Tired pilot caused Air Canada mid-flight dive

Passengers thrown from seats as Toronto-to-Zurich flight bucked wildly in January 2011

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A terrifying incident on an Air Canada flight from Toronto to Zurich last year took place because a pilot abruptly pushed the Boeing 767 into a dive shortly after waking up from an approved nap, says a report released today by Canada's Transportation Safety Board.

The report details what happened on Air Canada Flight 878 several hours after it left Toronto for Zurich on Jan 13, 2011. The report also finds several factors, including pilot fatigue, contributed to the incident that sent seven passengers to hospital in Switzerland.

The disruption in the middle of the flight, at night over the Atlantic Ocean, was described by Air Canada at the time as severe turbulence.

Instead, the TSB report says the first officer, who had just woken up from a nap in the cockpit, initially mistook the planet Venus for a U.S. air force C-17 military plane in the vicinity, and later decreased altitude abruptly after being "confused" and believing they were on an "imminent collision course" with another aircraft.

The captain counter-reacted by pulling the plane up. The moves shook the aircraft violently and caused several passengers not wearing their seatbelts in economy class to be thrown up in the air and then slammed into their seats and the aisles of the cabin.

Fourteen passengers and two crew members on board the flight suffered various injuries, and seven were sent to hospital after the plane touched down in Zurich.

Pilots are allowed to take "controlled rests" of up to 40 minutes in the cockpit to improve alertness during critical phases of flight, the TSB says. However, the flight attendant in charge must be alerted and instructed to call the flight deck at a specific time.

The TSB report into Flight 878 said the pilots did not inform the assigned flight attendant that the first officer was going to take a rest.

Flight quickly went from 'mellow' to chaotic'

The pilots had turned on the warning lights instructing passengers to fasten their seatbelts before the incident because of reports of turbulence in the area, the report said.

Louisa Pickering, a passenger on the flight, said the experience went from a "mellow, normal flight" to "chaotic" in an instant, as passengers, laptop computers and glasses were thrown into the air.

"I was sleeping and I was literally violently thrown out of my seat and slammed into the ceiling - I was in a window seat - so I hit the top of the ceiling and fell back to the ground," Pickering told CBC News in an interview from San Francisco.

"After that, it was just kind of chaotic."

As passengers around her screamed, Pickering said her initial thought was that the plane had hit a mountain or another aircraft.

"I thought we were going to crash, and I [felt]

hopelessness because there's no way to contact people outside the flight to let them know what's happening," she said.

When the airplane stabilized, she said many passengers were either crying or appeared in shock as the cabin crew began assessing injuries.

"The woman behind me reached her hand through the seats and asked if I would hold her hand, and all I remember is everyone repeating the same questions: 'Are you OK? Are you OK? Are you OK?'"

'The plane just dropped'

Ashlyn O'Mara, who was also on the flight, was returning to her exchange program at the University of Geneva after spending the Christmas holiday at home in Toronto. She told CBC News she had settled in to watch a movie when "all of a sudden out of nowhere the plane just dropped, like free-fell, nose-dived."

"I've experienced strong turbulence, big time," she said. "This was out of nowhere, it was free-falling, like you are free-falling at Drop Zone at Canada's Wonderland. Nose-dive, very strong force."

As soon as the plane levelled, O'Mara said one of the flight attendants shouted, "Seatbelts now! Seatbelts now!" over the aircraft's public address system.

"No one came on for an announcement and said, 'This is what happened, but everything's OK, or there might be some more turbulence up ahead,'" she said. "We didn't know if it was going to happen again, and we thought, 'Is this drop going to happen at any minute? Maybe in another hour?'"

Pickering said she remembers the flight attendants asking whether there were any doctors on board, but doesn't recall any of the crew mentioning what caused the disturbance.

If you have information on this incident or others like it please email <u>investigations@cbc.ca</u>.

"I don't remember any explanation," she said. "Basically, 'Put your seatbelts on,' and the lights went into an emergency sort of pattern where they were changing colour inside the cabin."

But Pickering also praised the flight attendants for their composure in the aftermath of the incident.

"There were two women on the flight that had sustained injuries as well, and they went above and beyond to

help the passengers," she said.

Canada's pilot fatigue measures questioned

The report is expected to renew the debate over whether Canada's regulations governing pilot schedules do enough to prevent pilot fatigue.

Controlled rests

A "controlled rest" is a recommended "operational fatigue countermeasure" for pilots that improves on-thejob performance and alertness through "strategic napping" on the flight deck "to improve crew alertness during critical phases of flight," according to the Air Canada flight operations manual.

"The rest periods are a maximum of 40 minutes in length (periods to be reviewed prior to resting) and must be completed 30 minutes prior to the top of descent. The in-charge flight attendant must be advised that controlled rest will be taking place and instructed to call the flight deck at a specific time. Upon conclusion of the rest period, unless required due to an abnormal or emergency situation, the awakened pilot should be provided at least 15 minutes without any flight duties to become fully awake before resuming normal duties. An operational briefing shall follow." *Source: <u>Transportation Safety Board</u>*

Air Canada spokesman Peter Fitzpatrick told CBC News that the airline has already taken action to enhance safety in the wake of its preliminary findings, and would study the final report to determine whether additional measures can be brought in.

"We sincerely regret that some of our customers were injured and we have taken measures to prevent a reoccurrence of this type of event and improve safety overall," Fitzpatrick wrote in an email.

The Air Canada Pilots Association and other unions, representing almost 7,000 pilots, have been calling for Transport Canada to change flight and pilot scheduling regulations.

Under Canadian regulations, pilots can be on duty for 14 hours, or up to 17 hours if there are unforeseen circumstances.

Capt. Barry Wiszniowski, safety chairman of the Air Canada Pilots Association, told CBC News Network that his organization began collecting its own data on pilot fatigue several years ago as part of a public push to get the regulations changed to recognize scientific findings on fatigue.

"I think the problem is that he's sleeping in the cockpit in the first place," Wiszniowski said.

"In Canada, we have the worst rules in the planet. We are working with the regulator trying to move forward and bringing our regulations in line so they are based on the science of fatigue."

3rd pilot in cabin

The TSB report also revealed that a third Air Canada pilot was on board "dead-heading" to Zurich to serve as a relief pilot for the return flight, but was seated in a regular seat so he wouldn't be paid.

After the captain was informed of the injuries in the cabin, the third pilot was called in to sit on the flight deck to monitor the flight and assist as needed, the report said. The remainder of the flight was described as "uneventful."

In December, the U.S. Federal Aviation Administration issued new rules aimed at preventing airline pilots from flying while dangerously fatigued.

U.S. airlines flying routes of similar duration to the Toronto-Zurich flight require three pilots on duty, Wiszniowski noted.

"I believe personally that safety trumps politics, commerce and competition, so if you're doing it on a costdollar value, that's one thing," he said. "But what more proof do we need that when a pilot operates in a fatigued state there's risk of an accident? And that's what we have in this case."

Air Canada's Fitzpatrick said the airline has rules for duty days and rest periods that are "more conservative than what Transport Canada requires," and also requires pilots who feel they are too tired to fly or otherwise not capable of flying safely to report this as part of a "non-punitive system."