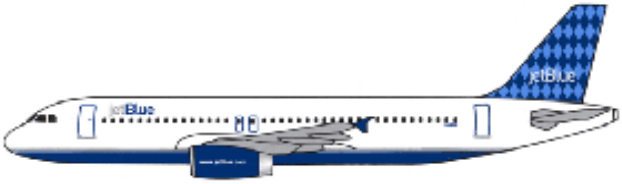

Aviation Human Factors Industry News

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Revealed: Damning new evidence of fatal flaws in RAF death crash Nimrod jets

- **Damning new evidence of potentially fatal flaws in the RAF's controversial Nimrod spy planes have been uncovered by defense engineers.**

Tests on one of the ageing aircraft, ordered after the deaths of 14 servicemen when a Nimrod exploded over Afghanistan, have revealed that the airframe has previously unknown defects.

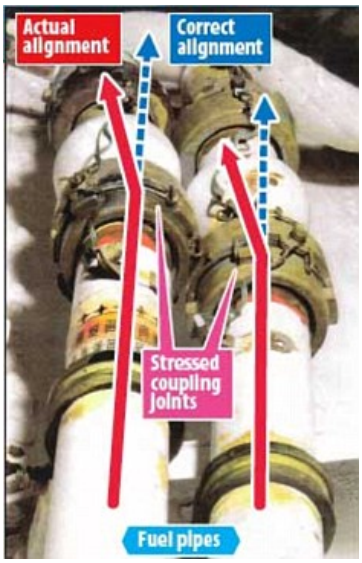
One critical fault has been found in the same fuel pipes that were blamed for the crash in 2006, which killed all on board. They are understood to have ruptured.

Controversial: Tests on the RAF's Nimrod spy plane has uncovered previously unknown defects in the airframe

The new evidence, seen by The Mail on Sunday, raises serious doubts over a decision by Defense Secretary Des Browne not to ground the RAF's 15 Nimrods despite growing concern that they are putting crews' lives at risk.

Last night the Ministry of Defense conceded that the new examination of the aircraft has resulted in a number of fresh issues and said the RAF would study the airworthiness report in full before making any decision on the fleet's future.

Critical: The misaligned fuel pipes on the stripped down Nimrod.



In May, the coroner investigating the 2006 crash demanded the fleet be taken out of service and accused the RAF of taking a 'cavalier approach to safety'.

His call was ignored by Mr. Browne, who insisted the remaining aircraft, now pressed into service hunting Al Qaeda and the Taliban in Afghanistan were safe to fly.

The latest flaws were discovered after a single Nimrod was examined in detail on the orders of the Defense Secretary in the wake of the Oxford inquest.

Defense contractor Qinetiq stripped down the aircraft and engineers discovered that fuel pipes in the bomb bay area were dangerously misaligned.

Photographs obtained by The Mail on Sunday show a vertical line that the pipes should follow.

Instead, the engineers have highlighted how the pipes have been bent out of shape, placing a strain on a key coupling joint.

Fuel leaking from a similar coupling joint was blamed as the most likely cause of a fierce fire and explosion that brought down the Nimrod shortly after it had taken part in air-to-air refueling.

Jim O'Halloran, an expert in aviation at Jane's Air Defense, studied the photographs and said the engineers' findings revealed a potentially fatal flaw.

He said: 'Where the fuel pipes meet and the couplings, which link and seal the pipes, are a critical area.

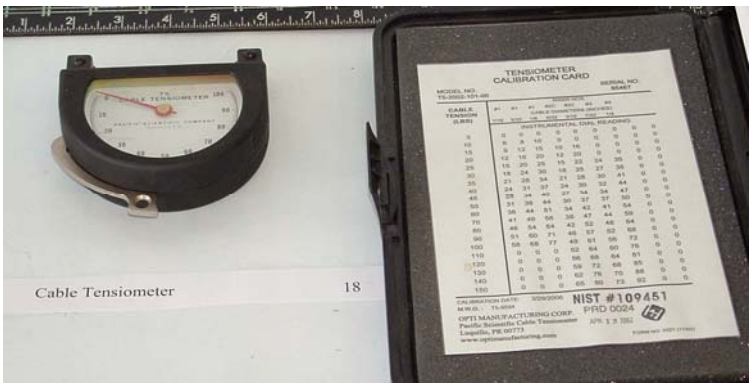
'Looking at these photographs, the alignment of the pipes and couplings is concerning.

