# Aviation Human Factors Industry News

## Volume VIII. Issue 40, October 26, 2012



From the sands of Kitty Hawk, the tradition lives on.

Hello all' From the sands of Kitty Hawk, the tradition lives on.

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## Pilots Of Crash Plane Drunk

Both pilots of an An-28 that crashed in eastern Russia last month were drunk. Ten of the 14 aboard the aircraft died when the plane went down in a forest. At the time, local reports said there was no post-crash fire at the accident scene, which was about six miles short of the airport at Palana, a tiny community on the Kamchatka Peninsula. Witnesses said they say both pilots hoisting a few the night before the flight. The Russian



authorities have now turned their attention to finding out how they got to the flight deck. According to forensic tests the pilot was "slightly inebriated" while the first officer was "moderately" so. Blood alcohol levels were not released. Alcohol has been implicated in several Russian crashes in recent years, the most serious of which was the 2011 crash of a Tu-134 in Petrozavodsk. Two weeks ago an amphibious aircraft crashed in the Black Sea with a drunk pilot at the controls but there were not fatalities.

## Air force owns up to safety failures

## Investigation: Bungles, misunderstandings and other lapses happened at least eight times, chief admits

The air force has shipped dangerous goods on civilian flights at least eight times - including one "seriously endangering" the lives of all on an Air New Zealand flight to Canada.Chief of Air Force Air Vice-Marshal Peter Stockwell last night issued a statement confirming several safety failures affecting civilian aircraft.



He also said the Royal NZ Air Force misled the Transport Accident Investigation Commission (TAIC) when reporting the incident in 2009.

And he said the air force bungled its plan to tell Air NZ about the incident and misunderstood its responsibility to tell the Civil Aviation Authority about the incident.

The admission of failures came as the CAA announced it would investigate the incident in which the air force placed up to 379 people at risk.

The Herald revealed on Tuesday the air force breached Air NZ's rules with an "illegal" shipment of chemical oxygen generators on the airline's 747-400 passenger flight to Vancouver on August 23, 2009.

A similar incident destroyed a passenger flight in the United States, killing 110 people.

The incident was revealed in a report obtained by the Herald newspaper that detailed safety problems in the air force. The report, part of an investigation into the Anzac Day 2010 tragedy that left three servicemen dead, found the air force did not have processes in place to carry out safe flying operations.

It also found the air force had adopted only 47 per cent of safety recommendations in the past 10 years - including recommendations that would have grounded the Anzac Day flight and kept the dangerous canisters off the Air NZ flight.

Air Vice-Marshal Stockwell said the air force court of inquiry into the Air NZ incident resulted in 22 safety recommendations of which 19 had been adopted.

He said the air force had known of problems after wrongly shipping a helicopter engine, classified as dangerous goods, on a DHL flight without accurate information.

He said that between 2002 and 2009 the air force had shipped dangerous goods with incorrect documentation on eight occasions of which it was aware.

Air Vice-Marshal Stockwell said the air force had contacted the TAIC by telephone but had misinformed it.

The air force person who contacted TAIC had wrongly told the agency the dangerous canisters had not been shipped. He said another error was made when the air force failed to send TAIC a copy of its investigation report into the issue, which revealed the canisters had been shipped.

"Nor did we raise the issue with Air New Zealand, which appears to have been the result of different staff within the air force thinking that others were doing this." Air Vice-Marshal Stockwell said the air force also failed to notify the CAA because it thought it only had to if there was "a serious harm event".

Defense minister Jonathan Coleman said he had confidence in the air force and its leadership.

## NTSB: Gulfstream Safety Culture A Factor In G650 Test Crash

The fiery crash of a Gulfstream G650 during flight testing in April 2011 was caused by an aerodynamic stall and subsequent uncommanded roll during a one-engine-out takeoff flight test, the NTSB determined on Wednesday. Those events were the result of several human failures, according to the NTSB: failure to properly develop and validate takeoff



speeds for the flight tests and recognize and correct a takeoff safety speed (V2) error during previous G650 flight tests; the G650 flight-test team's persistent and increasingly aggressive attempts to achieve V2 speeds that were erroneously low; and Gulfstream's inadequate investigation of previous G650 uncommanded roll events, which would have shown that the company's estimated stall angle of attack while the airplane was in ground effect was too high. Two pilots and two engineers died in the crash, in Roswell, N.M. The G650 was type-certified last month.

