

Aviation Human Factors Industry News

Volume VIII. Issue 43, November 23, 2012



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

Hello all,

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Safety czar drops fatigue from Most Wanted list

The National Transportation Safety Board has dropped fatigue and pilot-and-air-traffic-controller professionalism from its “most wanted” list of US transportation safety issues for the next year.

US controllers union, the National Air Traffic Controllers Association (NATCA) said it was pleased with the decision. NATCA President Paul Rinaldi said NTSB’s decision validates the progress that NATCA and the Federal Aviation Administration are making on both issues. Rinaldi added that the news strengthens NATCA’s resolve to continue addressing both important topics with the FAA in a collaborative manner and keeping the U.S. National Airspace System the safest in the world.

“Our sole focus is the safety of the system. Air traffic controllers and other safety professionals that we represent are fully committed to continuing to meet the highest professional standards,” Rinaldi said. “I want to thank Chairman Deborah Hersman and the NTSB staff for their commitment to aviation safety and putting a spotlight on two critically important safety issues. We have listened closely and we have worked collaboratively with the FAA to make improvements. But our work is never done. These are career-long commitments.”

NATCA and the FAA have mitigated issues related to fatigue by:

- Agreeing to schedule changes, including the addition of a key extra hour of nighttime rest to provide for a minimum of nine total hours – between an evening shift and a daytime shift the next day.
- Raising each safety employee’s awareness of fatigue. Each employee also is now required to complete a three and a half hour training programme, which addresses fatigue, its effects and how to manage personal fatigue risks in a 24/7 operation.
- Signing an agreement this year to implement a scientifically-based and data-driven Fatigue Risk Management System, which was recommended by a NATCA-FAA working group. It will analyze, identify and recommend additional mitigation strategies.

On the issue of professional standards, NATCA and the FAA, for the first time, are collaborating to institute a National Professional Standards Programme for air traffic controllers and other safety-related positions.



The programme's development began in 2010 to complement and support the Air Traffic Safety Action Programme. The goal of the programme is to promote and maintain the highest degree of professional conduct among employees while also monitoring performance, maintaining accountability and recognizing examples of exceptional professionalism.

This peer-to-peer solutions programme is the first of its kind in the U.S. air traffic controller profession and is just a few months away from a complete rollout across the National Airspace System, with over 318 Professional Standards Committee members from 202 facilities trained and working on issues.

Here, with links to each issue item, is NTSB's full list of most wanted improvements for 2013:

- [Improve Safety of Airport Surface Operations](#)
- [Preserve the Integrity of Transportation Infrastructure](#)
- [Enhance Pipeline Safety](#)
- [Implement Positive Train Control Systems](#)
- [Eliminate Substance-Impaired Driving](#)
- [Improve the Safety of Bus Operations](#)
- [Eliminate Distraction in Transportation](#)

http://www.google.com/url?sa=X&q=http://www.truckinginfo.com/news/news-detail.asp%3Fnews_id%3D78576%26news_category_id%3D12&ct=ga&cad=CAEQAhgAIAAoATAAOABAlSRhQVIAVgBYgVlbi1VUw&cd=YR4zZSCpyYE&usg=AFQjCNHb_dHe7_0oajQxbj-FJfuN9q_w2g

- [Improve Fire Safety in Transportation](#)

Three cargo fire accidents in the past 6 years have resulted in the deaths of two flight crews and the total loss of three aircraft. Two of those accidents involved Boeing 747-400 freighters. The NTSB involvement in these accident investigations revealed deficiencies in the fire safety strategy employed both for fire detection and fire suppression. The construction material for cargo containers was also identified as being directly related to the fire protection of cargo compartments.

The cargo fire accidents NTSB cited are [UPS Flight 1307](#), [ABX Air Flight 1611](#), and [UPS Flight 6](#).

- [Improve General Aviation Safety](#)
- [Mandate Motor Vehicle Collision Avoidance Technologies](#)

Five-Year-Old Implicated In Fatal Crash

Official report: A federal probe concluded that Sydney Stewart, aged five, caused the 2010 helicopter crash that killed her, her parents and the pilot by pushing on the flight controls with her feet.