'Aligning the pipe beyond the manufacturer's tolerances may strain a coupling.

'Over time, the pressure caused by the misalignment could cause it to fail.

'A leak under pressure, however small, would probably prove fatal.

Convair 580 crashed on first flight after cable-rigging check



US investigators have disclosed that the Air Tahoma Convair 580 freighter which crashed in Ohio earlier this month was conducting its first flight following a C-check, part of which included flight-control cable rigging.

The aircraft had been operating a post-maintenance check and training flight from Columbus Rickenbacker Airport to Mansfield, Ohio, on 1 September.

But just one minute after departing on Rickenbacker's runway 5L, the crew requested a return. Air traffic control cleared the aircraft to land on the same runway but it crashed into a cornfield at 12:06, only three minutes after beginning its take-off roll.

All three crew members - the only occupants - were killed in the accident. During the attempted return to the airport, they had advised air traffic control that emergency equipment was not required.

While the US National Transportation Safety Board is still investigating the accident, it has released preliminary information which confirms the aircraft was flying for the first time since undergoing a C-check.

It states that this work "included flight-control cable rigging as part of the check", although the NTSB has not said whether this bears any relevance to the accident.

The 52-year old Convair struck the ground, on a southerly heading, about 1.6km (1mi) southwest of the approach end to runway 5L.

Marks in the corn indicate that the undercarriage had been lowered, and that the aircraft was on a glide path of about 10°, with its right wing slightly down, at the point of impact.

From this point the debris field stretched about 200m (665ft) to a tree line, and the main wreckage was located a further 50m (160ft) south.

About 3m (10ft) of the forward fuselage separated at impact. Both wings separated from the fuselage, and both engines from the wings, during the crash. The wings and fuselage sections suffered fire damage.

The propeller gearboxes of both engines separated and were found near the initial impact point, although the propeller hubs were discovered 380m (1,250ft) away.

All four blades from both propellers separated from the hubs and were found throughout the debris path. Both flight recorders were retrieved from the wreckage and the information they contain is still undergoing analysis.

Human error shatters Westair 41-year maintenance record

The 41 year old flawless record of the country's largest aviation maintenance facility was dealt a severe blow following the investigation into the latest plane crash at Eros Airport.

The investigation uncovered evidence that Westair Maintenance carried out negligent work on the Cessna 210 that went down in Hochland Park in Windhoek, killing one passenger and injuring three others as well as the Swiss pilot.
The investigation concluded that engineers did not remove a plastic bag fitted over the air pipes of the ill-fated Cessna engine after carrying out maintenance work, and that blockage in the air system caused the crash.

Owner of Westair, Wolfie Grellmann, told Informanté "it was the worst nightmare of my 43 years in Civil Aviation when the investigation showed that human error in our workshops was responsible for the Cessna 210 crashing after take-off."
He said Westair had built up an impeccable reputation over 41 years, and assured Informanté that it was not a faulty system that led to the piece of metal being found in the engine of the crashed plane during the initial investigation.
"We have been constantly upgrading our maintenance system to adhere to the strict requirements laid down, but one can never rule out the human error.
"Not even the most thorough checking system can detect a tiny piece of hidden metal left behind in the engine once it has been sealed. Checking can then only be done on what is visible.

"We adhere to the highest standards in the industry and believe we have a system in place that can detect any faulty workmanship, but there is no detector for the human factor. "No mistake is acceptable, but this kind of thing can happen even when a 100% checklist was performed on maintenance work. It is sad, but unfortunately true."

He said that in 41 years Westair has never been slapped with an insurance claim for sloppy maintenance work.

"What the current crash investigation has revealed is the worst news I have received as owner of this reputable maintenance facility in my career." Informanté has meanwhile learned that the Swiss passengers injured in the disaster, are not considering an insurance claim against Westair for negligence. They have also indicated that they will not issue a statement on what they experienced on their first visit to Namibia. A visitor to their bedsides in the Roman Catholic Hospital in Windhoek told Informanté the injured tourists spoke in high regard of their Swiss pilot, Rene Klum, who also survived the crash.

