

Airline safety among best in world: study

Nav Canada brings critical factor in near-misses, collisions to crucial low

By Ian MacLeod

Canada's airspace is one of the safest in the world based on the global benchmark for measuring air-traffic-control safety.

Nav Canada, the private corporation that manages the country's airspace, reports "loss of separation" incidents, in which specified separation distances between aircraft are breached, at a near-record low.

There were 86 such incidents in 2008, none in which pilots had to take evasive actions. That translates to a rate of 0.74 incidents per 100,000 "aircraft movements," compared with about one per 100,000 movements in fiscal 2001.

The decline may appear to be minor, until one considers that it represents the elimination of potential mid-air near-misses or collisions between radar-guided aircraft criss-crossing the country, including huge commercial passenger jets.

In 1997, a year after Nav Canada assumed air-traffic control from Transport Canada, the rate was 1.36 per 100,000 movements, believed to be the highest ever. Nav Canada says its rate is now one of the lowest in the aviation world.

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-Ron Singer, Nav Canada spokesman

Transport Canada has many separation standards for aircraft, depending, for example, on whether they're landing, taking off, or low-level or high-level flights. Generally, high-level separation for radar-controlled flights is 1,000 feet vertically and five nautical miles laterally.

The vast majority of incidents in recent years have been classified as low risk, where aircraft passed with 50 per cent or greater of the separation standard, or moderate risk.

"If you breach it to 4.3 (nautical miles laterally), it's far from a near-collision or where a pilot has to take evasive action; but we report everything, even minor breaches, because we want to see any kind of a trend, or anything that could indicate that there's something that we could do better rather than wait for a near-miss or a near-hit or, God forbid, an accident," said Ron Singer, a Nav Canada spokesman.

The last time a loss-of-separation incident in Canada was classified as "critical" (250 feet or less vertically and 500 or less feet laterally) or "serious" was in 2005.

That July, two airliners passed within 0.7 nautical miles in airspace near The Pas, Manitoba, until warnings told pilots to adjust their paths. The separation standard was five nautical miles, but an air controller at Nav Canada's Edmonton Area Control Centre gave permission to an Air Canada Airbus A319 carrying about 120 people from Halifax to Calgary to climb to 38,000 feet, near where a Northwest Airlines 747 was en-route from Tokyo to Detroit.

The worst international incident in recent years was the September 2006 collision between a small private jet and a Brazilian 737 over the Amazon that killed 154 people. Investigators blamed the pilots of the small plane and air-traffic controllers.

There were 11.63 million aircraft movements in Canada last year, including take-offs, landing and en route movement. An Ottawa-Toronto flight, for example, would involve two movements, while a London-Chicago flight might only involve a single movement transiting some Canadian territory.

Singer said Nav Canada corporate culture encourages employees to report potential safety infractions without fear of punishment under an initiative called "Just Culture."

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Last year, the U.S. Federal Aviation Administration came under fire after disclosures that agency officials in Texas covered up errors, including separation violations, by flight controllers at Dallas-Fort Worth Airport.