

Stories

## Every A220 pilot undergoes months of training on sophisticated simulator



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Months before our new, modern Airbus A220-300 aircraft takes to the skies, dozens of pilots are immersed in training to prepare them to take the controls when we welcome our first A220-300 to the Air Canada fleet later this year.

Each pilot undergoes hours of training in classrooms and simulators, recreating a variety of situations so that when the time comes to accelerate down the runway toward V1, they are well versed in everything the A220-300 is capable of.

Simulator training is nothing new for pilots, who must continuously spend hours in these sophisticated training tools every six months to maintain their license to operate a particular aircraft.

And introducing an entire new aircraft to Air Canada's fleet also represents a major undertaking that requires teamwork and input from every department within the company.

"Within flight operations, we've got multiple groups from training within the fleet itself dealing with the change, the rapid changing of the documentation from the manufacturer. We also are in communication with other departments within Air Canada such as maintenance, in-flight, cargo, ground operations, ensuring that everybody is on the same page throughout the introduction so that at entry into service goes smoothly," said Rob Latter, Chief Pilot for the A220 at Air Canada.

Working out of our simulator facility near Toronto's Pearson Airport, each pilot undergoes weeks of training that begins with four days of classroom sessions, where pilots have a desktop simulator on a computer to allow them to familiarize themselves with the flight deck.

After that, there are nine sessions of four hours each on what is known as an Integrated Procedures Trainer (IPT), which is a scaled down model of the full simulator. And for the A220, Air Canada is one of the only airlines to have opted to equip its IPT with a fully functional console between the Captain's and First Officer's seats, allowing for the pilots to train on the actual equipment and build up muscle memory. Training options that replace the fully functional piece with touchscreens don't produce the same results.

Once they have completed this phase, pilots then undergo 11 sessions of four hours in the sophisticated A220-300 simulator, which replicates with stunning reality the flying capabilities of the aircraft.

Simulator sessions include taking off and landing at different airports, enabling pilots to manage the aircraft while encountering a multitude of weather conditions as well as a range of situations that can arise while operating a flight. Months before our new, modern Airbus A220-300 aircraft takes to the skies, dozens of pilots are immersed in training to prepare them to take the controls when we welcome our first A220-300 to the Air Canada fleet later this year.

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Robert Birch was one of the first pilots at Air Canada to go through A220 training and as a check pilot he helps certify the next group of pilots to be qualified on this aircraft.

"My initial impression of the flight deck is how spacious and roomy it is. How cleanly designed it is. It was obviously designed with the pilot in mind. I think it is going to be a really comfortable work space," Birch said. "The best part of flying the A220 in the simulator so far is that the level of automation is very high. It's got a great system of displays where you can customize them to your use and what your preferences are."

Before the A220, Birch was a captain on the Airbus A320.

"The biggest difference for me on this is that this has a geared engine. That has made it much more fuel efficient," Birch said.

Asif Khattak is also a check pilot for the A220 program and he too was impressed by the flight deck's spaciousness.

"For a narrow body, it's got a lot of room. It's really nicely laid out. The overhead panel is very clean and the display units offer a great amount of visibility. The side windows on the aircraft are huge, as well as the front looking out. So, the visibility in the aircraft is fantastic."

The automation and display screens on the aircraft make a pilot's job much easier.

"It allows you to customize it from your own perspective of how you want to manage the flight deck. It's also got a heads-up display unit which offers you a lot of situational awareness as well. From that perspective, I really enjoy the airplane," Khattak said.

He also believes passengers will really love the A220-300.

"I think they will be pleasantly surprised when they come on board this aircraft. It's got a feel of a widebody aircraft when you walk through the cabin. The windows are quite big, they can adjust the lighting as well, the overhead bins offer a lot of space. And I think the 3-2 layout that we are going to have in this cabin is a little different than perhaps they are used to on other narrow body aircraft. So it gives you the feeling that you are in a very big aircraft, or a widebody aircraft, but you are still in a narrow body plane," Khattak said.

"One of the unique features of this aircraft is the economy cabin. It's got a 3-2 configuration, so very few middle seats. And fewer middle seats makes for great comfort for passengers," Birch said.

The fact the Airbus A220-300 was conceived and designed by a Canadian company and is built in Canada is a source of pride for all three pilots.

"The fact that it is a Canadian aircraft means a lot to anyone working at Air Canada," Latter said.

"The most exciting thing about the A220 for me is that it's a Canadian built and designed aircraft, built from scratch as a new airplane. I think it's going to be great once we get it in the air," Birch said.

"I am excited to get into an aircraft that is built by a Canadian company. Bombardier built this aircraft, they did a lot of research and design into this aircraft. They have a lot of experience building this airplane. So just excited to get into the airplane and get a feel for it in the air and how it handles," Khattak said.

And the feedback from Birch, Khattak and other pilots who will go through the first rounds of training will help ensure a smooth transition for all of them.

"The feedback from our initial pilot group that started their training - the ones that have completed it and still in training - are very positive," Latter said. "With the aircraft itself, I've heard that the pilots love the technology level, the spaciousness of the cabin, the cleanness of the panels. It allows us to make the SOPs (standard operation procedures) flow very nicely from their perspective."

## **Fast Facts**

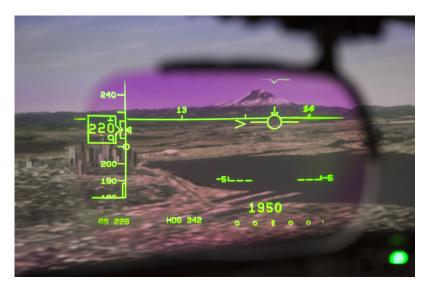
• Number of aircraft ordered: 45

Seating: 12 business class, 125 economy class

• Range: 3,200 nautical miles

- Average of 20 per cent less fuel consumption per seat compared to similar aircraft
- Noise footprint area up to 50% smaller than previous generation aircraft
- First new routes announced: Montreal-Seattle, Toronto-San Jose, California





Jan 12, 2022

