



## Aviation Human Factors Industry News September 15, 2008

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### Aircraft mechanic gets prison for fraud

WILLIAMSPORT - Brian Daniel Snyder, the aircraft mechanic who the Federal Aviation Administration says **compromised the safety** of about 180 small airplanes, has been sentenced to 51 months in federal prison.

**"You've done a terrible disservice to the aviation industry,"** U.S. Middle District Senior Judge James F. McClure Jr. told Snyder at sentencing Thursday.

Snyder, 28, of Selinsgrove, pleaded guilty in April to fraud involving **aircraft parts and interstate transportation of stolen property**. He told McClure he now is in the excavating business.

"I don't want anything to do with aviation," said Snyder, who graduated from the aviation program at the Pennsylvania College of Technology.

The jail term will start Oct. 1. McClure also ordered Snyder to make restitution of \$80,329 and spend 3 years on supervised release.

The crimes occurred between 2002 and this year.

Snyder, who operated Smooth Landings at the Northumberland County Airport near Elysburg, admitted when he pleaded guilty that he **forged the name of one certified FAA mechanic on 141 documents and forged the names of four other certified mechanics 28 times**.

Snyder also admitted he **backdated and illegally signed maintenance logs 27 times** after the FAA revoked his licenses in October 2006, and he **falsified records to conceal that 48 times he used parts stolen from other aircraft**.



Assistant U.S. Attorney Bruce Brandler said Snyder routinely went from airport to airport, **stealing parts from planes**, including GPS devices, crank cases, crank shafts and propellers. He then sold or used the items in his repair business, Brandler said.

Snyder admitted he stole a Piper PA-32 aircraft, which he had agreed to buy for \$55,000 in Fort Lauderdale, Fla., after the owner canceled the deal when Snyder's \$35,000 down-payment check bounced. He later sold the airplane for \$60,000, prosecutors said.

The charges list 65 victims, including some Dauphin County residents.

## Qantas pilots seek role in maintenance

Following a string of maintenance **glitches**, Qantas pilots are seeking greater involvement in the carrier's safety regulation process.

A current review by the Civil Aviation Safety Authority (CASA) identified **"emerging problems"** in the company's engineering and maintenance operations.



The Australian International Pilots Association (AIPA) argued the airline was in need of an alternative safety intelligence led by engineers, which would enable Qantas to utilize their expertise in devising strategies.

AIPA president Ian Wood told *The Australian* that the proposed model would work similarly to the college of surgeons in the medical profession, allowing pilots to have input into developing practice standards.

"It's a model to use the surgeon equivalent, pilots and engineers, to feed in via a government entity a **different view** of how airlines can maintain or best achieve their regulatory responsibility," Captain Woods said.

"In other words, high safety standards and the ability to withstand unrelenting commercial pressure."

He said CASA lacked resources and transparency of its operations to accurately monitor airlines.

The company underwent more than 100 external audits over the past 12 months, including 14 by the CASA and one by the International Air Transport Association (IATA).

The CASA review said Qantas was showing some **adverse trends in maintenance performance**, and was now below the airline's own benchmarks.

## Madrid air crash investigators explore 'pilot error' possibility

Investigators probing the Madrid air disaster are exploring whether **basic pilot error** was to blame for the plane crash last month which killed 154 people.

Initial findings from the black box recorders suggest that both engines were working normally **but that flaps on the wings had not been extended.**



The flaps on the wing's trailing edge and slats on the leading edge are essential for lift on take-off. They are one of the **"killer items"** that pilots triple check before take-off.

But the cock-pit voice recorder recovered from the crash showed that **the crew had confirmed "Flaps OK, Slats OK,"** according to reports leaked to the press.

**An electrical fault is being blamed for the failure of an audio alarm** which should have sounded in the cockpit alerting crew to the fact that the flaps had not been deployed.

Two other alarms, warning of nearby ground and imminent stall, did work in the Spanair aircraft as the pilots struggled to control it, it has emerged.

Experts said the failure of the essential alarm may have been due to a broader electrical problem which caused an earlier fault in the system. The Spanair MD 82 jet had already aborted its first departure from Madrid after a problem was detected in an external temperature gauge.

Mechanics fixed what was described by Spanair officials as a "minor glitch" and the aircraft was cleared for take-off.

But on its second attempt it struggled to gain enough power to take to the skies - a fact aviation experts say is consistent with a failure to deploy the tail flaps.