COD — Caterer Object Damage

The Captain of a Boeing 727-200 describes a harrowing incident that has led his company to revise its ramp procedures. The incident underscores the importance of ensuring that contract, as well as company ground personnel, undergo training in ramp safety procedures. In particular, all ground personnel need to understand that flashing aircraft beacons mean extreme caution — engines are running, or engine start is imminent.

- **Arriving at gate, could not get aircraft to accept external power (Auxiliary Power Unit inoperative). Left #1 engine running while off-loading passengers, while still trying to get aircraft to accept external power (beacon on). Lead Flight Attendant came running up aisle saying to shut down the engine, that somebody had been sucked inside. Shut down engine. Went to back of aircraft and talked to caterer after he had been removed from intake. He said he did not know the engine was running. #1 engine received FOD [Foreign Object Damage].**

The Captain provided additional details about this incident to ASRS analysts during a callback. The B-727's #1 engine had been left on idle power while maintenance attempted to get ground power on the aircraft. The aircraft's upper and lower beacons were on, and flashing, to alert all ramp personnel that one or more engines were operating. The station procedures required that the aft galley be serviced through the left aft exit. The catering truck parked next to this exit. As the catering supervisor approached the aircraft door from the walkway of the elevated catering truck, he was immediately sucked into the turning engine.

After he was removed and checked for injuries, he was asked whether he had heard the engine running. He replied "no."

The caterer suffered a number of broken ribs, but amazingly avoided more serious injury thanks to quick intervention by the cabin and flight crew. A preventative for this type of event is procedures that prohibit service vehicles from approaching parked aircraft until all aircraft beacons have been turned off.

Ready to take flight

Cpl. Eric Beauchesne does some maintenance work on the engine casing of a Snowbird.

Canadian Forces Snowbirds technicians are the people behind the pilots responsible for keeping the aircraft running. Cpl. Eric Beauchesne, an aviation technician, has been with the air demonstration team for two years and could find his way around its CT-114 Tutor jets blindfolded.

At 15 Wing Armed Forces Day Saturday, he'll be one of several blue coverall-wearing men and women running from the runway to the hangar and back again, ensuring the team is ready for its 30-minute show in the sky above Moose Jaw. "As part of the servicing crew for a show, we come in two or three hours before the pilots," said Beauchesne, who grew up in Bracebridge, Ont. "Basically, our job is to make sure that the aircraft are safe and ready for flight."

This entails a series of pre-flight checks to ensure tires, brakes and lights are all working properly and that the plane is not leaking fuel or fluid. If it appears to be functioning properly, it is towed out to the flight line and given a last-minute polish. "Appearance is important," said Beauchesne. "You want to make sure it's looking exceptionally clean." Before the pilots take off, technicians walk the runway, picking up any large rocks or pieces of garbage that could be sucked into an engine. They watch the pilots strap into the aircraft, then let the pilots turn the plane on and do their own series of checks to see if any issues arise.

Technicians remain ready for action on the ground for the first few minutes after take-off in case a pilot finds there is something wrong while in the air. "If something does come up, the pilot will use one of the team's spare jets and we'll fix the other one during the show," said Beauchesne. "In most cases, there are no snags because we would've caught it when they came back (from another show or flight)."

Once the show starts, the technicians grab a bite to eat and watch the team perform, enjoying a short break before heading back to the hangar to prepare for the team's landing.

After the show is over, technicians look at the same areas of the jets they did earlier in the day during pre-flight preparations, then check the oil, debrief with the pilots and address any issues with the planes or make repairs if necessary.

"If everything's good, we store the aircraft and go home," said Beauchesne. "Or, often when we're on the road, we go to sign autographs or attend functions. Dealing with the public is a lot of fun." What isn't fun, according to Beauchesne, is filling the plane with diesel fuel and getting dirty while doing it, or having to scrape bugs off the windshield. "Really though, there isn't much I don't like about my job," he said. "Even when there are some problems with the aircraft and I have to fix it, I enjoy doing that."