The NTSB says (PDF) it's likely a five-year-old girl's [restlessness started the chain of events](#) that led to the crash of a helicopter that killed her and four others on Valentine's Day in 2010. Although there is no direct evidence to support the hypothesis, the board says simulator scenarios and a biomechanical study point to the girl, who was [sitting on her father's lap](#) in the left pilot seat of the Eurocopter EC135, inadvertently stepping on the collective control and pushing it suddenly to its bottom stop. Then, the board postulates, either the pilot in command in the right seat or the left-seat passenger (and aircraft owner) yanked up on the collective and back on the cyclic. The violent control movements then caused the main rotor to hit the tail boom, causing the aircraft to go out of control about 2,000 feet above the Arizona desert near Cave Creek. The board cited the pilot's [failure to enforce "proper cockpit discipline"](#) as a contributing factor in the crash.



The NTSB said aircraft owner Thomas J. Stewart, the owner of Services Group America, had previously allowed his daughter Sydney to travel on his lap in the left pilot seat. Father and daughter, along with Stewart's wife Madena and her brother Malang Abudula, were traveling from their northern Arizona ranch to Scottsdale. The pilot was Rick Morton. The pilot's family is suing Eurocopter, claiming a faulty repair to a rotor blade caused the accident, their lawyer told The Associated Press. The NTSB said in the report that its investigation showed a rotor blade hit the tailrotor drive shaft and broke. "That's their interpretation, and it does not comport with what our experienced investigators believe happened," said Gary C. Robb, a Kansas City attorney.

<http://dms.nts.gov/aviation/AccidentReports/cggqckmwah0gxi55gusbma451/V11112012120000.pdf>

B-52 Sheds Flaps On Takeoff

Aircraft Had Recently Come Out Of Maintenance

A B-52 bomber being test-flown on Thursday [after undergoing maintenance](#) shed flaps from both of its wings on takeoff, according to officials at Tinker Air Force Base in OK. It was not specified if it was the inboard, outboard, or all of the flaps that separated from the airplane. The Logistics Center at the base overhauls about a dozen of the long-serving bombers each year. They are stationed at Barksdale AFB in Louisiana and Minot AFB in North Dakota.



According to a report appearing in The Oklahoman, the flaps on both the port and starboard wings came off the airplane during takeoff on the [test flight](#). The engineer who reported the incident to the paper did not wish to be named. Base spokesman Ron Mullan confirmed the incident, adding that "the pilot landed the aircraft safely." No one was injured, and base officials are reportedly "looking into" the incident.

According to the Air Force, the B-52A first flew in 1954, and the B model entered service in 1955. A total of 744 B-52s were built with the last, a B-52H, delivered in October 1962. The first of 102 B-52H's was delivered to Strategic Air Command in May 1961. The H model can carry up to 20 air launched cruise missiles. In addition, it can carry the conventional cruise missile that was launched in several contingencies during the 1990s, starting with Operation Desert Storm and culminating with Operation Iraqi Freedom.

Maintenance flaw led to Air Tahiti ATR engine fire

[Inadequate maintenance procedures](#) leading to a fuel leak from an injector were behind an 18 November 2011 engine fire on an ATR 72-200 (F-OIQO) in Moorea, French Polynesia.

A report into the incident by France's BEA accident investigation agency concludes that the operator, [Air Tahiti](#), [had not correctly checked the tightness](#) of a metal-to-metal coupling at the primary connection of the number 14 injector on the ATR's port [Pratt & Whitney](#) Canada PW120 engine. The coupling is designed to add an additional level of protection in the event of deterioration of either of the connector's two rubber O-ring seals. The BEA report notes that one of [these O-rings was cut](#), allowing fuel to escape and ignite.



No-one was injured during the incident, which took place on the ground shortly after the powerplant was started. No damage to the airframe occurred and it was returned to service the following day.

Pratt & Whitney Canada has recorded 25 incidents of fuel leaks on PW120 engines between January 2003 and August 2010, 10 of which resulted in fires, says the BEA.

Fuel leaks have usually occurred on the number 7 and 14 injectors due to their relative inaccessibility while the nacelle is fitted to the engine, [leading to a revision in inspection guidelines](#) by the manufacturer. Air Tahiti was aware of this update, says the BEA.

