



Aviation Human Factors Industry News September 12, 2007

Vol. III. Issue 33

Bombardier probes crash

Denmark incident Sunday third this year involving landing gear on planes similar to Toronto-built Q-400

A Bombardier Q-400 operated by Scandinavian Airlines lies on its side after crashing during an emergency landing. Five passengers suffered minor injuries after **part of the aircraft's landing gear collapsed and an engine caught fire**. In March, two similar planes had landing-gear problems in Japan.

(See attachment for additional photos)

Bombardier Inc. has dispatched an investigator to Denmark in the wake of an accident involving one of the company's Toronto-built aircraft when a Scandinavian Airlines turboprop crashed during an emergency landing.





The accident, which blocked the main runway at the Aarlborg airport in north Jutland, **is the third incident this year involving landing gear** on similar types of Bombardier aircraft.

"We have dispatched a product-safety specialist and related technical support," Bombardier spokesperson John Arnone said yesterday.

The SAS plane, a Q-400, was carrying 73 people while landing in Aarlborg on Sunday. **As the jet ran down the runway, part of the landing gear collapsed and an engine caught fire.** One propeller blade pierced the plane's cabin, but did not hit anyone. Five people suffered minor injuries, SAS said.

The plane had left Copenhagen's international airport for the domestic flight to Aalborg. **Problems with the aircraft's main landing gear were identified, "and the pilots prepared a controlled emergency landing,"** said the airline, which is the joint flag carrier of Norway, Denmark and Sweden. "After landing, the right main gear collapsed."

Arnone said various fleets around the world have a total of 160 Q-400s. The aircraft, recognized as a Canadian success story, has logged more than one million flight hours.

The jet is used for regional travel and can hold up to 76 passengers.

"What appears to have occurred in Denmark is the only incident we know of a landing-gear collapse," Arnone said.

This has not been a good year for the aircraft, also known as the Dash-8. In March, two of the turboprops were reported to have landing-gear problems in Japan.

A Q400 operated by All Nippon Airways had a landing-gear malfunction that forced pilots to make an emergency landing, creating sparks as the plane's nose hit the runway.

A week later, two pilots with Japan's Amakusa Airlines Co. were forced to engage their plane's landing gear manually after the automatic system malfunctioned. No one was hurt.

A spokesperson for Bombardier said at the time that it was **"too soon" to draw a link between the two Japanese incidents.**

As for the new incident, Arnone said: "The accident is under investigation by Danish aviation authorities, and we can't comment or speculate at this time."

NTSB Issues Safety Recommendations On Too-Hot Boeing Windshields

Says **Cross-Threading** May Result In Smoke, Fire In The Cockpit

In response to **numerous reports of fires near the windshields** of several Boeing aircraft over the past three years, on Wednesday the National Transportation Safety Board issued two safety recommendations calling for operators of Boeing 747, 757, 767, and 777 aircraft.

In its recommendations to the FAA, the Board said the agency should a) complete the process begun in 2004 to **approve the service bulletin for the installation of the redesigned windshield heat terminal block** on Boeing 767 airplanes (A-07-49); and **issue airworthiness directives** to replace the windshield heat terminal block on all Boeing 747, 757, 767, and 777 airplanes in accordance with the Boeing service bulletins.



"On January 25, 2004, American Airlines flight 1477, a 757-200 airplane, declared an emergency on departure from the Dallas-Fort Worth International Airport (DFW) because of smoke and fire near the windshield heat terminal.

The airplane returned to DFW and landed safely," the NTSB states. "Four days earlier, on January 21, 2004, the Danish Aircraft Accident Investigation Board notified the National Transportation Safety Board of a similar incident in which an **electrical fire started near the windshield heat terminal** on an Air Greenland 757-200 (OY-GRL) airplane in Copenhagen, Denmark. The event occurred on the ground while the airplane was being readied for flight.

"The windshields from both incident airplanes were removed and shipped to the windshield manufacturer, PPG, Inc., where a teardown examination was accomplished in March 2004 under the supervision of a Safety Board investigator, with representatives from the Federal Aviation Administration (FAA), Boeing, and American Airlines. **The examination revealed the cause of the fires to be the cross-threading of the screw that attached the power wire to the windshield heat terminal block, which resulted in an electrical arc and fire.**

"Board investigators determined that the windshield from **the January 25, 2004, incident was not the original one installed by Boeing; the windshield was installed in 1998.** Investigators were unable to determine if any recent maintenance work on the windshield could have caused the cross-thread condition."

