

## NIGHT-TIME AIRCRAFT OPERATIONS

### 24-Hour Operations

Like many international airports, Vancouver International Airport (YVR) is open 24-hours. To minimize disturbance caused by operations at night, the published Noise Abatement Procedures (NAP) for YVR contains specific procedures, which include:

- A mid-night to 6:00 AM restriction on Chapter 2 (older generation) noise certified jet aircraft over 34,000kg;
- Approval requirement for jet operations (cargo, air carrier scheduled, and charter flights) between the hours of mid-night and 7:00 AM;
- Between 11:00 PM and 6:00 AM, the use of preferential runways in an attempt to place both arrival and departure operations over the Strait of Georgia rather than over residential areas, weather permitting;
- Use of minimal reverse thrust upon landing, consistent with safety; and
- Closing the north runway (08L/26R) between the hours of 10:00 PM to 7:00 AM\*.

\*Exemptions for emergencies or maintenance.

On average, there were approximately 25 aircraft movements at night between the hours of mid-night and 6:00AM in 2008.

While most of the night-time traffic is associated with cargo and courier operations, there are some late night passenger services. Cargo and courier operations must occur at night in order to deliver packages at their destinations for the next business day.

When receiving requests for jet aircraft operations at night, the Airport Authority will review the benefits of the operation to the broader community. In general, operations that carry passengers or cargo to and from YVR are approved, whereas ferry (repositioning) flights and technical stops (refueling) operations are denied.

There is a common misconception that YVR is the only airport in Canada that is open 24-hours. All international airports in Canada are open 24-hours a day, but each has access restrictions in place to manage traffic during the night-time hours.

### Direction of Landings/Departures and Night-time Preferential Runway Use

The weather has a fundamental effect on aircraft operations and the wind direction and speed determines which runway is active and the direction in which aircraft will depart and land.

For safety reasons, aircraft must land and depart into the wind. The active runway is determined by the wind conditions on the airfield. Based on historical observations, we typically see more departures and landings in an easterly direction – “Runway 08”- during the Fall and Winter, and departures and landings in a westerly direction - “Runway 26” - during the Spring and Summer.

At night, when traffic is light and the winds are calm, the preferred departure direction is to the west (Runway 26) and the preferred landing direction is to the east, as this places both departures and landings over the water. Figure 1 illustrate this preferential runway use. This method of operating the runways is not always possible, and landings and departures do occur over the City due to the prevailing winds.



Figure 1: Night-time Preferential Runway Use – landing and departures over the Georgia Strait

### Unique Operations at Night

#### *Air Ambulance*

While most of the night-time traffic is associated with passenger or cargo and courier operations, there are some operators at YVR that provide BC Air Ambulance Service using both helicopters and jet aircraft. These aircraft and their crews are on call 24-hours a day to transport patients to and from remote locations with BC to the Vancouver area for care at the local hospitals.

#### *Circling small aircraft*

There are many operations that occur over the Lower Mainland at night that may account for the sound of circling aircraft. Some of these operations are investigative - news reporting, traffic, or surveillance. For example, "Air 1" is a light helicopter operated by the RCMP for their community policing efforts and in support of other Lower Mainland police forces.

The following web link provides you with a unique first hand experience of the types of operations performed by "Air 1":

<http://bc.rcmp.ca/ViewPage.action?siteNodId=50&contentId=5645&rpp=5&languageId=1>

*If you need more information, please contact the YVR Noise Management office at [noise@yvr.ca](mailto:noise@yvr.ca)*