PAMA/SAE Institute Calls for Subject Matter Experts: Composites, Rotorcraft, Avionics

Everything is looking up in the world of PAMA/SAE Certifications these days. Our first certification, the AMS/AME, has over 125 Honored Colleagues in its ranks and we have been working very hard to establish a significant customer that will tip the scales for a number of organizations evaluating our program. Look for a major announcement within the next month or so. Please visit us online for information on the PAMA/SAE Institute Aviation Maintenance and Production Certification Program.

In the meantime, we have been consumed with filling out our portfolio of certifications in concert with the Professional Certification plan we laid out some two years ago. We have completed the program design for a three-tier Composite/Bonded Structures Technician program in concert with the members of the SAE Commercial Aircraft Composite Repair Committee (CACRC). Sometime this fall we hope to begin formalizing that program with a Job Task Analysis and Test Blueprints. To execute those projects, we need Subject Matter Experts (SMEs) to volunteer their time.

If you are interested in participating as a Composites SME, please send your resume to Laura Blanchard, our Certification Coordinator. We'll be distributing more info on this opportunity shortly.

Also, we just announced last Friday the formation of a joint Military/Industry Master Rotorcraft Technician Stakeholders gathering during the last week of October. At this senior stakeholders meeting we will be determining the depth and breadth of the industry's desire for such credentialing - or if it even exists on a broad scale.

Our sense is that it does as the Army wants raise the bar for its civil servants and to provide its rotorcraft technicians with transportable credentials when they separate from the service - something most other separating service members have when they enter the civilian workforce. Industry has indicated a passion for growing their rotorcraft technician workforce and we believe our blueprint for a series of increasingly skilled certifications is the ticket to a long term plan. Even though we are not as far along as we are with Composites, we are starting to solicit Rotorcraft SME's also.

If you are interested in participating as a Rotorcraft SME, please send your resume to Laura Blanchard, our Certification Coordinator. We'll also be distributing more info on this opportunity shortly, too.

Also of interest, we have been approached by a non-aviation organization with a specialty in electronics to partner with them in the development of a comprehensive Avionics Certification program. We are very interested and even though this program is just getting underway, it could actually move quicker than both the Composites and Rotorcraft certifications. We'd like to get a jump on that certification program and we want to begin soliciting for Avionics SMEs right away.

If you are interested in participating as an Avionics SME, please send your resume to Laura Blanchard, our Certification Coordinator. Just like with the others, we'll be distributing more info on this opportunity shortly, as well.

You know, we always knew our profession demanded more than just attendance at classes. Knowledge and skills exams, developed by industry consensus, and maintained with integrity by a neutral third party, bring the kind of respect and professionalism that modern aviation demands. With your help and support, and under the strong PAMA/SAE banner, we will bring to reality this dream that so many have had. Tell your friends - we must all work together.

FAA Told to Audit Airline Safety Data for Accuracy

The Federal Aviation Administration should audit information it receives from airlines on safety and maintenance issues to ensure its accuracy, a panel of aviation safety experts said yesterday.

Transportation Secretary Mary Peters asked an outside panel earlier this year to review FAA safety policies in the wake of blistering criticism from Congress and the Transportation Department's inspector general that the FAA had grown too cozy with air carriers. The FAA relies heavily on self-reported data from airlines to spot trends that could lead to mechanical failures or plane crashes.

The criticism stemmed from safety lapses in the past two years by American Airlines and Southwest Airlines. The government fined Southwest $10.2 million for flying 46 Boeing 737s that had not been checked for fuselage cracks. Panel members said they supported the FAA's strategy of working closely with airlines on maintenance and safety issues, citing the approach as integral to the nation's aviation safety system.

Panel member William O. McCabe, a former aviation executive at DuPont, said the FAA had to focus on "leading indicators" by sifting through data. He called the system "looking for ugly." McCabe said safety officials can't depend on post-crash analysis for cues on safety given the small number of major incidents. The panel made 13 recommendations for changes at the agency, including implementing the audits, more training of inspectors and more consistency in inspection rules. Acting FAA Administrator Robert Sturgell said the agency would work "full throttle" to implement the changes.

