

The logo consists of a stylized mountain range with three peaks. The leftmost and rightmost peaks are green, while the central peak is grey. 

# Vancouver FIR

## Training Standards

Revision 3.2

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## 1. Definitions

- **Competency Check**  
An OTS-styled check that a visitor or transfer from outside VATCAN must complete to control at CZVR.
- **Knowledge Check**  
A short multiple-choice, exam-styled check that allows an instructor to assess a student's knowledge level to assist in the training process. Knowledge checks are not mandatory and have no pass/fail grade but are highly encouraged.
- **Over-the-Shoulder (OTS) Exam**  
A roughly 2-hour, on-the-network practical test done to upgrade a student's rating. The exam is marked using the marking sheet published on the VATCAN website.
- **Solo**  
A temporary certification granted to students training for tower, terminal, or centre positions which allows them to control said position without an instructor or mentor present to gain practical experience.
- **Supervised**  
A point at which a student's instructor feels they are ready to control on the network while being monitored by either an instructor or mentor.
- **Tier 1**  
A position with both complex procedures and high levels of traffic that requires significant additional training. CZVR does not have any Tier 1 positions.
- **Tier 2**  
A position with complex procedures that requires additional training. For CZVR, this is all positions at CYVR, FSS positions, and centre positions. The list of Tier 2 designated positions at CZVR can be found both on the VATCAN website and the CZVR Controller Policies and Procedures document. Tier endorsements are unique to individual FIRs and are often referred to alongside their related rating. For example, an S2 Tier 2 endorsement would allow a controller to control CYVR\_GND and CYVR\_TWR.
- **Unrestricted**  
Any position that is not classified as a Tier 1 or Tier 2 position. For CZVR, this is all positions except for positions at CYVR, FSS positions, and centre positions. There is no additional definition for a "restricted" position apart from Tier endorsements.
- **Written Exam**  
A multiple-choice test done on the VATCAN website necessary to continue training for either a rating or a Tier 2 endorsement.

## 2. Abbreviated Training Policy

### 2.1 Unrestricted Training Flow

The student will:

- PASS the VATCAN S1 written exam
- Submit a transfer request to CZVR through the VATCAN website
- Join the FIR & waitlist
- Advise the FIR of their availability
- Be picked up by an instructor
- Complete S1 training at CYYJ
- Complete S2 training up to SUPERVISED at CYYJ
- PASS the VATCAN S2 written exam
- Receive a tower SOLO at CYYJ or CYLW
- Receive a second tower SOLO at CYLW or CYYJ (whichever has not been completed previously)
- PASS the S2 OTS
- Complete S3 training up to SUPERVISED at CYYJ
- PASS the VATCAN S3 written exam
- Receive a terminal SOLO at CYYJ
- PASS the S3 OTS

### 2.2 Tier 2 Training Flow

The student will:

- PASS the S1 Tier 2 endorsement written exam
- Complete S1 Tier 2 training up to SUPERVISED at CYVR
- Complete S1 Tier 2 training up to T2 ENDORSED at CYVR
  - S1 Tier 2 training may begin at any point for a student prior to beginning C1 training
- OPTIONAL AT ANY TIME – Complete FSS Tier 2 training up to SUPERVISED
- OPTIONAL AT ANY TIME – Complete FSS Tier 2 training up to ENDORSED
- Receive S2 Tier 2 SOLO on CYVR\_TWR
- PASS the S2 Tier 2 endorsement written exam
- Complete S2 Tier 2 training up to ENDORSED
  - S2 Tier 2 training may begin once an S1 student has received their second tower SOLO
  - A student must achieve their S2 rating to hold an S2 Tier 2 endorsement
  - S2 Tier 2 training must be completed prior to a student beginning C1 training
- PASS S3 Tier 2 endorsement written exam
- Complete S3 Tier 2 training up to SUPERVISED on CYVR\_DEP
- Complete S3 Tier 2 training up to SUPERVISED on CYVR\_APP
- Receive S3 Tier 2 SOLO on CYVR\_APP
- Complete S3 Tier 2 training up to ENDORSED

- S3 Tier 2 training may begin once an S2 student has received their CYYJ terminal SOLO
- A student must achieve their S3 rating to hold an S3 Tier 2 endorsement
- S3 Tier 2 training must be completed prior to a student beginning C1 training
- PASS VATCAN C1 written exam
- PASS CZVR C1 enroute Tier 2 endorsement written exam
- complete C1 Tier 2 training up to SUPERVISED
- receive C1 Tier 2 SOLO
- PASS the C1 OTS

