Vancouver FIR

Tower Standard Operating Procedures

Revision 2.2

Vancouver FIR

Table of Contents

Vancouver FIR

1. General

This order provides supplemental direction for the CZVR Tower positions.

2. Departures

2.1. Departures with SID without Next Controller to Contact

If the SID does not state an altitude to contact departure, for jets and turboprops (fast climbers) hand off to "Departure" with the take-off clearance.

Phraseology: *"Contact <departure/terminal/centre> on <frequency> airborne..."*

Example: *"WJA672, Contact Vancouver Centre on 133.70 airborne, wind..."*

If Clearance has informed you that they are handing out departure frequencies with the IFR clearance and the departure frequency has not changed between the time an aircraft has received their IFR clearance and takeoff clearance, the departure frequency may be omitted from the takeoff clearance.

2.2. Departures with SID with Next Controller to Contact

At airports in the FIR that state what altitude to contact Departure, Terminal, or Centre on the SID, simply include the departure frequency with departure.

Phraseology: *"Departure <frequency>..."*

Example: *"JZA272, Departure frequency 128.60, wind..."*

2.3. Piston Engine Aircraft/Slow Climbing Aircraft

At the tower controller's discretion, keep lower-performance aircraft such as piston props on your frequency to maintain positive control until clear of traffic in the control zone, then hand off to the terminal/centre. Assign restrictions to altitude,

position, and/or direction of travel as and when necessary. Do not assign restrictions when there is no other traffic.

2.4. Usage of the "Behind" with "Line-up and Wait"

The use of 'behind' with 'line up and wait' when clearing an aircraft into the runway should only be used for full-length departures. Do not use 'behind' for intersection departures or behind landing aircraft.

> Phraseology: *"Behind the departing <aircraft type>, line up and wait <runway>."*

3. IFR Arrivals

It is the responsibility of the TCU/ACC to provide the appropriate separation between successive arrivals on final approach. Responsibility for spacing between arriving aircraft is transferred to the Tower once the aircraft crosses the Final Approach Fix (FAF). If using Euroscope in conjunction with FSX/P3D/XP/MSFS to operate a visual tower viewpoint, you may decrease the 3 nm separation of aircraft on final provided both aircraft are in sight.

Traffic on visual approach will be handed off to Tower once established on any leg of the visual approach prior to entering the control zone. NOTAMs related to visual approaches should be complied with when possible.

4. VFR Traffic

4.1. Position Reports

At controlled aerodromes, generally aircraft should not be asked to report at a position, such as, report final, report base, or report downwind. Your scope should be used to track the status of the aircraft at all times. During times of heavy traffic, you may ask pilots to report at a position as a reminder for yourself.

4.2. VFR Circuits

At controlled aerodromes, pilots are expected to report to the controller on the downwind leg with their intentions. "Call me midfield downwind" is not required at any time. This phrase should only be used if a pilot repeatedly omits the report.

4.3. VFR Departures

Apply departure restrictions when required to maintain separation from IFR traffic.

For towers in the TCA, before a VFR departure exits your zone horizontally, confirm with the aircraft if they wish to climb into the TCA, coordinate with the appropriate terminal controller prior to telling the VFR aircraft to contact the appropriate controller for higher.

4.4. Flight Following

If a pilot would like flight following, use the code "FF" in the scratchpad to notify other controllers.

4.5. Handling VFR During Times of Heavy Traffic

During times of heavy traffic it may take some time to sequence departures amongst IFR arrivals. In this case, ground controllers should not issue intersection departures. All aircraft will instead be sequenced with all other departures in the order that they arrive in the taxi queue to the departure runway. This restriction may be waived if the tower controller believes they can gain a clear operational advantage by doing so.

This order can be modified in order to expedite departures. For instance, wake turbulence times can be reduced to fit within an event departure wait time requirement by sequencing event IFR lights behind event IFR mediums and event IFR mediums behind event IFR heavies (where appropriate) so that the wake turbulence separation time does not exceed the wait time required to support the event. Although wake turbulence separation applies to VFR aircraft, IFR separation wait times for a departure to a specific airfield do NOT apply to VFR aircraft. If a VFR event departure can be accomplished between successive IFR event departures, sequence it there where possible.