The NTSB also noted three more related incidents, all involving 757s, that occurred before Boeing issued SBs for additional airplane models. Those incidents were also traced to cross-thread issues with the windshield heat terminal block.

Private Swiss Controllers Convicted Of Negligent Homicide

Passenger Jet Mistakenly Directed Into Cargo Jet

Four air traffic controllers, employees of a Swiss air traffic control company, **were convicted Tuesday of negligent homicide** in a mid-air collision over German airspace between a cargo jet and passenger jet in 2002 that killed 71 people.



Most of those who perished were Russian schoolchildren on vacation, according to CNN. **There was a lone Skyguide controller** on duty July 1, 2002, when a Bashkirian Airlines jet and a DHL cargo jet collided near the south German town of Ueberlingen. The controller, Peter Nielsen, told investigators **at the time conditions were very stressful that night because a coworker had taken a break and maintenance on the system adversely affected monitoring and communications.**

Other control centers saw the impending collision and tried to call Skyguide, but the phone was out of order. When Nielsen realized what was happening, he gave the respective pilots only 44 seconds of warning **then mistakenly directed the Bashkirian pilots to descend.**

That descent put it right into the DHL jet, according to CNN. **Nielsen was stabbed to death in 2004 by a Russian man who lost his wife and children in the crash.**

Three of the four controllers convicted were middle managers and each received a one-year suspended sentence. Prosecutors **blamed a culture of negligence and Skyguide's lack of awareness** and contended the accident wasn't caused by just one factor.

Some of the defendants placed sole blame on Nielsen. The fourth controller was ordered to pay an \$11,200 fine for his role in the collision and all four are responsible for \$20,700 in court costs.

Four additional Skyguide officials were acquitted. **The man who murdered Nielsen, Vitaly Kaloyev, is currently serving a five year, four month prison sentence.**

A hearing on an appeal to a Zurich court's order for his early release was postponed by the Federal Supreme Court of Switzerland Thursday and has not been rescheduled, according to the Novosti news service.

Comair Flight 5191 crash investigation less than satisfactory

People have been flying as airline passengers for several decades now, and despite the relative rarity of airliner crashes, **those disasters still hold a special grip on our emotions in a nation that can shrug off thousands of fatal car wrecks with barely a notice.**

We won't try to unravel the psychology of that situation.

But we do want to take note of a news story this week in which Amy Clay, the widow of Comair pilot Jeffrey Clay, killed when his airliner crashed on takeoff a year ago in Lexington, Ky., **is finally complaining that federal investigators are wrong to pin blame almost exclusively on the crew.**

We think she has a point. If aviation officials are letting the airport, the airline and the Federal Aviation Administration off the hook too easily, then that can allow dangers to lurk in the aviation system that could help lead to other deadly crashes in the future.

In this crash, Comair Flight 5191 was leaving the airport in Lexington, Ky. in the **predawn darkness** on Aug. 27, 2006. **The pilots mistakenly** took off on the wrong runway, which was unlit and much too short for their jet.

The plane slammed into the ground off the end of the runway and burned, killing 49 people. Only the co-pilot survived, and **he is said to have no memory of the event.** Cockpit recordings indicate the pilots never realized they were on the wrong runway.

Certainly, the pilot and co-pilot have the primary responsibility for the safety of their passengers, but **aviation is a complex business and fatal crashes often turn out to be the result of a chain of small slips and problems that create the final disastrous result.**

The devil in this crash is in such details:



Recent work at the airport had changed the regular layout used to reach the runway, but the pilots were not provided with updated maps of the layout.

Instead of having two air controllers in the airport tower, only one fatigued man was on duty in the tower and he turned away to do administrative chores and did not see the jet get onto the wrong runway.

Federal investigators however focused blame primarily on the pilot and co-pilot for allegedly being distracted by their casual chatter while rolling toward the runway and for not using "available cues" and verifying they were on the correct runway.

Pilot Clay's widow, however, noted the investigation showed her husband spoke only six words on the way to the runway. She agrees that her husband shares the blame, and would accept it had he survived, but said not enough blame was put on the bad runway map and the understaffed control tower at Blue Grass Airport.