### 2.3 Notes

- Students may begin FSS Tier 2 endorsement training any time after completing their S1 – unrestricted training.
- FSS training is NOT mandatory for S2 Tier 2, S3 Tier 2, or C1 training.
- Tier 2 training is not mandatory before starting C1 training.
- A student must make a request with their instructor to start Tier 2 training if they wish to do so. If no specific request is made, training will follow the unrestricted flow up to C1 training.
- All Tier 2 positions are listed in the CZVR Controller Policies and Procedures document.
- All “knowledge checks” are not mandatory and do not have a pass/fail mark. Students are highly recommended to complete all knowledge checks to assist their instructors in supplementing their practical training.
- The selection of an OTS field is at the discretion of the instructor; however, students can expect to do their OTS in most cases at either CYYJ or CYVR based on criteria described in the relevant sections of this document (see “Pre-OTS Requirements” of desired rating).
- Unless otherwise specified, SOLO certifications will be issued in 30-day intervals.
- Students are expected to show commitment to their training by coming to training sessions prepared (reading CBTs, SOPs, LOAs, or other assigned material ahead of the session) and controlling during their SOLO certifications.
- Generally, the first 30 days of a SOLO certification should be considered to be a time for students to get familiar with a position and the associated procedures. OTS prep should generally begin sometime between day 31-45 of a SOLO certification.
- If a student repeatedly fails to show commitment to controlling while being issued a SOLO certification, an instructor may withhold future SOLO certifications from being issued until such a time that the student is able to make use of their remaining SOLO time.

### 2.4 Visitor and Transferring Controllers

- The Visitor and Transferring Controller Induction Policy can be found at the end of this document.

- Training for inter-division transfers/visitors includes live training and Tier 2 written exams where applicable.
- Training for transfers/visitors from outside of the division includes simulated training, a competency check, and Tier 2 written exams where applicable.

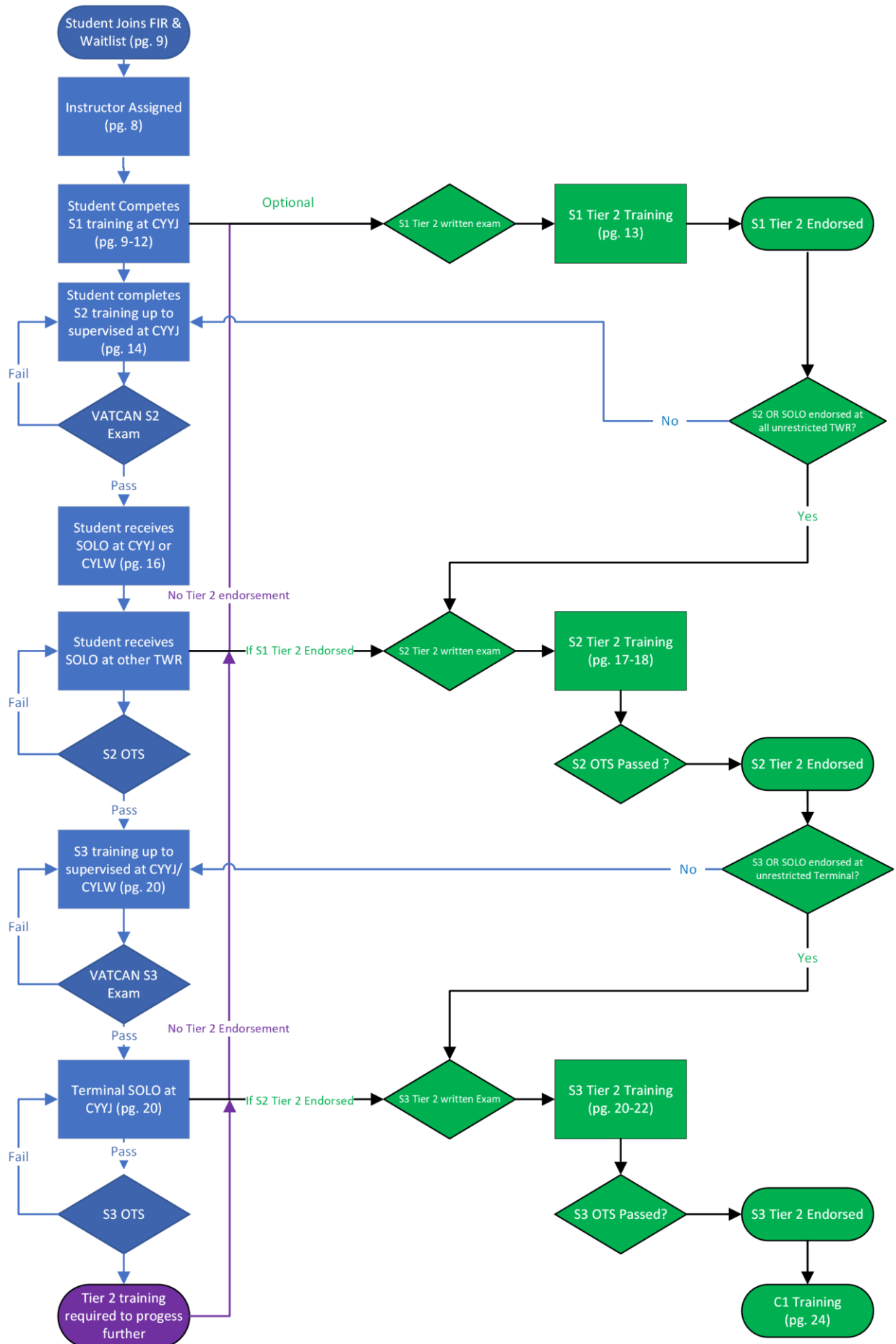
## 2.5 Notes for Instructors/Mentors:

