Aviation Human Factors Industry News

November 7, 2007

Vol. III. Issue 40

Third SAS accident may be from maintenance

A crash-landing by a Dash 8 Q400 turboprop plane flown by SAS on October 27 could have been caused by earlier maintenance, a preliminary report by Danish authorities said.

The report, issued over the weekend and obtained by Reuters on Monday, said a blockage could have caused the right-side main landing gear on the plane to fail to extend properly.

The incident, which occurred as the plane was landing at Copenhagen's Kastrup airport, was the third such accident involving a Q400 turboprop plane operated by the Scandinavian airline within two months.

No one was seriously injured in any of the incidents.

The report, by the Danish Accident Investigation Board, said a valve in the landing gear was blocked by a part from a separate valve.

It said that during the replacement of one valve on October 22, "the rogue O-Ring found blocking the orifice in the restrictor valve of the accident aircraft could ... have unknowingly been transferred ... by maintenance personnel."

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It said the investigation was continuing.

SAS declined to comment.

SAS, which has a fleet of 27 of the planes, said it would stop using the Q400 following the latest incident.

Bombardier said it stood by the Q400.

"These latest findings clearly support Bombardier's position that the Q400 is a safe and reliable aircraft," said Steven Ridolfi, President, Bombardier Regional Aircraft.

"We are concerned about the impact negative comments might have had on Bombardier and the Q400 turboprop's reputation, and we will do all that is necessary to protect our brand, and by association, the reputation of our Q400 aircraft customers."

SAS has said it wants compensation of around 500 million Swedish crowns ($78 million) from Bombardier over the first two incidents involving the Dash 8 Q400 planes, one in Denmark and one in Lithuania.

Report: Pilots Slept on Overnight Flight

Two commercial pilots allegedly fell asleep on a flight between Baltimore and Denver, with one pilot waking up to "frantic" calls from air traffic controllers warning them they were approaching the airport at twice the speed allowed.

The March 2004 event, which was discussed during a Congressional hearing Wednesday, was reported by the captain on the flight on NASA's Aviation Safety Reporting System, which allows crew members to anonymously document incidents.

Details of the "red eye," or late night/early morning flight, including the airline, flight number, or number of passengers aboard are not included in the reporting system. It did note the type of airplane, an Airbus A319, which are flown by Frontier Airlines and United Airlines.

United spokeswoman Megan McCarthy told the Rocky Mountain News, which first reported the incident, that United did not fly a "red eye" between the two cities at the time and it had no reports of that incident.

Frontier spokesman Joe Hodas told the newspaper the airline had a "red eye" flight on the schedule at the time but could not find a report of the incident.

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Federal Aviation Administration officials did not immediately return a message left by The Associated Press after business hours.

"Last 45 mins of flt (flight) I fell asleep and so did the FO (first officer)," according to the narrative in the report.

The captain noted they were approaching a point where they were to begin their descent into Denver International Airport about 60 miles southeast of there at 35,000 feet, much higher than required, and at Mach .82, or 608 mph, instead of a required slower speed.

"I woke up, why I don't know, and heard frantic calls from ATC ... I answered ATC and abided by all instructions to get down. Woke FO (first officer) up."

He spiraled the jet down to a lower altitude as ordered, then landed "with no further incidents."

The pilot had been switched to three nights in a row of flying the overnight, eight-hour round trip.

While unable to find a report on the incident, Hodas said the airline has received similar reports in the past and have addressed them, noting that pilot fatigue is a bigger issue in the industry than the public realizes.

"We take safety very seriously and watch crew fatigue very closely," he said.

The company has a number of programs in place to prevent crew fatigue, including no-fault fatigue reporting in which a pilot who feels fatigued and is scheduled to fly can call and be relieved from flying.

Safety Standdown draws hundreds in aviation to town

More than 530 pilots, flight attendants and maintenance personnel will be in Wichita this week to attend Bombardier's annual Safety Standdown.

The number of attendees -- most from general aviation -- is a record for the seminar, now in its 11th year. There were more than 800 applicants.

The sessions are offered at no cost. About half the attendees fly Bombardier aircraft. Attendees are from commercial, military, government and private aviation.

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"Aviation is the safest means of transportation ever devised by human beings," said Bombardier Business Aircraft director of flight operations Bob Agostino "The statistics support that."

But the goal is to make it even safer. Traditionally, eight of 10 general aviation accidents are caused by human factors, not equipment failure, planners note.

Safety Standdown provides information and training related to human performance, such as professional airmanship, advanced aerodynamics, applied aviation psychology, fatigue countermeasures and runway analysis.