The twin engine jet rose slightly from the runway before it veered to the right and slammed into the ground tail first. The back of the aircraft broke apart and the fuselage bounced three times before crashing into a shallow ravine and bursting into flames.

Only 18 on board survived the crash.

Investigators have called the leaks "incomplete" but have not denied them. The official preliminary report on the causes of the crash is not expected for several weeks.

If the flap theory is confirmed the tragedy would mirror that of other air disasters when pilot error was to blame.

In August 1987 a Northwest Airlines DC9 - predecessor of the MD82 - crashed at Detroit also killing 154 people. The DC9 pilots forgot to set the flaps and slats and the warning system lost power and failed.

In June 1972, 118 people died when the pilots of a British European Airways Trident inadvertently retracted leading edge slats shortly after take-off from Heathrow.

The plane immediately stalled and crashed in Staines, Middlesex. There was no cockpit voice recorder at the time, but the veteran captain and young co-pilot were suspected of being distracted by an argument between them over strike action.

A study by the American Federal Aviation Administration found that checklists were not followed correctly in 279 accidents, mostly involving smaller aircraft, which killed 215 people between 1983 and 1993.

## [When a Tragedy Becomes a Crime: Prosecutors Probe Air Disasters](#)

As investigators search for clues to the crash of Spanair SA Flight 5022 in Madrid last month, families of the 153 victims demand to know **who is to blame**. Another critical question: whether that will be determined in civil or criminal court.



For six decades, aviation regulators have sought the causes behind and responsibility for plane accidents. Victims' families have sued for damages with civil suits.

Lately, however, public prosecutors **are seeking criminal accountability** for **mistakes** that lead to air disasters, raising a thorny legal and moral question: **When does human error become a crime?**

"It's a Nobel Prize question, figuring out how to coordinate civil and criminal law enforcement," says Harvard Law School professor David Rosenberg.

While it isn't yet clear whether the Spanair crash will prompt criminal charges, several air accidents in Europe this decade have.

One of the latest cases stems from the [Air France Concorde](#) crash in 2000 that killed 113 people. (That was before the carrier became Air France-KLM SA.) French prosecutors have charged five people and Continental Airlines Inc. with [voluntary manslaughter](#). Among the defendants are three engineers who designed and certified the supersonic plane more than 30 years earlier. Continental and two of its employees are included because [a piece of metal that crash investigators believe dropped from one of its planes](#) is suspected of initiating the crash. All the defendants deny the charges.

National justice systems draw the line between civil and criminal cases differently. The U.S. has a range of civil penalties -- such as fines and punitive damages against individuals and companies -- [that don't exist](#) in many European legal codes, says Anthony Sebok, a professor at New York's Benjamin N. Cardozo School of Law.

In general, countries try to set a high bar for pressing criminal charges. The U.S. usually demands evidence of [reckless behavior or gross negligence](#). In the wake of a 2003 Staten Island ferry crash that killed 11 people, for example, federal prosecutors won prison sentences for the captain, who had passed out on painkillers, and his boss, for failing to enforce rules requiring two pilots in the wheelhouse.

"Most courts require much more than ordinary negligence or a slip-up," says Kenneth Simons, a professor at Boston University School of Law. The problem, he says, is to [define a "slip-up"](#) in medicine, aviation and other complex fields. American doctors, for various reasons, face the threat of huge financial liability in civil court but rarely face criminal prosecutions.

Few plane crashes are caused by an individual pilot, engineer or mechanic. "You're never going to get rid of [human error](#), so the system needs to be able to deal with [human fallibility](#)," says Gerard Forlin, a British barrister who has represented both victims and accused in crash cases. "The consequences of failing to do so are sometimes the criminal responsibility of managements and boards."

Some in aviation are sounding the alarm that the pursuit of punishment could prompt people to [hide problems](#), for fear of being held responsible for them. "There's a fundamental disconnect between how aviation investigators look at an accident and how prosecutors look at one," says David Rimmer, executive vice president at ExcelAire of Ronkonkoma, N.Y. Two ExcelAire pilots have been charged by Brazilian prosecutors following a 2006 midair collision in Brazil that killed 154 people. "Investigators look for causes and ways to avoid repeats, while the goal of law enforcement is [to find somebody to blame](#)."