- “[Position] - Supervised” doesn’t necessarily mean that only after this point can mentors be permitted to monitor a student (in fact mentors are encouraged to be heavily involved in the training process after the first training session). However, this is the suggested point at which the student is likely to be confident on the network with only minimal supervision required. If the student doesn’t meet the “Supervised” requirements, additional sweatbox sessions are recommended to give the student the chance to practice and apply these concepts in a controlled environment. Should the student be permitted to be on the network supervised before meeting the “Supervised” requirements, dedicated supervision (not controlling and supervising at the same time) is recommended (either by an instructor or a mentor) to ensure students meet the necessary training goals.
- Sweatbox files included for S3 and C1 training are mandatory based on the training goals described below.
- Instructors may waive training requirements with the authorization of the Chief Instructor. However, it is encouraged to discuss the topic with the student prior to an OTS. Items listed as “recommended” are not required but are items a student and instructor should aim for time-permitting.
- The minimum number of solo days required before an OTS may be booked is 7 days. This is only to be used in exceptional circumstances as per the VATCAN training policy.

### 3. Training Flow Chart

#### Unrestricted Training Flow

#### Tier 2 Training Flow





#### 4. Join, Waitlist, and Initial Training Procedure

- Student requests to join the FIR.
  - This is done through the VATCAN website after passing the S1 written exam.
- An executive staff member reviews the application.
  - The application may only be rejected with divisional approval.
- The executive staff member responsible for accepting the student assigns the CZVR Entrance Knowledge Check to the student and moves the student to the waitlist.
  - Once the knowledge check has been completed, the responsible executive staff member will note if a debrief session is required. If the knowledge check expires, an executive staff member will reassign the Entrance Knowledge Check. If it lapses a second time, a note will be made that the student did not complete the Entrance Knowledge Check.
    - *This policy applies to any other knowledge checks. If a student elects to not complete a knowledge check this should be noted.*
- When the student is at the top of the waitlist, an email will be sent to the student asking for their time zone and general availability.
  - The student has 2 weeks to respond. If no response is received within 2 weeks the student will be bumped down one spot on the waitlist.
  - Should the student not respond, another attempt will be made to contact the student via email and Discord if applicable. If no response is received within 90 days (104 days after the initial attempted contact) the student will be removed from the FIR at the discretion of the executive staff. The student may be bumped down the waitlist as necessary during those 90 days.
- When a response is received from a student, they may be picked up by an instructor when appropriate. The instructor will notify the executive staff that they have picked up a new student.