Nick Sabatini, Federal Aviation Administration associate administrator for aviation safety, is the keynote speaker. Capt. Gene Cernan, the last man to walk on the moon, will present a session on professionalism.

"Aviation is not just a romance," Cernan said. "There's a passion involved."

Pilots must direct that passion into commitment to be the best, Cernan said. And they must have the proper discipline to do the right thing at the right time, he said.

"If we have a problem up there, we can't convene a meeting at 9 o'clock tomorrow morning to discuss it," Cernan said. "We have to make a decision now."

Cernan said he hopes attendees will leave the seminar asking themselves whether they can improve as a pilot.

"We want people to take an introspective look at themselves," Cernan said. "We'll go a long way in safety in corporate aviation if we get people thinking about these things."

Bombardier and the National Business Aviation Association are co-sponsors of the event. The FAA and, for the first time, the National Transportation Safety Board, are also partners.

General sessions take place through Thursday at the Hyatt Regency Wichita.

Pilots train for unexpected at Safety Standdown

Highly reliable organizations plan for the unexpected and perform well under trying conditions, a University of Michigan business professor told about 500 pilots and other aviation professionals Tuesday.

"Under stress, we fall back on learned behaviors," said Kathleen Sutcliffe, professor of management and organization

at Michigan's Ross School of Business.

Sutcliffe spoke Tuesday before a record number of attendees at Bombardier's 11th annual Safety Standdown at the Hyatt Regency Wichita. The event runs through Thursday.

Attendees represented about 300 companies and 11 military and government institutions.

Sutcliffe wants those in attendance to think about ways their organizations operate.

"Most people focus on success and ignore their failures," she said.

That's the wrong strategy.

Highly reliable organizations catch small problems before they get bigger, Sutcliffe said. That way, they have more opportunities to solve them.

Successful organizations also develop a culture of people who worry about mistakes.

They're constantly learning, updating and building people's capabilities to handle whatever may arise, Sutcliffe said.

They track small failures, avoid oversimplification, pay attention to detail and foster a respect for interaction that allows someone to speak up when they disagree with a majority's viewpoint.

Successful organizations have employees who know how their jobs fit with others in the big picture, Sutcliffe said.

They must envision how things can go wrong and analyze them, she said.

"When mishaps occur, how often do you talk about them?" Sutcliffe said.

Gene Cernan, the last man to walk on the moon, said flying is safe, but it's important to continually improve.

In the aviation profession, "things that aren't supposed to happen do happen," he said. "If you're not prepared, you're going to put yourself in harm's way."

And when there are passengers in the back of the airplane, "you have a moral obligation" to continually learn and improve, Cernan said.

The presentations, tutorials and interaction with other attendees have made the event invaluable to Brian Koenig. Attending for the fourth time, the aviation safety officer based at the Patuxent River (Md.) Naval Air Station said he shares what he learns at the seminars with the flight test engineers and squadrons he works with.

"It's awesome," he said.

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Maintenance failing in Sea King chopper

A MAINTENANCE failure was behind an incident in which one of the navy's Sea King helicopters made a forced landing, the Defence department said.

The department did not detail the error, but said the grounded helicopters would resume flying operations tomorrow.

Bulletin **magazine last week said the aircraft's tail rotor all but fell off because an able seaman failed to perform a maintenance job properly and his two supervisors did not pick it up.**

"While a maintenance error occurred, the subsequent steps taken by the squadron to identify and resolve the issue are positive indicators of cultural change as a result of the maintenance reinvigoration program (MRP) implemented in 2005," Defence said today.

"The MRP is aimed at fundamentally improving naval aviation maintenance."

The September 27 incident led to the navy grounding all six of its 30-year-old helicopters for inspections.

No further problems were detected in any of the other aircraft and flying operations will resume tomorrow.

The defence statement, issued by Navy Rear Admiral Nigel Coates, said that after a thorough investigation by an independent technical airworthiness authority he was "satisfied to lift this suspension".

The incident follows the April 2005 Sea King crash, when nine Australian Defence Force personnel died on the Indonesian island of Nias during a humanitarian mission to help earthquake victims.

The crash was blamed on a maintenance error.

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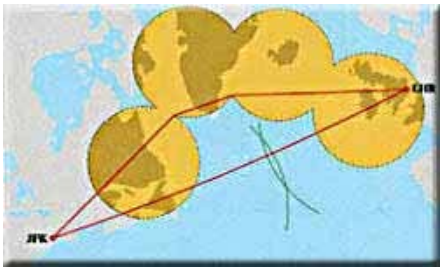
Scottish airline barred from direct US flights over poor maintenance



Scotland-based airline Flyglobespan has become the first British airline to have its license for direct transatlantic flights using twin-engined planes suspended, following investigations by aviation safety authorities.