To keep VFR traffic out of the way of subsequent IFR departures, assign them a turn on takeoff together with an altitude restriction to keep them clear of terminal airspace until

the controller on terminal has capacity to work them. For example, in the vicinity of the PASSAGE VFR waypoint (see diagram below), restrict the aircraft to 2,500' or lower. If Terminal cannot work the aircraft, release them to enroute frequencies with the restriction when they leave the Tower control zone.

If Terminal does not have the capacity to provide flight following, do not suggest to pilots that flight following may be available since suggesting it may result in the aircraft requesting it and then being denied, further tying up the terminal frequency.

Although you may warn VFR traffic that there may be delays, you may not deny VFR traffic.

5. Vancouver International (CYVR) Procedures

5.1. Runway Configuration

5.1.1. Preferred arrival runway is 08L/26R.

5.1.2. Preferred departure runway is 08R/26L.

5.1.3. Runway 13/31 may only be used if the crosswind component on the main runways exceeds 20 knots. Runway closure NOTAMs should be followed where possible.

5.1.4. Calm wind runways (5 knots or less) are 26L for departures and 26R for arrivals.

5.1.5. Use the actual runway in use as per [NavCanada OIS](), [NavCanada Spaces](), or FlightRadar24 where practicable.

5.2. IFR Releases

Blanket IFR releases are assumed at CYVR unless otherwise requested by the departure controller. All other airports require individual releases unless otherwise stated by the overlying radar controller.

5.3. Normal Runway Usage

Under normal circumstances, the runways at CYVR are to be operated dependently for IFR and IFR traffic separation. This means that if an aircraft is given a takeoff or landing clearance for one runway, both runways are effectively in use until the said aircraft has the minimum IFR spacing or has landed and will not go-around (a significant deceleration is observed on the scope).

The runways at CYVR may be operated independently from each other for VFR and VFR or VFR and IFR separation.

5.4.   Simultaneous Dependent Parallel Instrument Approaches (SDPIA)

From tower's perspective, when SDPIA are in use the following apply:

5.4.1. Both arrivals must be on an ILS, RNAV RNP, or RNAV with vertical guidance approach confirmed by either an SFI tag or by verbal confirmation from the aircraft

5.4.2. The aircraft are not expected to reduce to less than 2nm lateral separation OR,

5.4.3. Both aircraft are visual with the landing runway

If these are true, then landing clearances may be issued to both aircraft independently.

Aircraft on visual approaches are not *technically* considered SDPIA. However, they may still be cleared to land independently from traffic on approach to the parallel runway at CYVR, as separation responsibility shifts to the pilot when they accept a visual approach.

5.5.   Simultaneous Independent Parallel Instrument Approaches (SIPIA)

The tower controller will be notified by the ILS monitor controller if simultaneous independent approaches are in use. The tower controller may now operate the parallel runways independently of each other for arrivals.

If the ILS monitor controller steps in on frequency at any point to issue breakout instructions, the tower controller shall avoid making any transmissions on their frequency until they are verbally handed their frequency back by the ILS monitor controller.

Where possible, the tower controller shall inquire if arrivals are visual with the landing surface prior to the FAF when simultaneous independent approaches are in use as this reduces the ILS monitor controller's workload.

5.6.   Departing Traffic Independent of Arrivals

Aircraft may be given takeoff clearances after an arriving aircraft has already been cleared to land on the parallel runway given that the following conditions are met:

5.6.1. A radar controller (APP/DEP/CTR) is online at the time the takeoff clearance is issued.

5.6.2. The departing aircraft is on a published SID and has not been issued a heading that would converge toward the parallel runway.

5.6.3. In the event that the departure is departing from 08L, the aircraft has not been assigned the STANLEY # (STNLE#) SID.

5.6.4. The arriving aircraft on the parallel is on a published straight-in CAT I ILS, RNAV, or visual approach, and has been confirmed with:

5.6.4.1. The correct SFI on the aircraft's tag indicating an ILS, RNAV, or visual approach OR,

5.6.4.2. Verbal confirmation from either the aircraft or arrival controller that they are on an ILS, RNAV, or visual approach OR,

5.6.4.3. In the event that the inner arrival controller is also responsible for the CYVR tower control zone, the aircraft is established on and not deviating from the localizer inside of the FAF.

5.6.5. In the event of a go-around for an ILS or RNAV approach, there is no anticipated traffic that would prevent the arriving aircraft from safely executing the published missed approach procedure.