She is right, and that is reflected in the National Transportation Safety Board's recommendation to the Federal Aviation Administration to require better taxiway markings and runway verification procedures as well as installation of airliner cockpit map displays or an alarm system to prevent wrong-runway takeoffs. The crash also prompted recommendations to reduce air controller fatigue, but waffled on whether having a second controller on duty could have prevented the Kentucky crash.

Air crashes are exhaustively investigated so as to provide information -- lessons -- that will make the aviation system safer.

We share Amy Clay's complaint that the Comair Flight 5191 crash investigation has left potentially life-saving lessons unlearned.

Why Russian aviation is in trouble

Why critics say Russian aviation is in trouble:

_TOO MANY AIRLINES: After the Soviet Union collapsed, state-owned Aeroflot splintered into 500 "babyflots," of which 182 remain. Smaller ones, struggling to survive, are more apt to cut corners on maintenance and safety. Fleets are aging; many airliners are of Soviet vintage or are bought secondhand from the West.

_COMPETITION: Is fierce, and many managements are so attentive to fuel costs that they fine pilots



who abort flights or even landings, even when the pilot is acting out of concern for safety.

Pilots are paid according to how many hours they are in the air, a practice that can exhaust them and impair their judgment.

_REGULATORY BODIES: Russia has five. Duties overlap and at least two both regulate airlines and investigate their crashes. Often the only conclusion they can agree upon is **pilot error**, leaving the deeper causes of a disaster unexplored.

_TRAINING AND SALARIES: State flight schools license pilots who have logged only 50 hours in the air, compared with 150 in the West. Instructors' salaries are low and trainees' food allowances are just 50 rubles (US\$1.90 or €1.40) a day.

_LAWSUITS: Russian courts don't award large settlements to the relatives of crash victims. After one crash last year that killed all 170 people on board, the airline offered to pay just US\$11,500 (about €3,600) for each fatality.

Unattended Helicopter Rolls Over

While preparing the helicopter to pick up passengers for a sightseeing flight in Boulder City, Nevada, U.S., the morning of Nov. 11, 2006, the pilot started the engine and completed the preflight checks. After checking generator load, he left the engine running at 100 percent rpm to charge the battery, the NTSB report said.

"The pilot exited the helicopter with the engine running and the rotors turning to disconnect the APU and to move it away from the helicopter," the report said. "While moving the APU, the pilot heard the engine sound change, turned around as say the front skids lifting off the ground."



The helicopter then moved backward and rolled down an embankment.

Thai Airways says human error cause of Airbus A380's wing scrape at Bangkok airport

BANGKOK, Thailand: **It was human error**, not unsuitable facilities that caused an Airbus A380 to scrape its wing tip on a hangar's gate at Bangkok's international airport, the president of Thai Airways said.

The plane's left wing suffered minor damage that delayed its planned demonstration flight last Saturday to the northern Thai city of Chiang Mai from Bangkok's Suvarnabhumi Airport.

Thai Airways President Apinan Sumanaseni said Monday in a telephone interview that **there was a "miscommunication" between ground staffers when a truck was used to tow the Airbus — parked outside a hangar — before it headed for a taxiway before takeoff.**



There had initially been speculation that the accident occurred because the facilities at Suvarnabhumi Airport could not accommodate an A380, the world's largest passenger jet, but Apinan dismissed the idea.

Thai Airways has ordered six A380s, which are expected to be delivered in 2010.

"The hangar was designed for the A380," he said. "We do not need to adjust the accommodation **but will have to train the staff be more cautious when handling the plane at the hangar.**"

A Singapore-based independent aviation expert, Richard Pinkham, said an incident is common in any airport.

"The **tarmac of a major airport can be an almost chaotic place** and an aircraft can clip the wing of another plane or run into stationary equipment anywhere.

The situation could be compounded by the airport staff not being familiar with the aircraft," said Pinkham, Southeast Asian regional director for the Center for Asia Pacific Aviation.

Since opening in September last year, US\$3.8 billion (€2.8 billion) Suvarnabhumi Airport — intended to be Southeast Asia's leading air transportation hub — **it been plagued by a host of widely publicized problems, including cracks in taxiways, a shortage of toilets, dozens of design flaws and a long list of corruption allegations.**

In last Saturday's mishap, the plane's left winglet was damaged, and engineers removed both the winglets before the delayed flight took off. A winglet tips up and back from the end of a wing, improving aerodynamic efficiency, but is not essential.