The airline will now have to re-route its United States flights via Iceland and/or Canada, and is not allowed to fly any direct route across the Atlantic, according to the Civil Aviation Authority (CAA).

The CAA announced on Thursday 18 October that it had suspended 'extended range twin operations' (ETOPS) approval for the airline's aircraft on Friday 12 October.

ETOPS permits twin-engine aircraft to fly on routes, which take them more than one hour's flying time away from diversionary airports for landing in an emergency. The CAA said it was the first such move since the regulations were established in their present form 15 years ago.

The move will affect Flyglobespan's Boeing 737 and 757 aircraft. The decision followed investigations by the US Federal Aviation Administration (FAA) into an aircraft servicing sub-contractor.

Flyglobespan said its Glasgow-Knock-Boston and Liverpool-Knock-Boston routes had been affected, and passengers could no longer fly direct on these routes. It said though, that reduced passenger numbers and favorable winds had enabled flights to stay on schedule despite the longer routes.

He said only about 12 flights would be affected before the firm's transatlantic flights stop operations for the winter later this month. The airline's other transatlantic routes, to Florida and Toronto, are not affected because they are operated by aircraft leased from Icelandair and Neos, which are not covered by the ETOPS move.

Flyglobespan has admitted "an unacceptably high level of technical problems" with its Icelandair planes, but stressed that this had not made the aircraft unreliable.

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Airman Punished

Air Force Deputy Chief of Staff Maj. Gen. Richard Newton III gestures during a news conference at the Pentagon, Friday, Oct. 19, 2007. In its first explicit confirmation that nuclear-armed missiles were erroneously flown from an air base in North Dakota to a base in Louisiana in late August, the Air Force on Friday called the episode an "unacceptable mistake" _ of a sort that had never happened before.

The Air Force this week sanctioned 70 airmen for allowing six nuclear-tipped missiles to be inadvertently flown across the country. In a bizarre incident in August, the crew of a B-52 bomber flew from North Dakota to Louisiana without knowing they were carrying live weapons. After a six-week investigation, the Air Force relieved four officers of their commands and barred 66 enlisted personnel from handling nuclear arms. "This was an unacceptable mistake and a clear deviation from our exaction standards," said Air Force Secretary Michael Wynne. The Air Force said that the ground crew in North Dakota had failed to follow exacting procedures for tracking the movement of nuclear material.

New Technology Could Detect And Fix Cracks In Composites

A simple new technique could help to identify and repair small, potentially dangerous cracks in high-performance aircraft wings made of composite materials, researchers at Rensselaer Polytechnic Institute, in Troy, N.Y., have reported. The scientists added a small amount of carbon nanotubes to the mix when forming composite materials from epoxy resin and carbon fiber. The tubes can electronically detect even the tiniest cracks and then release materials that will repair the problem, with a 70-percent recovery in strength. The process would improve the life span, integrity and safety of composites, the researchers said. "What's novel about this application is that we're using carbon nanotubes not just to detect the crack, but also to heal the crack," said principal scientist Nikhil Koratkar. "We use the nanotubes to create localized heat, which melts the healing agent, and that's what cures the crack."

Koratkar said he envisions the new system for detecting cracks to eventually be integrated into the built-in computer system of a fighter jet or other composite aircraft.

He also said there is some evidence that the nanotube structures help to prevent cracks in the first place. He plans further studies. Philip Irving, an expert in damage tolerance at Cranfield University in the U.K., told New Scientist that heating could weaken a composite. "The top surface of a wing may buckle," he warned.

El Al's first female pilot reaches for the skies

MONTREAL — When you're a female airline pilot and a passenger mistakes you for a flight attendant and asks for a Coke, there's only one thing to do – get it.
Merav Schwartz, who in 2001, became Israel's first licensed female pilot for El Al, has grown used to such incidents, but not necessarily inured to them

While she shrugs her shoulders and even chuckles good-naturedly at such mistakes, Schwartz, who spoke recently at a Na'amat Montreal event at Beth Israel Beth Aaron Congregation, said that commercial aviation remains very much a man's world.

That's the case everywhere, the 39-year-old married mother of two said, but especially so in Israel, which has deeply ingrained macho culture.

Schwartz's regular route is on a Boeing 747 between Tel Aviv and New York.

"I think there may be six per cent of pilots in the U.S. who are women. Israel has two women [commercial] pilots out of 500," she said.