## 5. EuroScope and Software Familiarization

### 5.1 Initial Session – EuroScope/PC Setup

- *Recommended - Student has completed the CZVR Entrance Knowledge Check*
  - *NOTE: There is no minimum passing mark for this exam. However, if a student scores less than 80% the instructor may wish to have a debrief session with the student to cover where there may be gaps in their knowledge.*
- Student is able to connect to and navigate TeamSpeak
- Student has correctly installed and set-up their controller client, sector files, and Audio for VATSIM
- Student is able to connect to the VATSIM network
- Student is familiarized with usage of EuroScope (or their preferred client) and **demonstrates** the following:
  - Is able to correctly set-up vis centres and vis ranges
  - Is able to open the ground ASR for the airport they are selecting
  - Is able to correctly interpret all the information on the departure list
  - Is able to modify information on the departure list as needed including:
    - Text/receive/voice capabilities
    - Scratchpad
    - Open the flight plan box to view route and other info
    - Create and modify squawk codes
    - Update status tags
  - Send text messages to text-only pilots
  - Create a flight plan for an aircraft who don't have a flight plan filed (e.g. for VFR aircraft)

*NOTE: All the EuroScope items are now covered in a video in the CZVR CBTs. It is recommended instructors remind students to watch this video prior to their first lesson to spend minimal time on these items.*

## 6. Clearance and Ground

### 6.1 Clearance Delivery & Ground - Supervised

- *Recommended - Student has completed the CZVR S1 Knowledge Check*
  - *NOTE: There is no minimum passing mark for this exam. However, if a student scores less than 80% the instructor may wish to have a debrief session with the student to cover where there may be gaps in their knowledge.*
- Recommended study material:
  - VATCAN Block 2 CBT
  - CZVR Block 2 CBT - Unrestricted Clearance and Ground presentation
  - CZVR Clearance Delivery SOP
  - CZVR Ground SOP
  - Nav Canada IFR Phraseology Guide
  - Nav Canada VFR Phraseology Guide
  - CZVR Phraseology Cheat Sheet (to be created)
  - CZVR Unrestricted Airport document
  - CZVR/KZSE Letter of Agreement (LOA)
  - CZVR/PAZA LOA
  - CZVR/CZEG LOA
  - CYYJ & CYLW Aerodrome & SID charts
  - CYYJ & CYLW VFR Terminal Procedures chart
  - CYYJ & CYLW CFS
  - Any other assigned material
- Student **demonstrates** the following theories and concepts discussed in the CBT:
  - Basic radio etiquette
    - [who you're calling], [who you are on initial call], [message]
  - Understands the phonetic alphabet/numbers
  - Understands how to ask for and give a radio check
  - Is able to decode the basics of a METAR (reporting station, wind, & altimeter)
    - Is able to determine the most suitable runway based on the current wind
    - Is able to convert wind from True to Magnetic
  - Understands the difference between IFR and VFR
  - Understands how to select an appropriate cruising to assign an aircraft based on:
    - Direction of flight
    - Major obstacles (terrain).
      - *NOTE: Things like MEA's are not a knowledge requirement at this point, however students should have a basic understanding of the terrain surrounding CYVR*
    - Flight levels & transition altitude (including when FL180 is not suitable for a cruising altitude)
    - RVSM vs non-RVSM

- Point out what RVSM airspace is (all the CDA between FL290 and 410) and who can use it (for VATSIM purposes anyone who requests) as well as separation minima inside and outside RVSM airspace (1000ft inside and reverting to 2000 ft vertical spacing above FL410, e.g. FL430 for westbound, FL450 for eastbound, etc.)
- Is able to recognize incorrectly filed altitudes and correctly amends them to a correct altitude
- Understands how to read a route and resources to visualize a particular route if necessary (e.g. SkyVector)
- Understands the difference between an instruction and a clearance
- Is able to use correct phraseology when giving an IFR clearance:
  - [Prefix] [Aircraft Ident] [Clearance Limit] [SID]. [Route] [Altitude] [Speed] [Departure, enroute, approach or holding instructions]. [Special information including SSR code]. [Traffic information].
- Understands aprons in Canada are uncontrolled and the implications
- Student is able to amend a clearance
- Students are familiarized with CYYJ runway configurations
- Students are familiarized with CYYJ & CYLW SIDs
- Student has demonstrated a working knowledge of the CZVR/KZSE LOA, CZVR/CZEG LOA, and the CZVR/PAZA LOA and its contents
- Student is familiarized with how and when to use a *.wallop*
- Student has been familiarized with PDCs and their usage and the usage of the CZVR PDC plugin
- Student is made aware that filing direct on longer IFR flight plans is not acceptable
- Student has **demonstrated** understanding of the following competencies from the CBT:
  - Usage of correct phraseology for taxi instructions (for both arrivals and departures)
    - Clearance limit
    - Weather as applicable
    - Taxi route
    - Runway crossings as applicable
    - Hold short as applicable (and anticipates a hold short readback as applicable)
    - “Apron your discretion” as applicable
  - Runway crossing methods
    - Coordination with above facility
    - Switching aircraft to TWR (or appropriate facility) for crossing
  - Is able to use correct VFR phraseology:
    - [callsign], [departure runway]. [taxi instructions if applicable]. [departure procedure if applicable]. [squawk code]. [next frequency].
- Student has been familiarized with CYYJ taxiway/apron configuration, common parking areas, and taxiway limits/restrictions