**Bill Voss, president of the Flight Safety Foundation, a global nonprofit group in Alexandria, Va., says gross negligence or law-breaking merits criminal investigation but that "overzealous prosecutions threaten to dry up vital sources of information and jeopardize safety."**

**Prosecutors say the issue is one for the courts to decide and that holding people responsible should ultimately improve safety.**

**Since the mid-1990s, the aviation industry in most developed countries has followed a "no blame" approach. Confidential reporting systems allow pilots, engineers, managers and others to anonymously flag potential safety concerns without fear of grounding or demotion. A pilot who makes a nonfatal mistake, for example, might get extra training, but could also provide valuable insights that instructors apply to improve their teaching.**

**Aviation officials say the approach has helped improve air safety. There were 0.03 fatalities per million air passengers carried in North America in 2007, almost 85% fewer than the rate of 0.17 in 1997.**

**Some safety specialists say the aviation industry's reporting methods could serve as a model for other businesses, ranging from crane operators to nuclear-power generators. American medicine could benefit, too, some say, from less litigation and more transparency.**

**But criminal conviction has an emotional component, too, offering victims' families both a sense of finality and hope that the forceful finding can help prevent similar disasters. For the past seven years, families of the victims of a 2001 crash at Milan's Linate Airport that killed 118 people had been awaiting a final verdict in a criminal case against officials of Italy's aviation authorities. The convictions came earlier this year. Paolo Pettinaroli, head of a group of victims' families, wrote on the association's Web site: "It is over."**



## Maintenance Mishap Summary

Reading investigation messages revealed a trend of **four casual factors** in our maintenance mishaps.

- *Failure to follow procedures*
- *Attention failure*
- *Lack of communication*
- *Quality Assurance*



We'll give a brief overview of these **casual factors** however they need to be addressed on a daily basis to continue our downward trend in maintenance mishaps.

Our first casual factor "**Failure to follow procedures**" is one that we see all too often in daily message traffic and survey trips. **Procedures are written to prevent mishaps.** The main reasons for them are to complete the task at hand efficiently, correctly and safely. Procedures come in many forms, from written publications, MRC decks, Wing/Command instructions to today's electronic technical publications utilizing the tuff book laptop. How do we fix this? Think about it this way. We read the paper/internet to keep up to date on what's going on in the world. What's wrong in reading written procedures in keeping up with our daily aviation maintenance?

Our second casual factor is "**Attention failure**" that can be attributed to things that range from stress, decision errors, misplaced motivation, overconfidence and improper documentation. This list may seem all encompassing and a bit overwhelming and you may think to yourself there is no way we can address all of these issues. Try this...*Ground Crew Coordination* or Learning to act as a TEAM. **Safety is built on integrity, trust and leadership created and sustained by effective communication.**

That last line of the preceding paragraph brings us to our third casual factor "**Lack of communication.**" How can we put this into perspective? How about this famous saying: "**What we have here is a failure to communicate**". Poor communication has been the downfall of some of the greatest organizations in the world. It can take many forms including verbal, written and pictures but most importantly it should include **attentive listening.** Communication requires constant work from all and must flow down and up the chain of command to ensure everyone is on the same wave-length.

Our last casual factor is "**Quality Assurance**". During survey trips we see strong and weak squadrons/AIMD's/MALS and they all seem to stem from one specific area: **A strong or weak QA.** Commands should assign personnel to QA based on their **strong rating knowledge** as well as what I like to call their **SME (subject matter expert) quotient.**

Commands with a strong QA have their SME's walking through the command spaces, **asking questions, cross training** and breaking down the old clique barrier that often pokes fun at the phrase "I'm here to help". Unfortunately, we have seen an equal number of weak QA's on surveys with SME's behind the desk, surfing the internet and not getting around the command. My advice...If you work in QA get out from behind your desk and really *see* what is going on in the command. You will be amazed at the impact and changes that you can effect by practicing LBWA (**leadership by walking around**).

That's it for this month. We shall see you around the fleet and remember Work, Play, and Live ... Safely!



## One-Size-Fits-All Maintenance Problem

In the past several incidents have been reported to ASRS in which Boeing 737-100 and -200 wheel bearings were **incorrectly installed** on the series -300 aircraft. Now here's a **Captain's report** that describes the installation of a B-757 wheel bearing on a B-737-300 wheel — with potentially catastrophic results:

- Shortly after departure from Runway 34L the Tower controller informed us we had **lost a wheel** on the takeoff. In a very short period of time we were told we had lost either the right outboard main gear wheel, the right inboard main gear wheel, or even both right main gear wheels. I elected to stay in the local area and reduce fuel to an acceptable level (weight) for landing. The B737-300 does not have fuel dumping capabilities.