However, P&WC in February 2012 issued a further service bulletin to prevent this type of incident, which recommends undertaking a number of procedures when the engine is disassembled.

CAAP inspector suspended for certifying safety of plane in Robredo crash

The Civil Aviation Authority of the Philippines has suspended the airworthiness inspector [who cleared the plane](#) that flew Interior Secretary Jesse Robredo to his death last August.

CAAP director general William Hotchkiss III ordered a 90-day preventive suspension of Fernando Abalos while he and other CAAP personnel undergo an investigation, CAAP deputy director general John Andrews told reporters. In the suspension order, Andrews said Abalos' actions "[could constitute gross dishonesty and grave misconduct](#) that may warrant removal from government service." Andrews said the preventive suspension order was "not a penalty but is a cautionary measure so that the government official involved may not be able to influence witnesses or to tamper with the records."

The special committee that investigated the Robredo plane crash faulted Abalos for allegedly approving the test flight permit for the renewal of the airworthiness certificate for the plane on Jan. 2, 2012.

However, the committee found out that [there was no record in the aircraft logbook of the test flight](#). Moreover, the Mactan airport log also [did not show any flight plan](#) for the plane filed on that day.

The committee contented that the pilot, AviaTour Inc. owner Capt. Jesus Bahinting, "connived" with Abalos [to expedite the processing and approval of the certificate of airworthiness](#).

Abalos allegedly endorsed the application for airworthiness certificate renewal, and an entry in the CAAP database showed the documents for such a renewal had been reviewed by Abalos. The certificate was released to AviaTour on Feb. 7 but this was predated to Jan. 7, the committee said.

In a television interview, Andrews said the CAAP will be conducting its own investigation for the possible filing of administrative and criminal cases against those who may be answerable for the crash. The CAAP will be focusing on the airworthiness department, which is under the agency's flight standard and inspectorate service.



“During the investigation we are going to discover how far the graft and corruption in that department has reached and we will charge the people concerned. As far as we are concerned it is not only Abalos that would have been guilty of this because [there are several steps to be taken before](#) an aircraft is declared air-worthy,” Andrews said.

He added that Abalos and all those involved in the [alleged falsification of the certification](#) will be accorded due process by the CAAP investigation body, which would be led by assistant director general Abdiel Fajardo.

The body was given by Hotchkiss two weeks to submit its report.

The CAAP official lamented that the agency’s previous leaders had apparently “left aside” the strengthening of the regulation of air taxi operators and flying schools as the CAAP focused more time and effort on improving the country’s civil aviation status as rated by the US Federal Aviation Administration.

Andrews, who was appointed to the CAAP four months ago, said the “cleanup” at CAAP continues. He said unnecessary consultants and contractual have been weeded out and the departments that lacked personnel will be augmented.

He disclosed that the airworthiness department [had only two inspectors to oversee about 60 flying schools nationwide](#).

“That is why we are going to undertake a complete audit of all the flying schools, including air taxi operators and maintenance organizations,” Andrews said.

“A lot of things would not have happened if things were done properly. Unless we can stop the collusion between the regulatory body and the operators, [the same thing is going to happen again](#),” he added.

Astronaut Worries About Skills of Today's Pilots

Former astronaut Gene Cernan said Bombardier's Safety Standdown has made him more honest in confronting his own shortcomings as a pilot.

Apollo 17 commander Gene Cernan said he worries about the flying skills of pilots today. The type-rated Learjet 45 pilot, who was the last man to walk on the moon, commented to AIN at last month's Bombardier Safety Standdown in,



"I worry about the complacency that technology is imposing on pilots. Pilots tend to become overwhelmed with all the lights on these glass panels and forget they still have a responsibility to fly the airplane."

Cernan believes that part of the solution is pilots being honest about their flying skills and their shortcomings. Reflecting on his own skill level, he said, "Just because you've gone to the moon doesn't mean you're exempt from making stupid decisions. I've made a lot of them in my life." Cernan, who now flies a Cessna 421, hopes honesty about his own vulnerabilities will allow other pilots to see their own a little more clearly. He said his 421 has a glass PFD and MFD and terrain avoidance technology that's "supposed to keep me from killing myself; but if that technology fails, I still need to fly the airplane and miss that mountaintop."