From Bangkok the plane went to Hanoi, Vietnam, and then to Hong Kong, where it was being displayed for an air show Monday.

Airbus Chief Commercial Officer John Leahy said at a news conference at the air show that a new set had been shipped to Hong Kong and was to be installed before another demonstration flight Tuesday.

Leahy said that **the plane was being towed with its engines shut off** when the accident occurred in Thailand and that **the plane's pilots weren't to blame.**

System aims to avert collisions on runways

Direct-to-pilot alerts save crucial seconds

SYRACUSE, N.Y. — **It's a heart-stopping image**, yet one that is all too possible at any of the nation's congested airports: Two jets, packed with passengers, take off simultaneously **on converging runways and crash in a fireball.**

In an effort to prevent such a disaster, aviation experts are testing the first technology to stream warnings about probable runway accidents directly to the pilots of the planes at risk.

In a dramatic, real-life demonstration of the experimental system, two planes were sent on a collision course last week at Syracuse Hancock International Airport in upstate New York.

The control tower cleared a Sabreliner for takeoff on Runway 10. The pilot spooled up the twin engines to full power and released the brakes. Within seconds, the executive jet was a third of the way down the runway, accelerating toward its wheels-up speed of about 135 m.p.h.





"Caution! Caution!" rang out in the pilot's headset.

A Beechcraft King Air plane roared down Runway 15, heading for a collision where the two runways intersect. Neither plane stopped. A more urgent alert screamed to both pilots just before their planes reached liftoff speed: "Warning! Traffic! Traffic! Converging traffic! Converging traffic!"

The pilots applied emergency brakes and engine thrust reversers, and both aircraft screeched to a halt, stopping 1,500 feet short of a fiery crash and throwing passengers forcefully against their seat restraints.

The goal of delivering real-time data straight to the flight deck is to shave crucial seconds off the alerting process, **correcting human errors that occur every day at airports in the U.S. and threaten to produce catastrophic results.**

Under the existing runway safety system, the pilots of planes in danger of crashing into each other are generally the last to receive alerts, because radar that monitors the movement of planes and vehicles on the airfield transmits collision warnings to the airport control tower. Controllers then radio alerts to pilots—if it's not too late.****

"The key benefit to our system is a **safety logic that chirps advisories to the pilots if it determines these guys are going to potentially touch each other," said Tony Lo Brutto, vice president and general manager of air-traffic systems at Sensis Corp., which is developing the cockpit alerting technology with Honeywell International.**

Paired technologies

The collaboration pairs Sensis' new Airport Surface Detection Equipment Model X (ASDE-X) radar, which was activated at O'Hare International Airport in early August to detect movement on the airport surface, with Honeywell's Traffic Collision Alerting System (TCAS) that informs pilots about the whereabouts of other aircraft.

The Honeywell-Sensis endeavor still is in the conceptual phase, but officials say they hope to bring a federally certified product to market in as little as two years.

There is no time to lose.

The No. 1 threat to airline passengers looms on the runways and taxiways of congested airports. Planes, and sometimes vehicles, pass too closely about once a day somewhere in the U.S., according to the Federal Aviation Administration. A more serious incident creates an immediate collision hazard about once every 10 days.



In the fast-paced, high-traffic airport environment where planes travel thousands of feet in seconds, **the system can be unforgiving of a pilot making a wrong turn, or one blowing through the equivalent of a stop sign while another plane is landing or taking off, or an air-traffic controller making a mistake.**

A **spate of recent close calls across the nation—including a near-collision** of two airliners at Los Angeles International Airport on Aug. 16 and a less serious runway safety breach at LAX nine days later—has aviation safety officials worried that the next runway incursion won't be just another bloodless scare.

The FAA convened an emergency summit the day before the first Los Angeles incident to devise short-term solutions, while promising to step up research into more sweeping safeguards using new technologies.

The National Transportation Safety Board has been prodding the FAA for several years to work with the private sector to create a system that warns pilots of potential runway conflicts between aircraft.

FAA and NTSB officials keenly observed some of the demonstrations in Syracuse last week, but they were careful to avoid issuing an endorsement.

"While we welcome the development of new technology that furthers the board's efforts to improve aviation safety, we don't evaluate any specific product. We will leave that to the FAA," said safety board spokesman Peter Knudson.

