Veliz, Kim

From: Christopher Eriksson <christopher.c.eriksson@gmail.com>
Sent: Sunday, December 2, 2018 1:37 PM
To: City Recorder
Subject: Aurora Airport Runway Extension

Dear City of Wilsonville,

I fully support the expansion of the Aurora airport runway to increase safety at the airport. I am employed as a flight test pilot in Salem, a flight instructor in Aurora, and a first officer for a charter operation in Aurora. Lengthening the runway will without a doubt improve the safety margins at the Aurora airport for all aircraft ranging from the smallest single engine aircraft to the corporate aircraft that land there.

Every time an aircraft takes off, the pilot considers what they will do if something goes wrong. For most small aircraft below 800 feet above ground level, the best choice option is to re-land on any remaining runway or, if no runway is available, land straight ahead off the airport. Turning back to the runway below 800 ft has been aptly named "The Impossible Turn" due to the number of aircraft that have crashed and killed its occupants while trying it. With Aurora airport's current runway length and the climb performance of most small aircraft, there is a significant amount of time where the plan must be landing off field. Not only is this more dangerous to the pilot and passengers, but to bystanders on the ground as well. If the runway is longer, it provides more time that the pilot can either re-land on the runway, or climb sufficiently, where a turn back to the runway is more likely to succeed.

For larger aircraft, they must calculate takeoff distance required by finding a distance called the "Accelerate-stop distance". This requires the distance required to accelerate, and brake to a stop on the same runway. So, this ends up being at least the distance to takeoff, and to land essentially. A shorter runway provides less opportunities to successfully abort a takeoff in the case of an emergency.

Runway length also affects aircraft substantially during low weather operations. Pilots use avionics instrumentation to guide them safely to the runway in low visibility and low cloud ceilings. In the case of Aurora, this guidance can take the pilot down to 250 ft above ground level. This guidance to the runway leads the aircraft to a point 1000 ft down the runway, leaving Aurora currently at only 4,000 ft of runway remaining. Because of the very real possibility of having to immediately climb away from the ground if the runway cannot be seen, most small aircraft fly these approaches at speeds higher than their normal landing speed and must slow to landing speed in the final 250 ft to the runway. This extends the landing distances significantly. By adding another 1000 ft of runway to Aurora airport, it greatly improve the safety margins during weather such as what we experience here in Oregon for most of the winter.

General aviation supports everything from personal and business transport, to firefighting, and emergency medical transport. Aurora airport supports every one of these operations and more. At Aurora, we have flown human hearts for transplants, we have flown personnel and equipment to keep firefighters fighting wildfires, we have companies flying around the globe conducting business, and we are training the next generation of pilots. With every operation, safety is key and cannot be undervalued.

Sincerely,

Christopher Eriksson