Peters and Sturgell used the panel's report to defend the agency. Sturgell said the report "validated" the FAA's overall safety approach. Peters said the FAA had a "determined and persistent" focus on safety that was the world's "gold-standard." The five-member panel was chaired by Edward W. Stimpson, a former Clinton aviation appointee and a past president of the General Aviation Manufacturers Association.

Two Veteran Airline Captains Discuss the Crash of a Spanair MD82

AirSafe.com

This podcast features a discussion that was originally recorded on August 23rd, 2008, three days after the crash of the Spanair MD82, and featured Capt. Tom Bunn of the SOAR fear of flying organization, and Capt. Steve Fisher, a veteran airline pilot who has flown for a major US airline for over two decades.

Capt. Bunn has been a guest previously on the show, and in this episode he'll talk about some of the anxieties and concerns that have been expressed to him by some passengers.

In the days following the Spanair crash, I brought Capt. Bunn and Capt. Fisher together to provide insights into the mechanics of flying a large jet transport, especially the MD82, and to give the audience an idea of the kind of training and preparation pilots go through to prepare for emergencies during takeoff.

Early on in our conversation, the two captains discussed some of the issues that came up during the first few days of the investigation, including a problem with a temperature sensor that caused the crew of the accident aircraft to return to the terminal after its first takeoff attempt.

This download will take a few minutes to download.

You can use the following link for the podcast: Audio: MP3

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HK Airlines 737 tries to take off from taxiway

Hong Kong's Civil Aviation Department (CAD) is investigating an incident that occurred earlier this month when a Hong Kong Airlines Boeing 737-800 tried to take off from a Hong Kong airport taxiway.

A CAD spokesman in Hong Kong says on 13 September at 0414 Hong Kong Airlines 737-800 tried to take off from a taxiway at Hong Kong airport.

He says 112 passengers, five cabin crew and two pilots were on board the aircraft which was heading to do a charter flight from Hong Kong to Cheongju in South Korea.

Air traffic control radioed the pilots and had them abort the takeoff.

One of the pilots has reportedly claimed that he never planned to take off from the taxiway and that he was just taxiing at a very high speed.

But the CAD has dismissed this claim and said the speed that the aircraft was going suggests it was trying to take off.

Reportedly the two pilots have since been suspended from duty while the investigation is underway but the CAD spokesman was unable to confirm this.

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NTSB Cites Medical Falsification In Fatal Crash Investigation

The most recent application for a second-class medical certificate of a 74-year-old airshow pilot with a history of heart-related problems who crashed and died last year during practice for an airshow was approved by a physician who flew with him in airshows, according to the NTSB.

Prior to that, in 2005, the FAA had denied Geico Skytyper pilot Jan Wildberghs's medical application because it found he had a "history of falsification of multiple previous examinations." That falsification references applications in 2003 through 2005 on which the pilot failed to note his history of heart trouble and withheld from the FAA relevant information (including abnormally fast heart rhythms, tightness in his chest and shortness of breath).

According to the NTSB, those symptoms would likely have kept him from qualifying for a medical certificate. Pilots who flew with the now-deceased pilot said he had nodded off during the preflight and looked pale. The pilot was killed when four others broke from formation to turn for landing, but witnesses saw his aircraft continue flying in a shallow descent until it impacted the ground and was destroyed by fire.

Upon autopsy, two drugs were found in the pilot's body. One drug helped prevent blood clots, and the other may have been used to slow the pilot's heart rate. The NTSB's investigation also found a letter from the pilot's cardiologist to his primary care physician stating that the pilot may need to give up recreational flying due to his "aggressive" style of flying and performance in air shows.

Aviation museum receives plane

A former American Airlines aircraft that flew passengers around the U.S. has arrived at the Tulsa Air and Space Museum, which plans to fully restore it.

The Douglas DC-3 aircraft known as "Flagship Tulsa" was built for American in 1939 as part of its Flagship Fleet. It had been used for spare parts for other aircraft.

Russ Newman and Pete Kourtis of Tulsa bought the DC-3 and donated the aircraft to the Tulsa Air and Space Museum in memory of their fathers.