- Student has been familiarized with where to find information on charts for ground ops at other airports
- Student has been shown where to find the unrestricted airport documentation document
- Student has been familiarized with blanket authorization from other controllers (e.g. crossing instructions for runways), including when they are applicable and when they're not

*NOTE: It is recommended to do the first S1 session on sweatbox to allow for all of the above competencies to be demonstrated in a controlled environment, if instructor feels a second session is necessary prior to being on the network supervised this is advised at the instructor's discretion.*

## **6.2 Clearance Delivery & Ground - Certified**

- Has met the minimum competencies for *Clearance Delivery & Ground - Supervised*.
- Student demonstrates they are able to re-route an aircraft
- Student is able to interpret a full METAR (whether through own knowledge or using external resources)
- Student is able to interpret equipment codes and select appropriate routes based on this
- Student is able to provide alternate departure instructions in the event of an aircraft being unable to fly SIDs
- Students are familiarized with where to find charts and other relevant information for other airports within the FIR
- Student is able to queue up multiple requests from pilots without becoming too flustered or losing train of thought
- Student is made aware of where they can find preferred routes
- Student understands the importance of receiving a position briefing
- Student is able to brief controllers below them (sign-on briefing) and above them (sign-off briefing)
- Student has demonstrated a strong grasp of both deconfliction strategies on the ground as well as the foresight to avoid conflicts in the first place
- Student has demonstrated the ability to manage and take control of a marginally busy frequency
  - *NOTE: This may be best demonstrated in a sweatbox scenario*
- Student has been familiarized with where to find the procedures associated with reduced/low visibility procedures and understands the basics of how to apply them
- Student has been familiarized with simulated de-icing ops
- Student has been familiarized as to where to find additional information for the ground procedures at other airports
- Student is introduced to finding suitable cruising altitudes based on MSAs, MEAs, & MOCAs
  - *NOTE: This is technically a delivery item. It is recommended to be introduced as soon as possible without overloading the student in the initial delivery session.*
- Student understands usage and procedures for intersection departures
  - Including TC AIM 4.2.5.1 (oblique intersection usage)

*NOTE: Stronger students may be able to complete training goals for both supervised and certified in a single session. This is up to the instructor's discretion.*

### **6.3 CYVR Ground - Supervised**

- Student has met the minimum competencies for *S1 Training - Unrestricted*
- Recommended study material:
  - CZVR Block 2 CBT - Tier 2 Clearance and Ground presentation
  - CZVR Clearance Delivery SOP
  - CZVR Ground SOP
  - CZVR Aerodrome, Parking Areas, and Taxi charts
  - Back of Vancouver VTA
  - CYVR CFS
  - Any other assigned material
- Student has passed the CZVR S1 Tier 2 Endorsement Exam
- Students are familiarized with CYVR runway configurations
- Students are familiarized with CYVR SIDs
- Student has been familiarized with CYVR taxiway/apron configuration, common parking areas, and taxiway limits/restrictions
- Student has done a minimum of one sweatbox on CYVR\_GND
- Student has been familiarized with blanket authorization from other controllers (e.g. crossing instructions for 13/31), including when they are applicable and when they're not

