

LOUD AIRCRAFT TYPES

While aircraft engines are continuing to shift towards becoming quieter and more fuel efficient, some aircraft types are definitely louder than others.

Canada is a member state of the International Civil Aviation Organization (ICAO), and adopts aircraft noise and emission certification standards prescribed by ICAO. These standards require noise measurements to be taken at the time of aircraft certification. Depending on the measurement results, the aircraft is categorized as either Chapter 2, 3, or 4 (Chapter 2 being the noisiest and Chapter 4 being the quietest).

Figure 1 provides a comparison of the take-off noise footprint associated with a Chapter 2 (B727-200) versus a Chapter 3 aircraft (A320) of comparable size.

Chapter 2 Phase Out Legislation

Under federal legislation, all Chapter 2 jet aircraft over 34,000kg were phased out in Canada by April 2002. In order to operate in Canada today, jet aircraft over 34,000kg must meet at least Chapter 3 certification standards. There are a few exemptions to this, such as for aircraft flying in the Canadian North.

In order to meet the phase-out deadline, operators of Chapter 2 aircraft either replaced the aircraft with a newer more modern one, or performed modifications (installed hush-kits, replaced engines) to bring the aircraft into compliance with Chapter 3 standards. While these aircraft do meet Chapter 3 standards, they are not as quiet as an originally manufactured Chapter 3 aircraft.

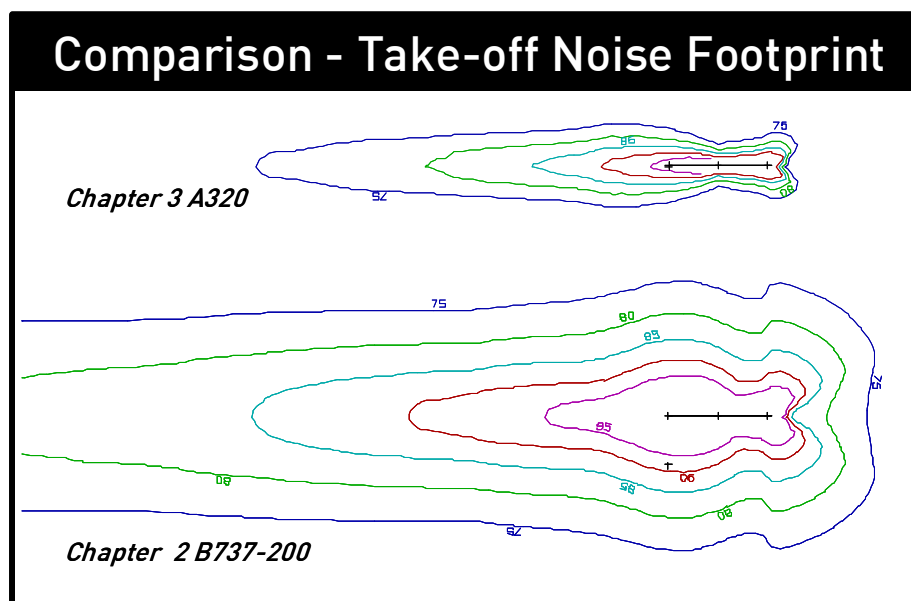


Figure 1

There are very few originally manufactured Chapter 2 aircraft still operating at YVR. Those that are have been modified to meet Chapter 3 standards and the most common one of these is the B727-100/200, which is operated by the various cargo companies.



B727

While such types of aircraft are normally noisier than their modern counterparts, they are legally compliant with Chapter 3 standards and are therefore permitted to operate in Canada.

Due to higher operating costs (fuel and maintenance) associated with these older aircraft, operators continue to look to either retire or replace these aircraft with newer models.