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The Tulsa Air and Space Museum is working with American Airlines' Tulsa Maintenance Base, Transport Workers' Union Local 514 and other aerospace companies to restore the plane fully.

Officials say the plane needs outer wing panels, two new engines and propellers and tail parts.

Making an Impact: Snap-on Introduces Compact Heavy Duty Cordless Impact Wrench

Snap-on Tools set the cordless impact performance standard with its groundbreaking 1/2-inch-drive wrench which put out more than 400 foot-pounds of torque. That same technology has now been applied to a more compact and lightweight package in the new 3/8-inch cordless impact wrench from Snap-on that offers industry-leading control and comfort.

http://www.newscom.com/cgi-bin/prnh/20080904/CLTH061

Boasting 230 foot-pounds of bolt break away torque, the CT4410 allows technicians to rev it up and get jobs done quicker and easier. The patented super heavy duty impact mechanism and the heat-treated alloy gears deliver strength and durability and reduce the chance of breakage.

Along with the uncompromising power, Snap-on's new impact wrench also offers comfort. Featuring an oversized trigger for precise control, a cushion-grip handle for less strain, a cushion-mounted motor for reduced vibration and a one-handed forward/reverse switch to easily change directions, it allows technicians to work longer with less fatigue.

Customers can find out more about the new 3/8-inch cordless impact wrench by contacting their local Snap-on representative, visiting www.snapon.com or by calling toll free 877-SNAPON-2 (877-762-7662).

No More Blame & Shame – Part II

Developing event-reporting systems may go a long way to reducing patient care errors in EMS

BLAME-AND-SHAME

When an error occurs, it's natural to ask who was at fault and hold them accountable for their mistake. While some may feel better because the person involved had to "pay" for the error, it isn't an effective way to improve the overall safety of the system.

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To illustrate this concept, consider a common example: Not noticing a stop sign, a woman drove right through a four-way intersection without stopping. By chance, she did not hit anyone. In patient-safety language, this is defined as a near-miss, because, although there was a situation with potential to do harm (a hazard), no one was hit. A police officer who observed the event stopped the driver and issued a ticket. In this case, the person was blamed (stopped by the police officer) and shamed (given a ticket). It was expected that this punitive action would not only teach the woman not to run stop signs, but also serve as a deterrent to others. Later that year, at the same intersection, a man ran the stop sign and struck and killed a bicyclist. This was an adverse event, as someone was killed.

SYSTEMS APPROACH

The goal of the systems approach is to examine all of the factors that led to an adverse event or near-miss, and to make changes to the system to prevent similar events in the future. One important part of this approach is understanding that human error is inevitable and will be repeated. Thus, after an incident occurs, the approach should focus on identifying problems in the system and finding changes that could be implemented to minimize the impact of human error. This is accomplished through two goals. The first is trying to find a solution that might reduce the chance of the same error occurring again, called a "forcing function." For example, consider that most monitor/defibrillator devices allow an unsynchronized electrical countershock to be delivered even when a patient is in a rhythm like supraventricular tachycardia, which requires a synchronized shock. A forcing function might prevent the delivery of shock unless the device is placed in sync mode. Since it is impossible to eliminate human error, the second goal is to buffer the effect of an error after it occurs, or to find a solution that will prevent the error from leading to injury (this is why cars have airbags).

Let's use the stop sign case to illustrate the systems approach. If the initial near-miss had been evaluated, it might have been discovered that the driver ran the stop sign because she didn't see it. Further analysis would have revealed that she didn't see the stop sign because it was partially obscured by branches from a nearby tree, which had not been trimmed at this intersection for the past two years because the city crew responsible for trimming trees was shorthanded due to budget cuts. Thus, further investigation revealed some root causes, as well as a factor that is easily fixed—cutting the branches. If the city realized this, resources might have been shifted to trim vegetation at stop signs around the city in order to reduce the occurrence of this same error. This could result in overall improvement of system safety. Other system solutions might be to minimize the consequences of the error, such as placing four-way stop signs or lowering the speed limit. The safest system solution would be building a bridge to eliminate the intersection, but cost-benefit analysis might find that this solution is not feasible. This example demonstrates how a simple human error can be due to several latent problems that are only identified once the event is analyzed more deeply. If we stop with punishing the driver for running the stop sign, we'll miss the opportunity to make changes that will prevent the same thing from happening again in the future. In this case, it would have saved a life.