Since I did not know the integrity or even existence of the remaining wheel on the right side, I wanted to reduce the aircraft weight as much as possible for landing. We held outside the [airport] area for **two hours**. I realized that if we held for an extended period, we would be making an emergency landing, and quite possibly a passenger evacuation after sunset. With this consideration, I held until the time we could make a low pass, get a visual inspection from the Tower and return for landing just prior to sunset.

- The low pass was conducted and the ATC personnel, as well as company mechanics, reported the right outboard wheel was intact, the **inboard was missing**. After the visual inspection, we returned for landing... The approach and landing were uneventful... The aircraft was towed to the maintenance hangar where it was discovered that the **main wheel bearing on the right inboard wheel had failed**. The wheel departed the airplane, leaving the axle and the brake assembly intact on the landing gear... There was absolutely no indication on the takeoff roll that the wheel had failed. In fact, when the errant wheel was located, it too was intact and even still inflated.

The B-737-300 wheel apparently will accept B-737-100, 200, and B-757 bearings and look like a correct installation. The underlying problem is that part numbers are on the bearing race are normally covered with grease. **Unless maintenance technicians take time** to verify the B-737 part numbers, the wrong bearing may be installed on the wheel.

## Pilot high an hour before flight

### - American sacked by private airline after failing breathalyzer test

An American pilot has been sacked after being **found drunk** an hour before he was to fly a Kingfisher plane with 140 on board from Calcutta to Delhi.

He was caught during the breathalyzer test that is part of the **routine pre-flight medical check**. The pilot was asked to return to the hotel and a reserve crew member flew the plane to Delhi.



“The pilot, a US national, was taken off the roster and later sacked for being drunk on duty. He has returned to his country,” said a Kingfisher official in Calcutta.

The Directorate General of Civil Aviation (DGCA) headquarters in Delhi recently received the report of the July 14 incident.

According to DGCA sources, this is the only instance this year of a pilot on the Calcutta sector being found drunk before a flight. In June, the pilot of a JetLite Delhi-Patna flight failed the breathalyzer test.

Last year, a cabin crew member of another private airline couldn't clear the test at Netaji Subhas Chandra Bose International Airport before a flight. "The airline had taken disciplinary action against her," said a DGCA official.

The Indian Aircraft Act prohibits the pilot and cabin crew from consuming intoxicants 12 hours before a flight as a precautionary measure.

"Airlines must conduct the pre-flight medical check stringently. It is one of the most important ways of ensuring operational safety," said another official.

The **medical tests are conducted an hour before the take-off of a domestic flight and 90 minutes before an international flight.** Each airline has a medical unit to assess the physical fitness of the crew.

The tests determine whether the crew members, especially the pilot, **is mentally stable, physically perfect, not suffering from stress or strain** and is not under the spell of alcohol.

"Someone not perfectly fit mentally and physically **can commit mistakes.** His or her ability to make a decision in an emergency situation may be impaired," said a DGCA official.

## Safety Management Systems: A Hot International Topic

At the June FAA-EASA International Safety Meeting, the single most-discussed topic was the Safety Management System (SMS) for air transportation. Strategies for implementation by government regulators and the form that such programs might take at both the government and industry level were all much-debated. One thing is clear from these discussions: everyone has a different view of what SMS will be.

The SMS debate is prompted by a requirement issued by the International Civil Aviation Organization (ICAO). ICAO Annex 6 currently demands that member states require that operator and maintenance providers implement an acceptable safety management system. The ICAO rule requires that all governments implement their systems by January 1, 2009. The current state of the industry makes it clear that no government will be in compliance by that time.

The most advanced implementer seems to be Transport Canada, but the Transport Canada SMS Program seems to have gotten entangled in legal issues and industry opposition. A major practical problem with the program was that it sought to make significant changes too quickly, causing a visceral reaction among the regulated industry. The FAA intends to take a more measured approach to implementation. The first official step in this approach will be the solicitation of public comments on what a potential SMS rulemaking should look like.

The SMS proposal would ultimately apply to operators, repair stations and manufacturers (design approval holders). Certificate holders would implement systems able to identify hazards and would then develop, implement, and maintain effective risk controls based on the identified hazards.