### **6.4 CYVR Ground - Tier 2 Endorsed**

- Student has met the minimum competencies for *CYVR Ground - Supervised*
- Student has demonstrated a strong grasp of both deconfliction strategies as well as the foresight to avoid conflicts in the first place
- Student has demonstrated the ability to manage and take control of a marginally busy frequency
  - *NOTE: This may be best demonstrated in a sweatbox scenario*
- Student has been familiarized with the procedures involved with a ground split
- Student has been familiarized with where to find the procedures associated with reduced/low visibility procedures and understands the basics of how to apply them
- Student has been familiarized with simulated de-icing ops (specifically at CYVR but also general concepts as applicable)
- Student understands usage and procedures for intersection departures at CYVR
  - Including TC AIM 4.2.5.1 (oblique intersection usage)

## 7. Tower

### 7.1 Unrestricted Tower - Supervised

- Student has met the minimum competencies for Clearance Delivery & Ground - Certified
- *Recommended* - Student has completed the CZVR S2 Knowledge Check
  - *NOTE: There is no minimum passing mark for this exam. However, if a student scores less than 80% the instructor may wish to have a debrief session with the student to cover where there may be gaps in their knowledge.*
- *Recommended* - Student has completed at least 5 hours on ground or clearance at any of the following airports. Hours are cumulative among the following airports. Hours must include time at no less than 2 of the following airports.
  - CYYJ
  - CYLW
  - CYXX
  - CYNJ
  - CYPK
  - CZBB
  - CYXS
- Recommended study material:
  - VATCAN Block 3 CBT
  - CZVR Block 3 CBT - Unrestricted Tower presentation
  - CZVR Tower SOP
  - Nav Canada IFR Phraseology Guide
  - Nav Canada VFR Phraseology Guide
  - Nav Canada Separation Standards
  - CZVR Phraseology Cheat Sheet (to be created)
  - CYYJ & CYLW Approach charts
  - VTA and VNC surrounding CYYJ and CYLW
  - Any other assigned material
- Student has **demonstrated** understanding of the following competencies from the CBT:
  - An understanding of flight priority (emergency, then airborne aircraft, then aircraft on the ground)
    - Understands changing the sequencing of aircraft (both on the ground and in the air) served may improve efficiency
  - Understands the following information about the circuit:
    - components of a circuit
    - the standard circuit
    - where to find information on non-standard circuits
    - How VFR aircraft are expected to depart the circuit (straight out, on a circuit leg, on a departure procedure)
    - Standard circuit entries (straight in, on the downwind)

- Uses of non-standard circuit entries (base, dead-side circuits)
- Is able to select correct active runways based on wind and airport procedures
- Is aware of basic takeoff requests & instructions
  - Departure frequency to contact when airborne
  - Backtracks
  - Short delay on runway (request from pilot)
  - Line-up and wait
  - Turnouts for VFR aircraft
- Is aware of basic landing requests & instructions
  - Full stop landings
  - Touch & Go's
  - Stop & Go's
  - Low & Overs/Low Approaches
  - Reporting points
- Uses the following phraseology correctly:
  - Clearing aircraft for takeoff
    - Warnings/cautions (traffic, wake turbulence, weather)
    - Instructions and/or request approvals if applicable
    - Weather (wind & altimeter if applicable)
    - Clearance (takeoff & lineup and wait) [runway #]
  - Clearing an aircraft to land
    - Instructions and/or request approvals if applicable
    - Weather (wind & altimeter if applicable)
    - [Type of landing clearance] [runway #]
      - OR
- Continue [sequence #], [traffic to follow if applicable]
  - OR
  - Extending current leg:
    - with ATC calling next leg
    - with turn for next leg over a VFR fix
    - with turn for next leg after a specific distance/time
  - VFR circuit entries/overflights
    - Clearance limit
    - Weather (wind & altimeter if applicable)
    - Instructions and/or request approvals if applicable
    - Clearance
    - Other restrictions
- Understands the application of radar releases
- Understands basic radar symbology presented in the tower view
- Familiar with the published go-around procedures, how to issue non-standard go-around instructions, and when to initiate a go-around, and the correct phraseology for all of the listed items
- Understands wake-turbulence concepts
- Has a basic understanding of different common IFR approaches



- ILS
- RNAV
- Visual
- Student is familiar with CYYJ runway configuration and circuit directions