But it's not like things haven't changed for the better. Any woman in Israel is now free to apply to El Al – the sky is literally the limit. But few actually do.

Schwartz, however, did not want to make it appear that she has not received support from men as well. On one of her first flights, she recalled, the captain admitted that having a female first officer was "new" to him, yet he was fully supportive. "So nice," Schwartz said.

At the same time, Schwartz, who has not yet earned her captain's wings, gives credit to women for serving as mentors and role models, and for cheering her on during her years of aiming, so to speak, for the stars.

"I was inspired by women and helped by women," she said.

At age five, during the 1973 Yom Kippur War, Schwartz already knew her destiny as she watched Israeli fighter pilots streak through the sky. A family friend even used to refer to her as "Mirage," after the French-built fighter jet.

Schwartz didn't take her first flying lesson until age 18, lessons she paid for through babysitting, tutoring, and with some help from her parents.

She had to amass 1,000 hours of "fly time" – meaning solo piloting in any type of aircraft – in order to apply to El Al's commercial pilot training program. Gradually, she got the hours – even by seeding rain clouds to accumulate them. She graduated to 747s from 737s.

Schwartz, somewhat jokingly, likened the long, difficult road to where she is today to the "Via Dolorosa" – the path in Jerusalem's Old City where Jesus walked with great suffering.

On the way, she was the recipient of an Amelia Earhart Memorial Scholarship to further her studies. Not surprisingly, Earhart is one of her heroes.

Ironically, Schwartz noted, women were able to serve as military pilots in pre-state Israel, but not post-state, and that didn't change until the Israel Defence Forces was sued by a woman.

Similarly, during the 1990s, El Al was forced to change its policy to train only former Israeli Air Force pilots when the airline was sued by a friend of Schwartz's, Orit Katzir, on the grounds of sexual discrimination. And that opened the door for Schwartz.

Katzir and other women "paved the way for me," Schwartz said, even though Katzir ultimately opted to work for another major airline. Another female friend, now working for Israel's domestic Arkia Airlines, also served as an invaluable role model, Schwartz said.

She sees herself in a similar role – as a mentor and role model for other women. She gave huge credit to Na'amat for exemplifying those ideals in its work.

Schwartz noted that despite the advances made by women, stereotypes persist, even among women.

"When I say I'm a pilot, they want to know who is home taking care of the children. A man would never be asked that."

Often at home taking care of children Yuval and Ofrir in New York – she also has a home in Tel Aviv – is her husband, Amit, who works on Wall Street.

Having him as a spouse was like winning "grand prize" in a lottery, she said.

"When I'm away, they're [the children are] in good hands – his."

Schwartz's talk was part of Na'amat Montreal's Jewish Women's Leadership Empowerment and Excellence program, and was sponsored by the Mike Dym Lecture Series.

Parts Shortage Leaves Choppers Sitting

http://wjz.com/video/?id=32461@wjz.dayport.com

CTRL + click to follow link

MARYLAND **On average, more than a dozen people a day are flown to hospitals in Maryland by state police helicopters. But in recent months, those life saving choppers were stretched thin. Mike Schuh reports this is because of the wars in Iraq and Afghanistan. For 18 years, at all hours, we've all come accustomed to seeing and hearing choppers flying above, but to keep eight air bases open, a dozen choppers rotate in and out of maintenance.**

"At our worst, we had four sometimes five choppers parked in this hangar," said Major A.J. McAndrew of Aviation Command. The reason? The wars in Iraq and Afghanistan cause choppers to sit in the hangar for the lack of parts.
"So this AC is done. It has completed its main cycle. It's just waiting for this rail there," said Sergeant Walter Kerr. One part is in such short supply, that when they fail, the manufacturer takes a new one off the assembly line in France and flies it here. "The company that makes these, Goodrich, has told us that we can't get the control boxes because the military in Afghanistan has priority for those control boxes. That's where everything is going," said director of maintenance William Condry.

It comes down to the special metals used in military and civilian aircraft and weapons. "So the vendors are having trouble getting the metal to make the part, so we can get the part from them," said Kerr. The situation has improved in part because McAndrew met with their chief executive officer. Now only one chopper is down, waiting for a part. Maintenance is a growing concern. The aging fleet should be replaced within the next 10 years.

"And studies have shown that once a chopper reaches 25 years of age, and these are quickly approaching that age, that they go down to 45 percent unavailability," said McAndrew. People flown from accident scenes are not charged for the service. The cost is absorbed by Maryland motorists. Every time a car is registered in the state, $11 goes to fund the choppers.

Man Convicted Of Aircraft Repair Fraud

A Mena businessman was sentenced in a Dallas federal court this week after being convicted of fraud and making false statements involving aircraft parts, a U.S. attorney announced.