Crash scenarios programmed

More than 40 potentially fatal accident scenarios have been programmed into the Honeywell-Sensis prototype cockpit alerting system, officials said. They include a case in which a plane strays onto an active runway just as another plane is descending to land.

"Runway occupied! Runway occupied," the computer voice alerts the pilot of the airborne plane, providing time to power up the engines and circle for a second landing attempt.

The advance warning to pilots can range from 15 seconds to 45 seconds, depending on the speed of the aircraft and other factors, Lo Brutto said.

Looking ahead, long-range strategies are aimed at flowing data to pilots that give them a fuller picture of what is going on at any airport they fly to, whether it is O'Hare or a one-runway airport in the middle of Oklahoma.

"There is no silver bullet to preventing runway incursions. But ultimately we envision a system where there is a moving map in the aircraft that has a picture of the airport surface and your position on it, along with all the other aircraft," said Rick Berckefeldt, marketing manager of aerospace safety systems at Honeywell.

"That's the dream state we all want to get to."

Fatigue Fighters

Business is waking up to the toll weariness takes on job performance, and helping employees get more shut-e

When Arshad Chowdhury was working as an investment analyst, he noticed a lot of his colleagues were sneaking into bathrooms to take naps. So four years ago he started MetroNaps, a New York company that sells resting chairs called EnergyPods for \$12,485.



PHOTO: NATHAN SAYERS FOR METRONAPS

These plush recliners lull users to sleep, then gently shake them awake after a specified time. Procter & Gamble has ordered a couple of EnergyPods, as has Cisco Systems, which positions them as part of a companywide effort to "support employee well-being," according to a spokesperson.

Some U.S. companies are waking up to the benefits of keeping workers alert. It started in industries such as aviation, trucking, and hospitals, where avoiding careless mistakes is a matter of life and death. Now, as news spreads about the toll fatigue takes on job performance, other industries are climbing aboard, teaching workers how to sleep better at night, shortening work shifts, and setting up napping rooms in corporate offices.

While the trend may fly in the face of America's hyperactive work ethic, there's a growing body of evidence that naps help. At Bombardier Aerospace, a leading maker of small aircraft such as the Learjet, internal research shows pilots who employed strategies to fight off drowsiness performed better than fatigued pilots on cockpit tasks such as responding to radio calls. Tired pilots sometimes fell into "microsleeps"—zoning out for a few seconds, unaware, and thus reacting to events more slowly. "Your brain shuts off, and you can't control it," says Robert W. Agostino, director of flight operations for Bombardier's business aircraft unit.

How does this translate to desk jobs? Just as a drowsy pilot is more likely to miss a radio call, a stock trader whose eyelids are drooping may have trouble pouncing on as many transactions as usual. "People think they're fine. They're not," says Dr. Mark Rosekind, president of Alertness Solutions, a Cupertino (Calif.) consulting company that trains executives in simple techniques for improving alertness at work.

Among Rosekind's tips: get more strategic about how you consume coffee. You'll get the maximum mental boost if you drink a cup one half hour before an important meeting or other business event. Sitting in a brightly lit room for just 15 minutes helps, too, as does exercise. And nap, of course. You won't necessarily lose if you snooze.

Midnight Shift Nugget

Are Your T.V., Computer and Cell Phone Ruining Your Sleep?

Modern society has an ever-growing number of people tuned into televisions, computers and cell phones for a large portion of the day and night. Many people stay connected until they fall asleep sometimes with cell phones or remote control devices in their hands. **But what effect do these devices have on our sleep?** A new study finds that using electronic media before bed may disrupt sleep and worsen our perception of our sleep. In the study, researchers surveyed 7,000 Internet users in Japan about their sleep and the frequency with which they use electronic media before going to bed. **They found that 83% reported having sleep problems, half of whom attributed those problems to media use at bedtime.**



Similar results were found in NSF's 2006 *Sleep in America* poll, which revealed that adolescents with more electronic devices in the bedroom are much more likely than their peers to get insufficient sleep. The results of the survey in Japan and NSF's poll suggest that sleep and use of electronics may compete for the same time. NSF recommends turning off electronic media and developing a quiet, relaxing bedtime routine at least one hour before sleep each night or day for midnight workers.

