

Stories

Air Canada Maintenance: There's an app for that



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When the check engine light goes off on your car, you can easily call the garage and schedule a maintenance appointment. When you are flying at 38,000 feet in one of Air Canada's aircraft things are not so simple.

But imagine a day when, thanks to advancements in science and technology, Air Canada Maintenance will be able to receive these notifications at ease, from the pilot and aircraft directly, while still in flight. No, we're not talking analog here, we're talking about converging state of the art technologies, on board our world class fleet of aircraft, and on the ground to our world class family of Aircraft Maintenance Engineers.

These notifications, which we call defects and fault message, will be received on a tablet by the Aircraft Maintenance Engineer. At that point, he or she will be able to ensure all the necessary parts are on hand, then proceed to meet the aircraft at the gate and make the repairs quickly so the aircraft is back flying customers to their next destination without delay or cause for concern.

Sound far-fetched? In 2017, Aircraft Maintenance Engineers at Air Canada began doing just that with a suite of apps customized to helping them uphold the highest standard in aircraft maintenance.

"The apps save time for the mechanics, who are better prepared when an aircraft lands so that work is done quickly rather than having to spend time identifying an issue manually and then sourcing the parts, which can lead to delays," said Brad Warren, Managing Director, Line Maintenance at Air Canada. "The end goal of integrating mobile technology is ultimately to improve the customer experience by avoiding delays and maintaining a world class cabin, but also by making sure that everything in the aircraft is in safe working order for the upcoming flight."

There's an added environmental impact of the change to a digital reality as we cut down drastically on the amount of paper used on a daily basis by our maintenance crews. "Air Canada is one of the leading airlines in the world to undertake such a vast digitization process when it comes to how we maintain aircraft. We're doing this by leveraging consumer technologies that we've already seen take over the market place and connecting them throughout our entire operation. A byproduct of going digital is a reduction in the amount of paper Air Canada technicians & engineers use. Consider this: Each month, on average, 35 gigabytes of data are updated on each of our hundreds of tablets, mostly aircraft maintenance manuals. These are lengthy documents that in the past, portions of them would be printed out numerous times a day as maintenance is performed," said Keith Dugas, Manager of Connected Operations at Air Canada.

And as Air Canada moves to digitize its paper maintenance processes, many of which date from the airline's early days, paper log books used in the aircraft will also be phased out. That's a saving of more than 30 tons of paper per year!

Removing those log books from aircraft will also reduce up to 3 kilograms of weight, which may seem trivial, but any little bit helps when it comes to reducing the amount of fuel burned during flight as we seek to reduce our carbon footprint.