John Wentzell Downs, 65, was sentenced to two years in prison and ordered to pay $4,000 restitution. He must surrender to the Bureau of Prisons by Jan. 8.

During the sentencing hearing Thursday in U.S. District Court, Northern District of Texas, Judge Sidney A. Fitzwater found that Downs' decision to fraudulently backdate maintenance records "involved the conscious or reckless risk of serious bodily injury or death to aircraft pilots and passengers," according to a news release by U.S. Attorney Richard B. Roper.

The judge also noted that a key factor in his sentence was the need for deterrence, Roper reported.

Criminal charges against Downs, who has owned Mena Aircraft Propellers since August 2006, centered on his former maintenance business, Millennium Propeller Systems, based at the municipal airport in Lancaster, Texas.

During his trial in June, the government presented evidence that the Federal Aviation Administration had issued an air agency certificate authorizing Millennium to operate as an approved FAA repair station.

But in March 2005, the FAA administrator determined that Millennium demonstrated a disregard for regulatory compliance that threatened aviation safety and was contrary to the public interest, the release states.

FAA officials found that Millennium "repeatedly performed maintenance without complying with manufacturers' maintenance manuals or its operations specifications; used parts that had no history and were not segregated as to serviceability; and ... performed maintenance to propellers contrary to other regulatory requirements."

The FAA revoked Millennium's air agency certificate on March 29, 2005, but customer Juan Fernandez testified at trial that Downs performed work in 2005 on a propeller of his between Sept. 12 and Oct. 5 without telling him of the revocation.

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Fernandez said that when he collected his overhauled propeller, Downs gave him maintenance records that had been fraudulently backdated to represent that the overhaul had been performed March 1, a month before the revocation.

"Other witnesses and documents reflected that Downs was in financial trouble in the fall of 2005. Downs charged Fernandez $2,250 for maintenance work he was not authorized to perform," the release states. Fernandez testified that he would never have gone to Millennium had he known of Downs' license revocation and he felt Downs had compromised his safety and that of his passengers.

FAA witness Robert Hardwick testified that Downs used an improperly drilled part when re-assembling Fernandez's propeller, which could have resulted in the loss of a propeller blade and thus endangered the safety of the aircraft in flight.

The government also presented testimony that making false entries in aircraft maintenance records affects interstate commerce by interfering with the FAA's ability to ensure the safe operation of private and commercial aircraft, which in turn undermines public confidence in aircraft safety and discourages public use of aviation.

The case was investigated by the Department of Transportation's Office of the Inspector General; it was prosecuted by Assistant U.S. Attorney David Jarvis.

Downs could have been sentenced to up to 10 years in prison and/or fines up to $250,000.

Luggage fell from jet into rail yard

MIDWAY | Plane had open cargo door; FAA investigating

A piece of luggage that apparently fell out of an open cargo hold on an airborne regional Delta Air Lines flight was found in a Bedford Park railway yard Monday. A second piece of missing luggage had not been found.

The mishap occurred despite a pilot's inspection of the cargo door before takeoff Sunday from Midway Airport, said Kate Modolo of Atlantic Southeast Airlines, a regional carrier for Delta.

"The pilot did go outside before the flight happened and found the cargo door to be secure," Modolo said.

'Door ajar' light was faulty

It's unknown whether human or mechanical error is to blame, she said, and there's no indication of tampering.

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The jet had a malfunctioning door indicator light on the flight deck, said Elizabeth Isham Cory of the Federal Aviation Administration, which is investigating. Normally, that light would indicate if a door is ajar.

The faulty light is permissible "deferred maintenance" because the door can be checked visually to ensure it is closed, Cory said.

The Atlanta-bound flight turned around about 60 miles from Chicago when the crew discovered a problem with cabin pressure, Cory said.

Makeup case still missing

Even though luggage -- a garment bag -- was found on the ground Monday half a mile from Midway, Modolo maintained that didn't necessarily mean the cargo hold was open from the start of the flight.

Flight 4718 left Midway about 9:40 a.m Sunday, Cory said. It returned about 10:25 a.m., Modolo said.

Workers unloading cargo discovered two pieces of luggage were missing, he said.

The garment bag was found Monday by a worker at Belt Railway, 6900 S. Central, according to Chicago Police and the railway. A makeup case is still missing, Cory said.