SAFETY ATTITUDES

The Employee's Role in Workplace Safety

Here's an article to share with your workers on how they can assess their own safety attitudes.

You consider yourself a safe worker because you generally follow the rules, wear the required PPE and take the necessary training. And you rely on your employer to keep you safe on the job. **So why would an accident happen to you? Well, there's one thing your employer can't do—control your actions and your attitude.**

Employers bear a huge responsibility to protect their workers from injury. The regulations they must abide by are very demanding, to say the least.





But employees must also take charge of their own safety. Remember, you have the most to gain ... and the most to lose.

A Good Safety Attitude

Having a good safety attitude isn't just about following procedure. It's staying alert to possible hazards and taking the extra time to use PPE. It also means that you're willing to listen to suggestions that might protect you. To have a good safety attitude, you need.

Focus: A good safety attitude means you focus on the task, you concentrate on the job. If you have other things on your mind, you may be distracted. And if you're bored, an accidental slip is easy.

Strength: No, this doesn't mean muscle strength; it's the strength to do the right thing, even when you are under pressure to take shortcuts. A good safety attitude means you have the strength to stick with the procedures.

Time: A good safety attitude means taking the time to do things correctly. Is saving a few minutes worth a lifelong injury? If you add up the life costs due to injuries, it's obvious that it's cheaper to do the job the right way the first time.

Responsibility: If you care about yourself and your co-workers, you will take responsibility even when a task "isn't my job." A good safety attitude means thinking of yourself as part of the team.

Behavioral Warning Signs:

These behaviors indicate that you're not taking responsibility for your own safety.

- Being too tired for the job;
- Consuming drugs or alcohol at work;
- Ignoring written safety procedures;
- Skipping safety meetings;
- Refusing to wear PPE;
- Operating equipment without training; or
- Working too quickly.

8 Steps to Safety Responsibility

Here are 8 ways you can take responsibility for your own safety:

1. Acknowledge that you're not invincible;
2. Attend the proper training sessions;
3. Know the health and safety standards that apply to your work;
4. Use safety equipment, PPE and devices properly;
5. Follow all safety procedures and policies;

6. Break bad safety habits (such as overreaching on ladders);
7. Support or join workplace safety and health committees;
8. Refuse dangerous work.

[Job fair to seek workers for jets](#)

Honda Aviation and GTCC will hold a job fair in October to give **workers their first chance** to apply for HondaJet employment and training to make HondaJets beginning in 2010.

No firm date has been set, but it will likely happen in the middle of October, said Ed Frye, chairman of GTCC's transportation systems technology division.

Honda will screen individuals at the event, taking applications and working with state JobLink and other work force groups **to do hands-on and written testing**, Frye said. Some of the testing will check an applicant's skills in certain work processes, for example.



The screening is for direct aircraft work only. Honda has asked others to apply at <http://www.honda.com> and follow the "careers at Honda" button.

Honda plans to hire up to 300 workers, but Frye declined to say how many jobs will be available through the job fair.

Those selected must first enter GTCC training programs at the T.H. Davis Aviation Center to learn specific Honda technology and **Honda's business culture.**

"They want folks to go through this training," Frye said. **"It doesn't matter if you're already an experienced aircraft mechanic."**

The first training class in **airframe and power-plant mechanics** begins in January, he said, and **will last for two years.**

If the students selected for the training are successful, they will become Honda employees, Frye said.

Other courses will last from eight to 15 months and could involve a variety of specialties. Frye said his best estimate that such workers as component installers, structural specialists, avionics installers and interior specialists will be trained at GTCC. But Honda is still fine-tuning the training it wants.

Honda received approval from Guilford County inspectors this week to begin construction on its headquarters at Piedmont Triad International Airport.

It is currently working on Federal Aviation Administration certification of its jet, which it expects to begin delivering in 2010.

Frye said he gets dozens of calls a day about potential Honda jobs, so "the anticipated pool of applicants is going to be large."

Job Stress, Depression Link Found

If you have a demanding job you are more likely to become depressed, according to a new study by UK researchers. They determined that 45 per cent of new depression or anxiety cases are caused by stressful work.

Using data collected by a long-term study in Dunedin, New Zealand, the researchers asked the 1,000 participants, all in their early 30s, if they had workload and time pressures, were required to work overtime and if they had too much work to do everything well.

They were also questioned about whether their jobs were hectic and whether they were unclear about what they had to do.