This approach can be applied in the EMS setting. An adverse event or near-miss should be investigated by asking "why," unlike the blame-and-shame system that asks "who" was at fault. It is important to ask "why" six times, because stopping at one "why" will not identify the real root cause of the error or all of the contributing factors.

Midnight shift Nugget

Sharing bedtime with your BlackBerry

In the survey, 33 percent said their smart phone is more important then their telephone; 6 percent value it more than their car.
Once upon a time, we brought teddy bears to bed as a way to feel more secure. Today, it's our Blackberry's. That's according to a survey of 1,500 smart-phone users in which; 87 percent said they bring their smart phones into their bedrooms at night; 84 percent said they check them right before going to bed and/or on walking in the morning; 85 percent said they check in the middle of the night if they wake up; and, a remarkable 80 percent said they check before their first cup of coffee.

In a business environment in which clients on the other side of the globe are waking up and logging on just as we're going to bed, having a smart phone handy on the nightstand can make many people feel connected and more secure.

"It's about the fear of missing something important," said Samuel Nahmias, chief operations officer for Cedarhurst-based Studylogic Llc, the market research and business intelligence firm that conducted the research for Sheraton Hotels & Resorts.

The survey also asked respondents to tell what (or whom) they could live without if they had to: Forty-nine percent said their smart phone; 35 percent, their significant other; 16 percent, their pet. Nahmias, who is recently married, elevated his new wife over this smart phone. But as the choosing between that device and their golden retriever, "that would be a tough one" because being without a BlackBerry could means loss of a client, he said.

"It's all about how people live their lives today; were connected 24/7," said Hoyt Harper, senior vice president of brand management for the Sheraton Group, who says, yes, he is among those who take a peek if he wakes up in the middle of the night.

Thought 85 percent of respondents said they feel compelled to maintain some work connection day and night, seven day a week, the same percentage said such technologies allow them to spend more time out of the office with friends and family. Indeed, 62 percent said they love their handheld devices.

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However, that late-night hit may be a contributing factor to a rising problem: stress-induced chronic insomnia.

If you have trouble sleeping, checking your smart phone before bed or in the middle of the night can contribute to the problem, said Marta Maczaj, co-director of the sleep disorders center at St. Charles Hospital in Port Jefferson and associate professor of psychiatry at New York University. When you go to bed, you're supposed to "calm-down, relax, unwind – you need to put work behind you."

Nearly Half of Americans Struggle to Live Healthy Lifestyle

A lack of exercise and sleep are keeping Americans from living a healthier lifestyle, according to a poll by Amway Global. The poll, which questioned 15,000 Americans, discovered that 38 percent of respondents found getting regular exercise to be the most challenging part of living a healthy life. At 34 percent, getting enough sleep was reported as the second greatest challenge. Eating a well-balanced diet came in third with 25 percent. "Wellness isn't just about the scale, it's about a holistic approach — from getting adequate sleep and exercise to reducing stress and eating a balanced diet," said Amway Global Managing Director Steve Lieberman. Though diet and exercise are critical components of healthy lifestyles, it's also important to remember that sleep is inherently linked with how we eat (and how much), how we exercise (and whether or not we lose weight), and how we function on a daily basis. Getting the proper amount of sleep each night is necessary to face the world with your best foot forward.

Smell the coffee and wake up

Drinking a cup of coffee can wake you up, but perhaps a whiff of java is enough to reverse the effects of sleep deprivation on the brain.

A team led by Yoshinori Masuo at the National Institute of Advanced Industrial Science and Technology in Tsukuba, Jampan, deprived rats of sleep for a day. When they examined their brains, they found reduced levels of mRNA-messenger molecules that indicate when a gene is being expressed-for 11 genes important to brain function. When the rats were exposed to the aroma of coffee, the mRNA for nine of the genes was restored to near normal levels, and pushed to above normal levels for two.

We don't know if the same genes are suppressed in sleep-deprived humans, but many of these genes do have human equivalents.