Greenlee Offers Five New Pliers In New Hand Tool Line

Side- and diagonal-cutting, long nose pliers and two types of pump pliers now available

Greenlee, a Textron Inc. company, now offers a variety of new pliers in its line of recently launched professional hand tools. Greenlee's line of pliers includes side-cutting pliers, diagonal-cutting pliers, long nose pliers and two types of pump pliers. These pliers feature high leverage for optimum performance, hardened cutting edges for longer life, an ergonomic non-slip grip and a custom grip area for end-user identification.

The high leverage side-cutting pliers come in 8-inch or 9-inch lengths and feature a handle ridge allows the end-user to "choke up" for greater control. The diamond-serrated jaws and precision-machined and induction-hardened blades strengthen cutter provide consistent performance allowing for effective cutting of hardened wire, ACSR bolts, screws and nails.

The angled diagonal-cutting pliers allow the end-user to place the head of the pliers flush against the surface while gripping the handles securely. These pliers are available in 5-inch, 6-inch, 7-inch and 8-inch grip sizes, making it easy to cut in cramp places.

The long nose pliers feature 6-inch, 7-inch or 8-inch flared handles that offer a wider grip design that provides the end-user with a larger load bearing area.

There's also an area on the custom grips for the end-user to put their identification mark on the pliers.

The molded grip pump pliers come in 10-inch or 12-inch lengths with a slip-proof ergonomic grip for increased comfort and reduced end-user fatigue. The 16-inch double-dipped grips offer added comfort and superior slip resistance. Both have right-angled teeth for gripping in both directions.

For more information on the new pliers or other products from Greenlee, a Textron company, call 1-800-435-0786 or visit www.greenlee.com.

COULD THIS HAVE BEEN YOU?

Hydraulic Oil, Oxygen Causes Explosion

A defective brake caliper exploded during a test while it was being repaired in a shop. One worker was killed and two more were injured by flying fragments.

How it happened

The brake caliper had been part of a scoop tram, a piece of heavy equipment used in a mine. It was being tested for defects such as possible leaking gaskets. To do so, a worker attempted to pressurize the hydraulic brake caliper by hooking it up to a bottle of oxygen. The explosion occurred when the oxygen reacted with a residue of hydraulic brake fluid remaining in the caliper. One worker was killed on the spot and the other two were taken to hospital for treatment.

Don’t let it happen to you

To prevent an explosion such as this, be aware of possible chemical reactions and always follow safe work practices. Keep the following tips in mind:

- **Compressed oxygen must never be used when oily or greasy substances may be present. Oxygen is an oxidizer, causing other substances to burn**

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- **violently. For the same reason, you must not handle oxygen cylinders with greasy hands or gloves.**
- **In this case, the correct procedure would have been to test the brake component with hydraulic pressure.**
- **The workers and the supervisor should be trained and educated about the hazards involved in this and any procedure.**
- **Employees who work around hazardous substances such as compressed oxygen must be warned of the hazards.**
- **Workers need to read labels, material safety data sheets and other warnings. Compressed oxygen is labeled with warnings about the dangers of mixing it with oily substances.**

Bad Marriages Blamed for Heart Disease

If you believe your marriage is killing you, you might not be exaggerating. That's the conclusion from a study of more than 9,000 civil servants in Great Britain.

Researchers found that people who had the worst personal relationships were more than one-third more likely to suffer a coronary event during the next 12 years than their counterparts who reported good marriages or similar relationships.

Researcher Dr. Roberto De Vogli of University College in London, England, says that even after eliminating other heart disease risk factors such as depression, both men and women involved in negative relationships still had a 25 percent greater risk of suffering a heart attack or other heart-related problems.

None of the study participants had a history of heart disease at the start of the study. They were asked how much stress or worry their spouse or close friend had caused them within the past year, along with whether talking to this person made the situation worse, how supportive the person was, and whether they felt able to confide in that person.

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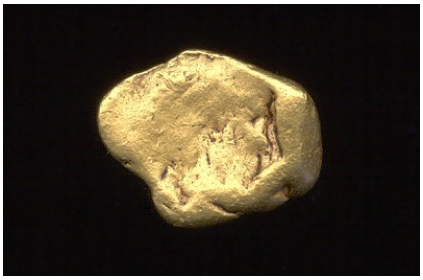
Midnight Shift Nugget

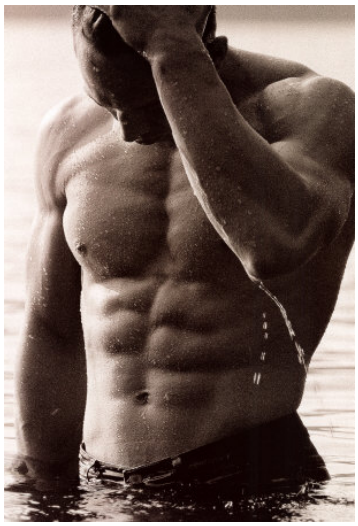
Counterclockwise Shift Rotations Lead to Sleep Debt



A recent study examined the sleep patterns of 28 air traffic control employees who worked a rapidly rotating counterclockwise schedule (afternoon, day, morning, night shift). Sleep was recorded using an actigraph and a sleep diary. The study found that across the work week, sleep duration decreased largely due to earlier rise times associated with shift start times. In the short turn-around between the morning and night shift, 90% of the controllers slept for an average of 2.2 hours.

