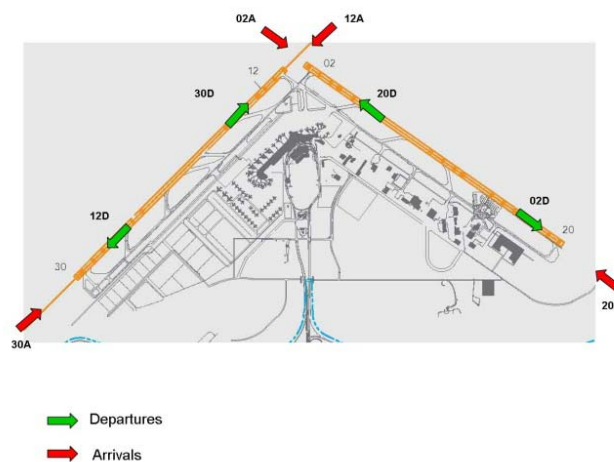


Top Five Noise Concern Questions (with Answers)

Question #1:

Why are aircraft flying over my community?

The Edmonton International Airport (EIA) operates two runways (Runways 02/20 and 12/30) in an open “V” configuration. The primary factor in determining which runway to use for arrivals and departures is the direction and strength of the prevailing wind. All aircraft need to depart and arrive into the prevailing wind, which is the safest way to operate an aircraft. Generally the prevailing winds for EIA are from the northwest, and so we tend to see a lot of activity on our main runway (12/30) and in the Runway 02 direction.



When looking at runway operational distribution for 2011, 39% of total departures were off Runway 02 (to the northeast), 29% were off Runway 12 (to the southeast), 20% were off runway 20 (to the southwest), and 12% were off Runway 30 (to the northwest). This distribution for departures is to be expected as the top two directions correspond to the shortest taxi times for departing aircraft.

The operational distribution for arrivals in 2011 was 31% on Runway 30, 24% on Runway 20, 23% on Runway 02, and 22% on Runway 12. This distribution is also to be expected, as those two directions correspond to the shortest taxi times to the main apron for arriving aircraft.

As the aircraft distribution around the airport varies considerably yet is not focused on any one runway or direction, the communities surrounding the airport experience different aircraft operations due to their locations. Some further details for the surrounding communities are as follows:

- City of Leduc
 - Most aircraft departing off Runway 12 or arriving on Runway 30 will fly a fairly narrow path over the northeastern part of the City of Leduc, with some

exceptions for small aircraft. Aircraft departing on Runway 20 may turn left and fly over the City if they are bound for destinations to the east.

- Town of Beaumont
 - Approximately 20% of Runway 02 departures that are bound for eastern destinations will fly over Beaumont at altitudes greater than 3000 feet above ground.

- City of Edmonton
 - EIA has air service to many Northern Alberta communities, so given the location of EIA in relation to the City of Edmonton, aircraft to and from these destinations will fly over the city. When aircraft are arriving at EIA, they fly over the City of Edmonton at altitudes of over 2000 feet above ground and arrive on Runways 02, 12, or 20. Aircraft departing to these communities usually use Runway 02 and fly over the City at altitudes greater than 4000 feet above ground.

- Town of Devon
 - While uncommon, some aircraft arriving on Runway 12 or 02 fly over Devon at altitudes greater than 1800 feet above ground. Aircraft departing off Runway 30 will occasionally fly over Devon at altitudes greater than 4100 feet above ground.

Question #2:

Why do aircraft fly over my community early in the morning or late at night?

EIA operates 24 hours per day, 365 days per year, and there are no restrictions preventing aircraft from arriving or departing, day or night. So depending on the type of activity (commercial passenger, cargo, charter or military), destination, and runway used, aircraft can be over area surrounding the airport at almost any time.

While aircraft operate continuously throughout any given day, there are peak times for regular commercial passenger traffic that occur between 6:00 AM to 8:30 AM, 11:00 AM to 1:00 PM, and 10:00 PM to 1:00 AM. Those peaks are entirely dependent on airline operating schedules and may change over time.

Cargo operations typically occur at night, between 9:00 PM to 7:30 AM. Charter operations, which are not tied into regular operating schedules like commercial passenger traffic arrive or depart virtually at any time, and change over the course of a year. Military activities can also occur at EIA at irregular times of day or night.

There are a number of factors that can influence airline schedules such as weather (at our airport and other airports), aircraft turnarounds and checks, and aircraft maintenance considerations which can take them off schedule.