The FAA plans to issue an Advance Notice of Proposed Rulemaking later this summer, seeking public input into the form that such a rule might take.

## Medallion Foundation celebrates safest year of flying

Medallion Foundation Executive Director Dennis Ward shows the foundation's award for excellence given to Federal Aviation Administration employee Angela Elgee at an annual award ceremony. FAA Administrator Bobby Sturgell and Sen. Ted Stevens attended the event to **celebrate Alaska's safest year ever for commercial aircraft traffic.**



Commercial aircraft carriers in Alaska have improved, making this year the safest ever, according to the Federal Aviation Administration's top official.

“Carriers here have **cut down accidents by 50 percent,**” said Bobby Sturgell, administrator for the FAA, while in Anchorage for the Medallion Foundation's annual awards presentation Aug.15.

Sturgell and Sen. Ted Stevens presented awards to seven air carriers all Part 135 (10 passengers or less) scheduled and on-demand air taxi operators.

The **nonprofit Medallion Foundation** was started by Alaska Air Carriers Association in 2002 to reduce commercial and general aviation accidents and to reduce unusually high insurance rates paid by commercial carriers.

The mission of the Medallion Foundation is to reduce aviation accidents in Alaska by fostering a **new safety culture** and by promoting higher safety standards through research, education, auditing and advocacy.

“The FAA is proud to have had a part in this achievement,” said Sturgell. “We all need to find a safe way to make things better for aviation safety.”

Stevens, who has championed the Medallion Foundation for its part in fostering a **new safety culture** by Alaska's aviation industry, also credited operators for this hallmark achievement.

“This movement is part of the process of saving lives,” said Stevens. “No one depends on aviation like we do here in Alaska. I spend a lot of time in Congress telling senators from all over the nation about our dependency on aviation.”

Sturgell was introduced by executive director Dennis Ward at the ceremony. Ward also presented an award to FAA employee Angela Elgee for her part in using a new way to analyze accident information to help FAA inspectors.

Elgee introduced the use of statistical data, called “TapRoot Analysis,” to FAA officials to assist Alaska air carriers in operating more safely by finding a correlation between accidents and incidents in Alaska.

The Medallion Foundation provides specific **training classes**, one-on-one company mentoring, and auditing in conjunction with and supplemental to the Five-Star/Shield programs. Courses such as system safety, safety officer, flight risk management and taproot cause and analysis are offered as prerequisites for the star programs.

The Medallion Foundation also has established the certified flight instructor and designated pilot examiner program to address initial training and re-training pilots about specific safety issues that have been identified in the TapRoot analysis and through focusing on aeronautical decision-making process.

## Torque Tools

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<http://www.sleepfoundation.org/site/apps/ka/ec/category.asp?c=hulXKjM0lxF&b=2417155&en=epKDLMMuFfKHJLOvHfJFILNsEiIXLYOvGcLLJXMAIqJPJYNCJtE>



## [Are these 7 mistakes killing your sleep? Take the quiz and beat insomnia](#)

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## [Sleep apnea – Part II](#)

### [Sleep Analysis](#)

The symptoms of sleep apnea are all too familiar to Marlin Priest, **director of maintenance** for McWane of Birmingham, Ala. Priest supervises four full-time technicians, a hangar attendant and an intern. His flight department has two Learjet 45s and a GIII. Priest has been diagnosed with severe **sleep apnea**.



“Apnea had a daily effect on my work,” he said. “By about two o’clock in the afternoon I would hit a wall energy-wise. In a large group setting such as a conference I would **lose concentration** and even fall asleep. In the shop I would have to **reread things** over and over to remember them. I would talk to my mechanics then not remember what we talked about. Driving home late afternoon and early evening, I was having a **difficult time concentrating**, and I would wake up every morning with a headache. I thought it was a sinus problem.”

Priest said his wife, **a nurse**, forced him to recognize he had a problem. “My wife said, ‘If we’re going to sleep in the same bed, you’re going to have to get help,’” he said. “She recognized that I wasn’t just snoring at night; **I would actually stop breathing**. I did the sleep study and they found I was having an episode about every 58 seconds all night long.”

A sleep study requires an overnight stay at a sleep disorder clinic. The subject has numerous electrodes glued to his head, chest and legs with all the wires coming together into a single bundle and plugging in next to the bed. There is also a small breathing-detection device placed under the nose that is identical to a general aviation oxygen cannula used in non-pressurized aircraft. A computer silently **monitors numerous physiological variables** while the subject sleeps.

