

# LOW FLYING AIRCRAFT

Canadian Aviation Regulations (CARs) 602.14-602.16, prescribes 1,000 feet as the minimum altitude that an aircraft may over-fly a built up area (500 feet for water), unless the aircraft is conducting a take-off, approach or landing (other exemptions may apply). This regulation is enforceable by Transport Canada Civil Aviation Enforcement. If you suspect an aircraft operating too low or in an unsafe manner, the details of the incident should be forwarded to Transport Canada by:

Email: <a href="mailto:services@tc.gc.ca">services@tc.gc.ca</a>
Telephone: 1-800-305-2059

Fax: 613-957-4208

In the vast majority of cases, aircraft operating over the Lower Mainland are flying at altitudes consistent with those prescribed by regulations and in published procedures. Nevertheless, there are a number of regular operations that normally raise questions from the community about low flying aircraft.

#### Instrument Landing System – Flight Check

The Instrument Landing System (ILS) provides critical information to aircraft on approach to assist with landings. There are five ILSs at YVR, and these are owned and maintained by NAV CANADA, the company responsible for providing air navigation services in Canada.

Routine checks of the ILS are required to ensure the system meets stringent certification standards prescribed by Transport Canada. These checks involve having a specially equipped CRJ jet aircraft fly simulated approaches to ensure the system is operating within tolerance.



NAV CANADA CRJ Flight Check Aircraft

The duration of a flight check depends on the type of maintenance done to the system, but normally last between 2-4 hours.

The simulated approaches flown during the flight checks are unique in that the aircraft typically breaks off the approach at a very low altitude once it is over the threshold of the runway turning and climbing away from the runway to initiate the next approach. When these

checks are being conducted, the majority of concerns raised by the community are related to safety as the aircraft will be at low altitudes.

The Airport Authority places community advisories on the airport website - <a href="www.yvr.ca">www.yvr.ca</a> - to inform the community of upcoming ILS checks. These advisories notify the community to anticipate unusual operations while the checks are being conducted.

Figure 1 depicts the flight paths of ILS flight checks on various runways. Each ILS flight check has a slightly different flight path and requires different numbers of circuits.

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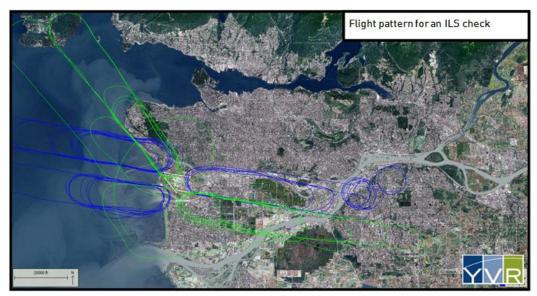


Figure 1: Sample Flight Tracks Associated with an ILS Flight Check

## Propeller Aircraft over the City of Richmond

Concerns related to propeller aircraft over the City of Richmond are often raised by residents when runway 08 is active – i.e. departures over the City and landings over the water.

While jet aircraft are normally required to climb along the runway heading until 3,000' before commencing their turns, propeller aircraft are normally assigned turns soon after they take-off for aircraft spacing and capacity reasons. Turning propeller aircraft in this manner is consistent with procedures at other busy international airports, and is a critical element in allowing the airport to manage the diverse aircraft fleet mix at YVR – an almost 50/50 split between jet and propeller aircraft. Figure 2 illustrates the flight paths of jet aircraft and propeller aircraft departing from runway 08.

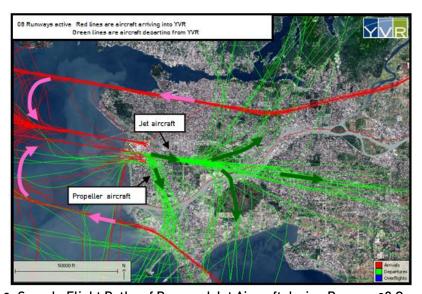


Figure 2: Sample Flight Paths of Prop and Jet Aircraft during Runway 08 Operations

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#### Air Ambulance

There are some operators at YVR that provide BC Air Ambulance Service using both helicopters and fixed wing aircraft. These aircraft and their crew are on call 24-hours a day to transport patients to and from remote locations in BC to the Vancouver area for care at local hospitals.

Due to the needs of the patient and time sensitivity, air ambulance aircraft are often expedited and given the shortest route, In addition, some injuries may also require flights at lower altitudes.

### Circling Aircraft/Helicopters

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 helicopter operated by the RCMP for their community policing efforts and in support of other Lower Mainland police forces.

The following web link provides further details on AIR 1 operations:

http://bc.cb.rcmp-grc.gc.ca/ViewPage.action?siteNodeId=23&languageId=1&contentId=10002

If you need more information, please contact the YVR Noise Management office at noise@yvr.ca

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