Question #3:

Why has the number of aircraft flying over my community seemed to have increased?

From 2009 to 2011 aircraft movements at EIA increased by 9%, from 126,763 in 2009 to 138,562 in 2011. EIA's biggest air service growth has been in the general aviation sector related to serving the growing resource sectors in the north and an increase in transborder flights to the US. Because of community demand for more flights to more places, we expect continuous growth in aircraft movements in the future.

And aside from aircraft movements increasing over the last few years, we have also seen a change in historical runway distribution. A change in distribution means that aircraft are using different runways than previous, which will change what people experience on the ground and in their communities.

From 2009 to 2011 departures off Runway 20 and 12 have increased, Runway 02 departures have been stable and there has been a decrease in Runway 30 departures. This is to be expected for Runway 12, as it reflects our overall traffic increase. The increase in Runway 20 departures reflects the increase in northern charter aircraft operations which are focused on the northern part of the airfield, so that runway is closest from a taxiing perspective.

Arrivals on Runway 20 and 12 saw similar increases as for departures, with Runway 02 arrivals showing a slight increase and Runway 30 arrivals seeing a slight decrease. Those changes reflect a change in distribution of aircraft bases across the airfield at EIA, which are now not solely focused on the main apron at the Terminal Building.

Question #4:

Is there anything that prevents aircraft from flying over my community?

The flight patterns and distribution of aircraft using EIA are influenced by many factors including prevailing wind direction and speed, the origin/destination airport, aircraft performance characteristics, local weather, visual ground reference points, instructions provided by air traffic control to maintain safety in the airspace, and regulatory requirements under the Canadian Aviation Regulations.

Noise generated by aircraft is not a typical factor considered in aircraft operations, but can be in special cases where Noise Abatement Procedures (NAPs) are created to reduce the impact of aircraft noise on places around airports. NAPs are developed through a rigorous regulatory

development process overseen and scrutinized by Transport Canada, which can only be justified by significant validated community concerns about aircraft noise. NAPs are developed to reduce aircraft noise exposure to areas around an airport; however they can often cause significant impacts to airport and airline operational viability and efficiency. The development of NAPs for EIA falls under the purview of the EIA Noise Advisory Committee.

Currently there is only one NAP for EIA, which influences departures off of Runway 12, and applies only to turbo jet and turbo fan powered aircraft. The affected aircraft taking off to the southeast are not allowed to make a right turn until they have progressed past a ground-based navigational aid (the Leduc Beacon), taking the aircraft beyond the heavily populated areas of the City of Leduc. The diagram below depicts the procedure. As the NAP is a regulatory requirement, all pilots are required to follow the procedure unless there are overriding circumstances that would affect the safe operation of the aircraft (like wind and weather at that time).



There are no other NAPs for EIA and so aircraft are unconstrained when operating in the surrounding vicinity, with respect to the noise they create.

Question #5:

Why do aircraft fly at low levels over my community?

As per the Canadian Aviation Regulations, aircraft can over-fly built up areas at a minimum altitude of 1000 feet unless the aircraft is arriving at or departing an airport. Due to the orientation of the runways at EIA, arrivals and departures can occur over or adjacent to most of the communities around the airport. Arrivals are normally experienced at lower elevations than departures, as arriving aircraft tend to be slowly descending, while departing aircraft are quickly ascending.

Based on historical flight track data, commercial aircraft operating from EIA fly over the surrounding communities at different elevations. Arrivals and departures over Leduc are at the lowest levels experienced by any community, ranging from as low as 300 feet above ground for arrivals to altitudes greater than 1200 feet above ground for departures, due to the close

proximity of the airport to the community. Aircraft heading to and from EIA fly over the City of Edmonton at altitudes greater than 2000 feet above ground. Departures over Beaumont are at altitudes greater than 3000 feet above ground. And of course, residents of Leduc County can also experience arrivals and departures of aircraft from EIA over a wide range of elevations from 500 feet above ground for arrivals to 6000 feet above ground for departures.

A specific aircraft activity in the Edmonton region which causes residents concern are pipeline patrol aircraft operations. Pipeline patrol aircraft inspect pipeline right-of-ways looking for indications of leaks, construction near the pipeline, soil movement, and other factors that might affect public safety and pipeline operations. These small aircraft have received special operational exemptions from Transport Canada to operate at elevations of 500 feet or less, and are operated year round along the many pipeline right-of-ways in the Edmonton region.