"Two prior close calls should have prompted a yellow flag, but instead of slowing down to analyze what had happened, the program continued full speed ahead," said NTSB chairman Deborah Hersman. "This crash was as much an absence of leadership as it was of lift." Later, she acknowledged that after the accident, Gulfstream recognized "that many changes needed to be made and began to implement them." The investigation showed that Gulfstream's flight-test schedule was "aggressive," with "pressure to get the aircraft certified," Hersman said. "Assumptions and errors were made, but they were neither reviewed nor evaluated when review data was collected." The board's conclusions and recommendations are posted online.

#### **NTSB'S STATEMENT ON PROBABLE CAUSE**

The National Transportation Safety Board determines that the cause of this accident was an aerodynamic stall and subsequent uncommanded roll during a one engine-inoperative takeoff flight test, which were the result of (1) Gulfstream's failure to properly develop and validate takeoff speeds for the flight tests and recognize and correct the takeoff safety speed (V2) error during previous G650 flight tests, (2) the G650 flight test team's persistent and increasingly aggressive attempts to achieve V2 speeds that were erroneously low, and (3) Gulfstream's inadequate investigation of previous G650 uncommanded roll events, which indicated that the company's estimated stall angle of attack while the airplane was in ground effect was too high.

Contributing to the accident was Gulfstream's failure to effectively manage the G650 flight test program by pursuing an aggressive program schedule without ensuring that the roles and responsibilities of team members had been appropriately defined and implemented, engineering processes had received sufficient technical planning and oversight, potential hazards had been fully identified, and appropriate risk controls had been implemented and were functioning as intended.

http://www.ntsb.gov/news/events/2012/gulfstream/index.html

### **Safety Study Finds FAA Needs Better Data**

The accident rate varies among the various sectors of general aviation, says a new report from the Government Accountability Office, but without better data it's hard to tell what's really going on. For example, experimental amateur-built airplanes were involved in 21 percent of the fatal accidents reviewed, but for only 4 percent of the estimated annual flight hours, while corporate operations flew about 14 percent of estimated annual flight hours but were involved in only about 1 percent of fatal accidents.



Limitations in the data "preclude a confident assessment" of what those numbers really mean in regards to general aviation safety, the report states. The GAO said the FAA should find a way to collect more detailed data in ways that won't create a burden on the GA community.

Specifically, the report said the FAA should take the following actions: collect and maintain data on each pilot's recurrent training; improve measures of general aviation activity by requiring the FAA to collect flight-hour data at regular events that are already required, such as during registration renewals or annual maintenance inspections; and set specific general aviation safety improvement goals -- such as targets for fatal accident reductions -- for individual industry segments using a data-driven, risk-management approach. Officials from the Transportation Department "agreed to consider our recommendations," the report concludes. The full text of the report is posted online PDF.

http://www.gao.gov/assets/650/649219.pdf

## **GAO Issues GA Industry Safety Recommendations**

#### Pilot Error = Human or System Error

The Government Accountability Office (GAO) has recommended that FAA set specific general aviation safety improvement goals — such as targets for fatal accident reductions — for individual industry segments, "using a data driven, risk management approach."

GAO issued a study praising the U.S. aviation system as one of the safest in the world, but noting that the GA community suffers hundreds of fatalities each year, mostly due to pilot error. GAO said it



examined characteristics of and trends in general aviation accidents from 1999 through 2011 and recent actions taken by FAA to improve general aviation safety. GAO analyzed National Transportation Safety Board accident data, reviewed government and industry studies and other documents, and interviewed FAA and NTSB officials and industry stakeholders. The agency recommended, among other things, that FAA require the collection of general aviation aircraft flight-hour data in ways that minimize the impact on the general aviation community, set safety improvement goals for individual general aviation industry segments, and develop performance measures.

## Think the Pilot's Bill of Rights Doesn't Apply to Mechanics? Think Again. - John Goglia

Let's see a show of hands if you never heard of the Pilot's Bill of

Rights? Looks like most of you. And if you've heard of it, you didn't really think too much about it, right? Of course. Who has time to think about pilots' rights when you're struggling to maintain your own! So, I can well understand why you wouldn't have heard of it, or if you heard of it, why you didn't look into it further. After all, a law



with only pilots mentioned should apply only to pilots, right? Wrong. At least when it comes to this newly enacted law. Yup. This law applies to mechanics, just as much as it applies to pilots – although the effects may well be harsher – as I'll tell you in just a minute. It also applies to aircraft dispatchers, air traffic controllers and anyone else who holds an airman's certificate. That's because the law applies to holders of "airmen certificates" and, perhaps unbeknownst to Congress and the President – and apparently AOPA and EAA as major pushers of this bill – A&P certificates are airmen certificates, too. So this means that this new Bill of Rights applies to us, too.