5.6.6. In the event of a go-around for an ILS or RNAV approach, the arriving aircraft is instructed to fly the published missed approach procedure.

5.6.7. In the event of an arrival on a visual approach, the departing aircraft is issued a heading with their takeoff clearance that diverges more than 30 degrees from the anticipated missed approach path of the arriving aircraft.

These procedures should be used when possible as it greatly improves efficiency at CYVR.

5.7. Simultaneous Departures

simultaneous departures are authorized on the parallel runways at CYVR given that the following conditions are met:

5.7.1. A radar controller (APP/DEP/CTR) is online at the time the takeoff clearance is issued.

5.7.2. Both aircraft are issued the VANCOUVER # (YVR#) SID.

5.7.3. The aircraft on the north runway is issued a turn of at least 5 TRACK degrees to the North with their takeoff clearance.

5.7.4. The aircraft on the south runway is issued a turn of at least 10 TRACK degrees to the South with their takeoff clearance.

5.7.5. A radar release has been obtained for both aircraft from the overlying radar controller, regardless of whether or not blanket clearances are being used.

5.8. Dash-8 Q400 Takeoff Clearances

The agreement between NavCanada and the airlines regarding the Dash-8 states that due to the speed of the DH8D for any SIDs with speed restrictions for propellers (*i.e. do not exceed 165kt until passing 4000 and in contact with departure control*) will be waived, because for this purpose the DH8D is considered a non-jet. This shall be used for Dash-8s on the RICHM# and the STNLE# SIDs

An example of a takeoff clearance for a DH8D on the RICHM7 SID would be:

Example: *"Jazz 146, speed restriction cancelled, contact departure on 132.30 airborne, wind calm, cleared for takeoff 26L."*

5.9. Multiple Landing Clearances

Landing clearances at CYVR may be issued to any aircraft on the same runway, regardless of the sequence number provided:

5.9.1. The controller or the aircraft will gain an operational advantage,

5.9.2. The aircraft are observed on the final approach course,

5.9.3. The preceding aircraft has not received a stop and go or clearance for the option

5.9.4. Minimum separation will exist at all times,

5.9.5. This procedure is applied between successive arrivals only with no departing aircraft between arrivals,

5.9.6. If traffic ahead of the first aircraft in the landing sequence is departing, the departing aircraft may not be stationary on the runway or backtracking. Once departing traffic begins the takeoff roll, a landing clearance can be provided with an appropriate traffic point-out.

Example: *"Jazz 123, wind light and variable, number 2 following an A320 on a 2-mile final, cleared to land runway 08L."* (Note that the "following" instruction in the case comes AFTER the weather)

6. Combined Frequencies

When a position is not split, the combined frequency should be used whenever possible.

6.1. CYVR

The combined tower frequency at CYVR is the south tower frequency, 118.70

6.2. CYYJ

The combined tower frequency at CYYJ is the inner tower frequency, 119.70

6.3. CYXX

The combined tower frequency at CYVR is the inner tower frequency, 119.40

Vancouver FIR

Revision History

Version	Subject	Authorized	Date
2.2	Update to Simultaneous Parallel Dependent Instrument Approaches and Departing Traffic Independent of Arrivals to include guidance on visual approaches to comply with CARs standard 821.	Josh Jenkins	December 30, 2024
2.1	Update to Simultaneous Parallel Dependent Instrument Approaches to include RNAV, changes to VFR section, and changes to 13/31 usage.	Josh Jenkins	November 13, 2024
2.0	Branding, added additional information on CYVR procedures, removed magnetic variation and ATIS sections, incorporation of vAIC 1/23 & 3/23, and other changes to comply with GCAP	Josh Jenkins	February 1, 2024
1.7	Departure handoff revision	Brad Crockett	May 1, 2021
1.6	Taxi Crossing of Runways, revised ATIS	Brad Crockett	February 17, 2021
1.5	Position Reports	Brad Crockett	January 30, 2021
1.4	Flight Following, Water take-off and landing	Brad Crockett	January 24, 2021
1.3	ATIS, VFR departures in heavy traffic	Brad Crockett	January 14, 2021
1.2	Circuit, departure	Brad Crockett	November 4, 2020
1.1	Magnetic Variation	Brad Crockett	April 25, 2020
1.0	Initial	Brad Crockett	January 8, 2020