twice as likely as females (16.3% vs. 8.6%) to drive under the influence of alcohol in the past year.

Picture This!

What you can't see is that the worker in the yellow shirt has pulled it up to cover his nose and mouth. The lesson is that there is no substitute for the proper PPE. At the very least, these two workers need faceshields or goggles, filter masks to filter out dust and hardhats to deflect flying debris