2.2 hours of sleep - not a comforting thought to have the next time you board an airplane. This study raises the alarm on shift schedules that rotate counterclockwise. Many studies have shown that these types of schedules are diametrically opposed to the human body's innate daily (or "circadian") rhythms. Consequently they can cause severe fatigue, decrease productivity and increase the risk for accidents. If your facility is operating such a schedule, you might want to investigate how you can make the change to a safer and more productive shift schedule.

Is Being Male Hazardous to Your Health?



Ask any man and he's sure to say that the male sex is the stronger one. It's easy to see why: Men are bigger than women, so we can lift more, run faster, and jump higher.

But ask doctors of either gender, and they're likely to say that women are actually stronger, at least where health is concerned.

How much stronger and why? What can men do to become healthier and keep up with women? The answer isn't very complex. Men need to be more like women. That means understanding our bodies, taking better care of ourselves, and getting the medical care we need.

The longevity gap

In the U.S. and around the world, women live longer than men. The average American woman has a life expectancy of 80.4 years while American men lag 5.2 years behind at 75.2 years.

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At every age, starting at conception, males have a higher death rate than females. And when it comes to our five leading causes of death — heart disease, cancer, stroke, chronic lung disease, and accidents — men die from these conditions at rates 40% to 220% higher than women in the U.S.

The health gap

Men die younger than women, more frequently than women, and have more chronic illnesses than women. We also fall ill at an earlier age. Here is a list of some of the diseases that are much more common in males along with the difference in rates:

Disease or Condition	Male: Female Ratio
Inguinal (groin) hernia	9.5:1
Aortic aneurysm (abnormal swelling of the aortic artery in the abdomen)	5:1
AIDS (in America)	4:1
Gout (a type of arthritis)	4:1
Kidney stones	3.5:1
Alcoholism	3.3:1
Bladder cancer	3:1
Emphysema	2.2:1
Duodenal ulcer	2.2:1
Heart attack	1.9:1

Why are men less healthy?

Why do men lead in illness and lag in health? It's the $64,000 question that has no single answer. Instead, the health gap is based on a complex mix of biological, social, and behavioral factors. Here are some possible contributors:

Biological factors

- **Sex chromosomes — Men have one X chromosome while women have two, which may make men more vulnerable to abnormal mutations on the X chromosome**
- **Hormones — Men have much more testosterone than women do, while women have much more estrogen. Testosterone tends to dampen the activity of the immune system while estrogen increases it.**

- **Metabolism — Women have higher HDL ("good") cholesterol levels and men more abdominal fat, which lives in and around your organs and is dangerous to your health**

Social factors

- **Work stress — Men suffer more work-related stress than women, putting them at greater risk for stress-related illnesses such as heart disease**
- **Social networks and supports — Men have smaller networks of friends and tend to rely on their wives for their social life; social support protects us from mental and physical problems**

Behavioral factors

- **Men are more likely to engage in risky behavior, aggression, and violence**
- **More men smoke — The gap is narrowing, but 25% of men compared with 20% of women smoke**
- **Men are more likely to abuse alcohol and other substances**
- **Diet — Men are less diet-conscious than women**
- **Exercise — Women are more active than men on the whole**
- **Men suffer from "Real-men-don't-see-doctors" syndrome**

The John Wayne Syndrome

When it comes to health, many men put their heads in the sand and deny their symptoms for as long as possible. Whether you call it the John Wayne Syndrome or the Ostrich Mentality, it's an important contributor to the health and longevity gap between the two sexes. When they can no longer pretend nothing's wrong, they grit their teeth and "tough it out" instead of getting prompt medical care.