The results yield information about the rate of respiratory disturbance, oxygen levels, arousals from sleep due to snoring, cumulative amount of REM sleep, and number of limb movements resulting in arousal to a lighter stage of sleep. Based upon the results, various forms of treatment may be recommended. These vary from **weight loss** to using a **continuous positive airway pressure (CPAP)** device, which consists of a mask and air compressor system that blows air in your nose or nose and mouth to keep the airway open.

Priest said his results indicated his oxygen level dropped as low as 79 percent; it should not go below 90 percent. He was told to return for a follow-up study using a CPAP mask and as a result was fitted with one to use every night.

“Once I started using CPAP **it took a while to get comfortable** with it but when I did I went from getting almost no sleep to **sleeping seven or eight hours a night** with no fatigue, headaches or grogginess in the morning. Now my energy level lasts all day; I don’t get tired in the afternoon anymore. It has been a huge turnaround in my general health and energy levels,” he said.

For those who travel frequently, CPAP machines come small enough to be packed in a suitcase, along with their hose, mask and global voltage transformer.

## **Lessons from the cockpit: Medical crews train with simulation models adopted from aviation**

There are a handful of industries that hold **no room for error**. When getting it right really matters -- and getting it wrong can lead to disaster.

William Hamman has worked in two: aviation and health care.

Using simulations modeled after those he helped develop for cockpit crews, Hamman now works to teach health care professionals **to improve teamwork**.



"It's amazing some of the things that we see that they just don't understand," said Hamman, who's conducted more than 150 simulations at hospitals since 2006.

The real-time, videotaped simulations are meant to induce and then increase stress on a medical team, challenging their abilities often by worsening a patient's condition or adding a sudden complication.

"Things start to happen and things happen rapidly. People lose their situational awareness and you have a bad outcome," Hamman said.

From that result can come valuable lessons on improving patient care under stressful situations.

A cardiologist, Hamman has flown for years as a commercial pilot for United Airlines, for which he once was director of quality and risk. He's also a research scientist at Western Michigan University's College of Aviation.

Hamman began developing his simulations three years ago at WMU after he landed a \$2.9 million state grant to customize the aviation model for health care.

He recently co-founded a new Battle Creek-based consulting company, PSO One - short for Patient Safety Organization.

The simulations are designed to drive improvement in 12 critical skills that are needed for the kind of team function and cohesion that can make the difference between chaos and control at critical moments in a patient's care, he said.

Hamman's work recently gained the attention of the Lansing-based Risk Management and Patient Safety Institute, which is partnering with PSO One to conduct simulations for its health care clients.

Karol Warek, senior vice president for the institute, sees a parallel in applying the aviation simulation model to health care.

"We wanted to bring a very unique learning opportunity to health care," Warek said. "We think it's very leading edge."

Hamman's simulations, and how a medical team responds to such stress, help hospitals identify problems and refine their clinical processes and protocols.

Among the scenarios that Hamman has conducted during all times of the day or night:

- A medical team had to wait 45 minutes to have a CT scan done on an infant whose car seat was thrown through a window in a vehicle crash. The baby, despite an obvious head injury, was not classified a trauma case, and therefore not given a higher priority by the radiologist.

Since "trauma always rules," Hamman said, the hospital changed the way it classifies patient coming into the ER to better manage such situations.

- Delays are caused in getting the proper personnel to the operating room, where a woman in labor must undergo an emergency caesarian section.

- A surgeon didn't receive the right blood type during a surgical procedure because the hospital's protocol requires two blood draws to confirm the patient's blood type before delivering it to the OR.

"They had no idea that procedure was in their organization," said Hamman, noting that problems identified in simulations often reflect a breakdown in communication or teamwork.

Training scenarios are immediately followed by a debriefing of everybody involved.

"It's not a shame and blame game," Hamman said. "It's not about the who, it's about the what."

Quite often miscommunication stems from the hierarchical structure in health care that keeps some people from challenging the authority of a doctor or surgeon.

"We see that over and over and over again when there are human dynamics getting involved," Hamman said. "When health-care professionals enter a room, they have no concept of working together as a team. They work as individuals and think of themselves as individuals coming together."

"It's about 'what I do when I come down,' rather than the team."