So the team says gene suppression may help explain why people feel tired when they haven't had enough sleep-and that gene reactivation could explain why people love the smell of coffee.

The team hopes to identify molecules in the coffee aroma that affect gene expression. They suggest pumping them into factories to help revive tired workers who can't sip coffee while operating machinery.

AUDIO SAFETY TALKS!

WORKPLACE FIRST AID

If the something bad happens, you may be the person to stop the worst from happening. If you're on the scene when a colleague is injured, you're the person who could save his or her life, or prevent further injury. Help to prepare and encourage yourself and your co-workers against the day they may have to use their first-aid knowledge with this safety talk.

Copy and type this link into your browser:

http://www.safetysmart.com/ezine/weeklybriefing/080915/audiotalk.mp3

TOP 13

WORST EXCUSES FOR CALLING IN SICK

Another way that horseplay interferes with work

1. A woman called to say her toilet fell through the floor with her on it and she was stuck in the floor where it apparently was rotted through.

2. A man was two hours late coming back to the office from lunch because his tie got caught in the newspaper rack and he was out of change to open it again. It was in an area known for pan handlers and no one would give him a quarter.

3. My son gave me rat poison.

4. The road I live on is the only one in and out of my community. There was a terrible wreck that blocked the road and the state trooper said it would be several hours to clear it. I went home and waited for the trooper to call. He never called...

5. I have to go take care of a mess; the cat ate my rent money!

6. I can't come in today I'm sick... In the background you can hear his name being paged for his flight!

7. I can't come in today, I'm raw. He was chaffed in the upper thigh region...

8. We were camping on the weekend and a raccoon attacked us in our tent!

9. I had a worker show up on Monday for second shift 3 hours late Explanations was "I forgot about the time change" This was referencing the change in Daylight Saving time that occurs at 2 AM on Sunday morning over 36 hours earlier. My response was "What Rock Do You Live Under?"

10. A team member called to say the snow prevented his reporting to work. This employee lived less than one city block from the plant, and always walked to work. P.S. I drove 23 miles, to work, with no problem.

11. I had one employee call in and say "The train had a flat and he could not get by". All I could do was laugh at the excuse.

12. A colleague of mine called in sick once because her horse had escaped from inside the fence, and kept running away from her when she tried to catch him. She could not coax it with apples or carrots so she had to wait for her husband to get home, so they can corner the horse and trap it in order to put it back within the fence.

13. Recently I had an employee tell me he was not able to come to work because he couldn't see. I asked him what had happened, and he replied nothing, that he just couldn't see coming to work.

EMERGENCY PREPAREDNESS

And Our Schools

Does your child's school have a safety committee? It's just one of the many questions parents should ask to assess the safety culture of a child's school and to prepare for emergencies.

September is the fifth annual National Preparedness Month in the United States. (In Canada, Emergency Preparedness Week is in May.) This annual awareness campaign is designed to encourage Americans to take steps to prepare themselves for emergencies - at work, home or school.


YOUR SCHOOL'S
REPORT CARD

Grade the safety culture of your child's school

To help your workers address the many safety topics relevant to schools, we are again offering our school safety poster, complete with a pass/fail checklist.

5 Questions Parents Must Ask

In addition to completing the checklist, to prepare for emergencies, parents of school-age children must learn the answers to these 5 essential questions about their children's schools:

1. **What is my child's school's phone number?**
2. **What is the school's accident, injury and incident reporting policies?**
3. **Does my child's school have a safety committee?**
4. **Does the school have my current contact information?**
5. **Does the school and my child understand our own family emergency plan, including who may pick up my child in the event that I am unable to?**

Fact Check

While you make a 10-minute safety speech, two people will be killed and about 489 will suffer disability injury.

Source: National Safety Council, 'Injury facts," 2008.

Picture This!

We often lampoon folks for not taking the time to get a step ladder, instead making do with pallets, tabletops, chairs, what have you. Then along comes a fellow like this guy who reminds us that fetching a step ladder is only the first step.

The second step being putting it in a stable position, and let me tell you, this ain't it. The mooched in sides of an inverted plastic container don't exactly whisper "Stability."