And, is that good news? Do we want the same bill of rights as our brother and sister airmen? After reviewing this law – I admit belatedly because I too thought it applied only to pilots – I say not so fast.

I think the passage of this law makes two things abundantly clear - no one in the government is looking out for mechanics. Couldn't our elected officials have thought to ask whether this law affected anyone other than pilots? After all, this law had seventy co-sponsors in Congress. Do our representatives even know that mechanics hold FAA certificates?

And neither the FAA nor the NTSB – the two agencies directly affected by changes in the law – never thought to let mechanic organizations know. I have looked through mechanic and maintenance websites and have not seen a mention of the impacts of this law on A&Ps. (And AOPA and EAA have issued a number of press releases on this law but I have not found one that mentions any impacts on mechanics.)

So, what's my beef with this new law? It boils down to two main issues, although I have a number of other issues , as well. Instead of giving airmen stronger protections in FAA enforcement actions, I think it will make it more expensive for airmen to defend themselves, mainly because the new law requires the NTSB to comply with the Federal Rules of Evidence and the Federal Rules of Civil Procedure("whenever practicable) instead of the current, more lenient administrative rules. (I've already seen one lawyer warn on his website, that with these changes to the rules, airmen will need to consult more than ever with experienced counsel. Ka-ching\$\$\$!)

The law also gives airmen the right to appeal a final NTSB decision to the Federal District Court instead of the Court of Appeals. Well, there's another expensive proposition. How many airmen have the kind of money to battle lengthy hearings in administrative tribunals and then start all over in federal district court? Really.

But my biggest concern though is that since this law only applies to certificate actions, it will push the FAA to use its airman civil penalty authority more vigorously. Which could result in onerous fines and findings of violations – and a greater impact on many working mechanics than certificate actions today. After all, many mechanics can continue to work even with a suspended license – as long as the work is done under a certificated mechanic's supervision. But who is going to pay their fines?

Moral of the Story: We really need to think about how we got caught unawares and how to prevent that from happening in the future.

#### New system targets runway overruns

American and Delta to keep airliners from rolling off slippery runways.

The business has developed a system to provide pilots with more accurate information about conditions on the tarmac, particularly for landings in bad weather. By automatically



retrieving and analyzing data already collected by aircraft sensors and onboard flight-control computers, Aviation Safety Technologies aims to give pilots what they lack: standardized, real-time measurements of local braking conditions right before touchdown."Patrick Doyle, the Federal Aviation Administration's top runway-safety official is cited as saying: "It's a wonderful technology, and we are pushing this very hard." He called it superior to current methods, which can cause delays when specially equipped vehicles are sent to determine surface conditions. "You're taking that runway out of service for a period of time," Doyle says, maybe for as long as 20 minutes.

The FAA is now planning a broader study to assess whether SafeLand could improve airlines' on-time performance at busy airports.

http://www.airtrafficmanagement.net/magazine/view-issue/?issueID=3124

# NBAA condemns President Obama for 'disparaging business aviation'

President Barack Obama has again come under fire for saying he wants to end tax breaks for owners of business jets in the USA - this time during the first presidential debate with Mitt Romney.



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National Business Aviation Association chief executive Ed Bolen has accused Obama of "disparaging business aviation and mischaracterizing the industry".

During the 3 October debate, Obama argued for a change to laws that allow businesses that own their own jets to depreciate their value over five years, compared with seven for charter operators.

"Why wouldn't we eliminate tax breaks for corporate jets? My attitude is if you got a corporate jet, you can probably afford to pay full freight, not get a special break for it," he said.

The President has been condemned previously for remarks about tax breaks to owners of corporate jets, including during a press conference in June 2011. Two years earlier, at the height of the global financial crisis, the image of business aviation was dealt a blow when chief executives of Detroit car makers flew to Washington DC in company jets to ask for government subsidies.

Bolen accuses Obama of having "denigrated" an industry that is "responsible for 1.2 million American jobs and \$150 billion in economic impact".

He adds: "The President's comments completely mischaracterized the businesses and groups that depend on an airplane, the majority of which are small- to mid-sized businesses, farms, flight schools, medical care providers and emergency responders that use the aircraft to connect communities and grow their businesses."