Women, on the other hand, think about health more than men, and are more diligent about check-ups and preventive care. They are better at listening to their bodies and reporting discordant signals to their doctors. Consider these findings:

- **Seventy-six percent of the women who responded to a CNN survey had been tested for health problems within the two prior years, compared with only 64% of men.**
- **American women make 471 million visits to the doctors' offices each year compared with men, who make 316 million visits. That averages out to 3.5 annual visits for women and 2.4 for men according to the National Center for Health Statistics.**

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A study by the Commonwealth Fund lends further support for this tendency toward denial:

- **Three times as many men as women had not seen a doctor in the previous year; 33% of all men versus 10% of women do not have a regular doctor.**
- **More than half of all men had not had a physical exam or cholesterol test in the previous year.**
- **Sixty percent of men older than 50 had not been screened for colon cancer within the previous year.**
- **Forty-one percent of men older than 50 had not been screened for prostate cancer within the previous year.**
- **Twenty-five percent of men said they would handle worries about health by waiting as long as possible before seeking help; only 18% said they would seek care as soon as possible.**

Even when men do visit their doctors, they tend to minimize symptoms, gloss over concerns, and even disregard medical advice.

Busy work schedules and competing responsibilities and interests may play a role. But it's the macho mentality that appears to be the chief culprit.

Who can blame men for wanting to be John Wayne? What can convince men to take the simple steps to protect themselves from the heart disease and lung cancer that felled the quintessential American he-man? Stay tuned for the answers.

FACT OF THE WEEK

Transportation Deaths Fall

According to the National Transportation Safety Board, overall transportation fatalities in the U.S. were down 0.5% in 2006. Breakdown:

- **Highway fatalities: 42,642 (as compared to 43,510 in 2005);**
- **Aviation fatalities: 779 (617);**
- **Marine fatalities: 805 (789);**
- **Rail fatalities: 781 (803); and**
- **Pipeline fatalities: 19 (16).**

Scenes like this were slightly rarer in 2006

Source: National Transportation Safety Board,

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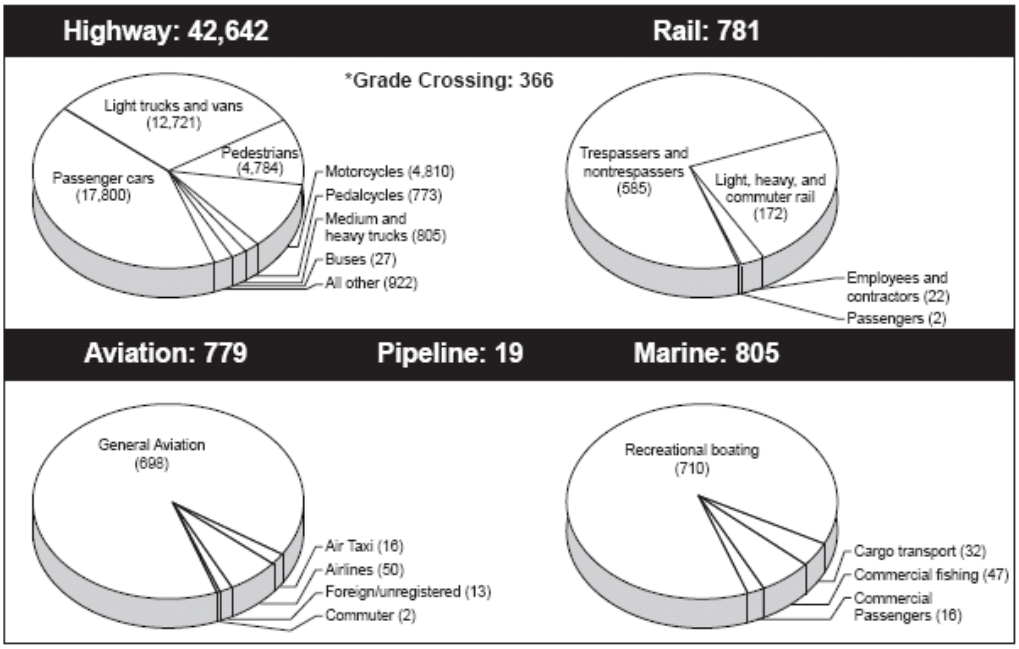
NATIONAL TRANSPORTATION SAFETY BOARD
45,026 Transportation Fatalities In 2006



*Note: All data are preliminary estimates. Grade crossing fatalities are not included in the grand total because they were counted in the rail and highway categories, as appropriate. The pie charts are not drawn proportionately to each other. Aviation data are from the NTSB; marine data are from the Department of Homeland Security; all other data are from The U.S. Department of Transportation (DOT).

PICTURE THIS!

The man in front of the red retractable barrier is refueling a race car. He is wearing the appropriate flame-retardant outfit, and has a fire extinguisher on hand, as well as other firefighting gear. But if the worst happens, and a massive ball of flaming fuel vapor suddenly erupts, what do you think will happen to the man behind him?