He added that attending the Safety Standdown has forced him to be more introspective when he flies. "It's easy to preach and a little more difficult to do," he said. "I always feel a little guilty now when I'm flying if I take a shortcut that I told someone else not to try. I call it the standdown effect."

Major airlines incorporate latest science in proposed changes to Transport Canada regulations governing pilot work hours

Canada's largest airlines have submitted recommendations to Transport Canada for revising the rules governing hours of work for pilots. The proposals from the National Airlines Council of Canada (NACC), validated by independent, third-party scientific researchers, imply better management of pilot fatigue and enhanced aviation safety while also allowing efficient operations. "Safety is the number one priority for our members," said George Petsikas, president of the NACC. "We have studied the issue of flight crew fatigue thoroughly and consulted with experts in the field over the past few years. The science of sleep and fatigue management has evolved significantly and we have a much better understanding of factors that influence fatigue, its effects on pilot performance and the necessary mitigating systems and practices. We will continue to work with Transport Canada and industry stakeholders to ensure the latest science is incorporated into any new regulations."



The NACC's submissions are a response to Transport Canada's request for comments on its proposed regulations. An underlying principle of Transport Canada's flight crew fatigue management working group was that the recommendations were to be based on science. As such, the NACC retained two internationally-respected scientists to assess the effect of its recommendations on pilot fatigue.

"We commend Transport Canada for this safety initiative," said Mr. Petsikas. "The changes that the NACC is proposing are based on sound science, operational experience and have regard to developments in other jurisdictions. Our recommendations introduce new safeguards to ensure safety while maintaining operational flexibility."

Texting in the Tower - From NASA's Aviation Safety Reporting System

Texting While Taxiing



Distraction due to “texting” is not a problem that only affects pilots. This Tower Controller reported that the requirement to be “heads-down” entering flight plan and route information into a Flight Data system can detract from the job of keeping an eye on aircraft and [other factors](#) affecting air traffic.

- I instructed Air Carrier X to taxi from the terminal ramp to Runway 08 via Taxiways Foxtrot and Mike, and to hold short of Taxiway Juliet (for an aircraft that I knew would be exiting the runway). The pilot of Air Carrier X read back the instructions at the same time that Air Carrier Y was on final reporting birds. While I was typing in the Flight Data Input/Output (FDIO) system, attempting to amend a flight plan, I looked up and observed Aircraft X on Taxiway Foxtrot, on the West side of Runway 17R, facing West.

The aircraft had obviously just crossed Runway 17R at Taxiway Foxtrot. I advised the aircraft that he had gone the wrong way; instructed the aircraft to turn around (holding short of the runway), then proceeded with traffic as normal. The pilot made no indication that he knew he had even made a mistake. There was another landing aircraft on about a six mile final.

[Maybe there should be more awareness and less complacency on the part of pilots.](#) Just because it's a low activity time doesn't mean that the same hazards of collision do not exist.... The same goes for Controllers. Also, amending just one flight plan requires "heads-down" time as does amending routes. This takes away (since we work Local/Ground/Flight Data combined a majority of the time, no matter what the traffic situation is) from the Controller's ability to spot those pesky "little things" like flocks of geese on final, jets crossing the runway, etc.... Combined positions are a very poor practice, requiring the Local Controller to take his eyes out of the air and away from the runways and aircraft, to perform required duties of two other positions at the same time.

[New USAF website for proactive safety](#)

Greetings from the USAF Safety Center. We have just launched a new website dedicated to proactive aviation safety that may interest you. Here's the news release: <http://www.afsec.af.mil/news/story.asp?id=123323288>

The pages contain a philosophical overview and descriptions of our three leading proactive programs (FOQA/ASAP/LOSA), plus an explanation of [how they fit into human factors](#).

Please take a minute to visit our pages. Click on the "Proactive Aviation Safety" icon on the right-side of the AFSEC website under Safety Center Links: <http://www.afsec.af.mil/>

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