Ten per cent of men and 14 per cent of women studied suffered their first episodes of depression or anxiety during the year-long study.

"Our study shows that work stress appears to bring on diagnosable forms of depression and anxiety in previously healthy young workers," says study leader Dr Maria Melchior, epidemiologist at the Institute of Psychiatry, Kings College London.



The participants held a variety of jobs, including actress, brain surgeon, teacher, **helicopter pilot**, journalist and policeman. They are at a time in their lives where they are settling into careers and are **less likely to choose lower stress jobs**.

These stressed-out professionals reported having little time to take part in social activities.

Getting through grief: 7 things that can help

Any one who has experienced loss knows how painful and prolonged **grief** can be. It's common to feel overwhelmed at first by its depth and intensity. All the small details of daily life—getting out of bed, making meals, going to appointments, taking care of children, plowing through tasks tied to home or work—may seem overwhelming and inconsequential all at once. Let the nonessentials slide, and **focus on ways to help yourself through this difficult time**.



Here are some ways to do that:

Eat well. Try to eat healthy foods. Avoid foods that supply mostly empty calories. Drink plenty of fluids. If you've lost your appetite, try simple comfort foods, such as soups, mashed potatoes with chicken or meatloaf, fruit and yogurt smoothies, puddings, pasta, or foods from your childhood or cultural background. Eating small portions frequently may help, too. Take a multivitamin to cover any nutrients your diet isn't currently supplying.

Take necessary medications. Grief makes you more vulnerable to illness. Take your scheduled medications as usual. Not everyone needs to take an antidepressant or anti-anxiety medication, but these drugs can be a huge help for some people. Talk with your doctor about this, if necessary.

Get the sleep you need. Grief is exhausting. Nap if you need to. Go to bed early if you can. If you're having trouble sleeping, try exercising more (but not too close to bedtime). Avoid drinking beverages containing caffeine after 2 p.m., and abstain from alcohol for at least two hours before bedtime. If these steps don't help, talk with your doctor. Sometimes, taking sleep medications for a short time to help you sleep can help you cope better during the day.

Try to exercise every day. A simple walk, a bike ride, yoga, or a harder workout can ease agitation, anger, and depression. Exercise can serve as a distraction when you need a break from grief, or offer you time to meditate on your loss. Make a date with a friend to walk a few days a week. Whether you do so in silence or take this opportunity to pour out your feelings, the activity will benefit you both.

Stop risky behavior. Dangerous coping strategies, such as drinking too much alcohol, abusing drugs, or engaging in impulsive or risky behavior, may blot out or numb pain temporarily.

But they derail healthy grieving and can have other unwanted consequences. Substituting safer behaviors when these impulses arise—such as seeking solace with other caring people, praying, exercising, writing in a journal, or trying stress-relief techniques—will serve you better.

Delay big decisions. Grief can cloud your thought processes, and if you make abrupt decisions, you may regret them later. Many experts suggest waiting a year, if possible, before moving, changing jobs, clearing out keepsakes, and making other momentous decisions.

Do something for yourself every day. Ask “What would help me most today?” The answer may vary from day to day and even from hour to hour. If you need to cry, cry. If you need to retreat to a sanctuary, create one. If you need to connect with and commemorate your loved one, you can do so in many ways. If you feel angry, express it. If you feel guilty, explore it. If you need support from friends or family—a hug, a home cooked dinner, a night out, or just their presence in your home—tell someone. If you need a break from grieving, allow yourself that.

If you're afraid of the feelings you're having, share them with a caring friend or family member, a support group of people treading the same path, or a mental health professional.

Cooler Heads Prevail With Workflow

A California company wants **cooler heads** to prevail with a new system designed to **reduce the heat inside workers' hardhats.**

The cooling device, called **“WorkFlow,”** attaches to a hardhat and utilizes a small fan that cycles on and off throughout the day. The fan creates an evaporative cooling system that **“foils the greenhouse effect”** by evacuating the hot air inside the hat. This makes workers feel cooler and reduces the risk of heat-related illness, according to the manufacturer, WorkFlow Industrial Products.



The device weighs about 10 ounces and can be retrofitted to any hardhat. The computer-controlled fan uses a rechargeable lithium ion battery.

For more information on the WorkFlow, call 1-877-406-4501 or visit www.workflowindustrialproducts.com

Picture This!



END