In the emergency c-section scenario, for example, nurse-doctor miscommunication leads to delayed access to the operating room, and as complications arise, so does chaos.

"It's been extremely powerful," Hamman said. "There are things going on right under their noses and they just can't see it until they see these videos."

## Think Safety

### Use The Right PPE From Head To Toe

> Use all the required protective equipment (PPE), no matter how quick a job may seem.

> Inspect your PPE before you use it. Don't use suspect items.



> Never become complacent, PPE provides defenses against injury, but does not prevent dangerous incidents.

> Check the material safety data sheets (MSDS) when working with or around new hazardous substances.

## Fact Check

In 2006, one worker was injured on the job every **nine seconds**.

Source: National Safety Council, "Injury Facts," 2008.



## TOP 10

### Hurricane Safety Myths

If you're in an area vulnerable to hurricanes, you might want to help your workers protect themselves and their families. A good starting point is to pass around this notice debunking 10 common myths about hurricanes:

#### **10. When Hurricanes Strike**

**Myth:** Hurricanes and tropical storms only strike during the official hurricane season of June 1 to November 30.

**Reality:** Hurricanes and tropical storms can take place at just about any time during the year. Three examples:

- Hurricane Lili occurred in late Dec. 1984;
- Tropical Storm Anna hit in April 2003; and
- Hurricane Zeta loomed in the Atlantic Ocean in late Jan. 2006 even though it never made landfall.



**Taping windows won't prevent them from shattering**

## 9. Drinking Water Safety

**Myth:** It's a good idea to keep your tubs and sinks filled to provide a source of drinking water if the public water supply is cut off or contaminated.

**Reality:** Although you can use it to bathe and flush, water stored in tubs and sinks is dangerous to drink because, among other things, it can be leached with lead from the glaze.

## 8. Evacuation Planning

**Myth:** You don't need an evacuation plan because if an evacuation order comes down, the authorities will provide complete instructions.

**Reality:** Authorities will direct you to emergency shelters but you might not want to stay in one, especially since they don't accept pets. In addition, authorities won't help you prepare your house to withstand the storm.



## 7. Wind Danger

**Myth:** Winds from a hurricane or tropical storm aren't much more dangerous than high winds produced by regular old summer thunderstorms.

**Reality:** Summer thunderstorms can produce wind gusts above 60 mph. Hurricane winds can exceed twice that rate. And hurricane winds may be sustained for hours.

## 6. Home Preparation-Open Windows

**Myth:** Opening the windows on the side opposite the wind will relieve air pressure and keep your house from exploding.

**Reality:** Wrong, wrong, wrong! The best way to protect a home from wind is to keep the windows shut tight and boarded up.

## 5. Home Preparation-Taping Windows

**Myth:** Taping windows will prevent them from shattering.

**Reality:** Taping doesn't prevent shattering. It just keeps the broken glass from scattering inside your home. Shutters and boards provide the best protection against shattering.

#### 4. Home Preparation-Why Bother

**Myth:** There's nothing you can really do to protect your home against a big hurricane.

**Reality:** Although a powerful hurricane can destroy even the most solid structure, taking basic precautions like shuttering windows, bracing garage and entry doors and bringing yard items indoors can significantly reduce storm damage.



#### 3. Waiting to Evacuate

**Myth:** I'll wait until the weather starts to turn bad before I obey an evacuation order.

**Reality:** Bad move. Storm paths are unpredictable and you need time to get out safely. If you wait for the storm to hit, you lose your cushion.

#### 2. Going Outside in a Storm

**Myth:** It's safe to go outside during the "eye" of the hurricane.

**Reality:** Stay inside during the entire storm. True, winds in the eye are calm. But you don't know how long the eye will remain over you. Moreover, the strongest winds of a hurricane are those just inside the eye.

#### 1. Mobile Home Safety

**Myth:** A mobile home that's tied down and braced is a safe place to ride out a storm.

**Reality:** A mobile home is NEVER a safe place to be in a storm, no matter how securely tied down you think it is.

## Picture This!

### The Proverbial Spare Tire



**This probably isn't particularly dangerous. We're just running it for those people who always wondered about the origin of the phrase in this week's title.**

**Carrying a tire this way may actually be a useful precaution, if the rider gets in a wreck and parts ways with his motorcycle. It will be easier for him to roll to a stop. However, at that point, he will be wishing he had worn a jacket.**