## 7.2 Unrestricted Tower - Solo

- Student has met the minimum competencies for *Tower - Supervised*
- Student has completed VATCAN S2 Exam
- Student has demonstrated a basic understanding of helicopter operations and phraseology
- Student is aware of the airspace around the CYYJ/CYLW Tower CZ
  - See NOTE 2 & 3
- Student demonstrates the ability to effectively sequence traffic in the circuit.
  - *NOTE: the student isn't expected to be perfect at this point but should have a working understanding of how to deconflict aircraft in the circuit and ensure separation*
- Student demonstrates a basic understanding of simulated IFR procedures
- Student has been familiarized with VFR Weather minima
- Student has been familiarized with LAHSO Ops
- Student has been familiarized with Special VFR phraseology
- Student demonstrates a working knowledge of issuing traffic point-outs
- Student demonstrates understanding of immediate/on-the-roll takeoffs
- Student has been familiarized with where to find information on VFR departure & arrival procedures
- Student should be able to deal with airborne conflicts and be familiar with strategies to deconflict airborne traffic
- Student has demonstrated a working knowledge of the following:
  - Handling emergencies
  - Sequencing and resequencing of traffic in the circuit
  - Intersection departures
  - Full procedure, circling, contact approaches
  - Low/Reduced visibility ops
  - TALPA GRF runway condition reports (where to find them, how to interpret them, how to pass on the info to pilots)
  - Water-ops & phraseology at CYHC Tower CZ
  - Assigning VFR departure procedures
  - Assigning VFR arrival procedures
  - Assigning VFR overflight routes
- Student has a basic understanding of the usages for radar within the tower environment
- Student has been familiarized with where to find information about the airspace surrounding other unrestricted tower CZs
- Student has been familiarized with where to find information for VFR aircraft at other unrestricted airports

NOTE: At the expiry of the unrestricted tower solo, if a student wishes to begin Tier 2 training, and their instructor feels that the student is ready to do so, move onto the “Tier 2 Tower - Supervised” checklist. If not, renew the student’s solo as necessary to give the student a minimum of 30 days of solo time on unrestricted towers to prepare for their OTS. Move onto the “S2 Pre-OTS Requirements” checklist.

NOTE 2: Solos should be issued in a way that splits the workload between CYYJ and CYLW. If necessary CYXX may also be used as a solo tower position should a significant number of students be already crowding CYYJ or CYLW. Remind students that controlling clearance and ground positions is still helpful to the student and the FIR if their tower is currently in use. Certain towers may also be able to be split North/South or Inner/Outer to maximize controlling time.

NOTE 3: Students should ideally be issued at least 14-days worth of solo certs at two different unrestricted airports prior to preparing for an OTS or moving onto CYVR\_TWR. Reminder - the minimum solo cert length is 7 days, but this shall only be used in rare circumstances where the student shows advanced knowledge, and not to accommodate moving a student around to different towers for experience.

### 7.3 Tier 2 Tower - Supervised

- Student has met the minimum competencies for *Unrestricted Tower - Solo*
- Recommended study material:
  - CZVR Block 3 CBT - Tier 2 Tower presentation
  - CZVR Tower SOP
  - Nav Canada Separation Standards
  - CYVR approach charts
  - CYVR Noise Abatement chart
  - Back of VTA
  - VTA surrounding CYVR
  - CYVR CFS
  - CZVR AAS/RAAS SOP
  - Any other assigned material
- Student has achieved their S1 Tier 2 endorsement
- *Recommended - Student has completed at least 10 hours of solo time on Unrestricted Towers.*
- Student has passed the CZVR S2 Tier 2 Endorsement Exam
- Student has shown a strong comprehension of basic tower items
- Student has been familiarized with CYVR configuration and circuit directions
- Student has been familiarized with parallel runway ops & simultaneous parallel dependant, and independent approaches
- Student has completed a minimum of one sweatbox session on CYVR\_TWR

#### 7.4 Tier 2 Tower - Solo

- Student has met the minimum competencies for *Tier 2 Tower - Supervised*
- Student has demonstrated a working knowledge of the following:
  - Benefits of intersection departures at CYVR
  - Low/Reduced visibility ops at CYVR
  - Water-ops & phraseology at CYVR
  - Assigning VFR departure procedures at CYVR
  - Assigning VFR arrival procedures at CYVR
  - Assigning VFR overflight routes at CYVR
- Student must be mostly comfortable handling a relatively full circuit plus other aircraft
- Student must be able to sequence departures and IFR arrivals in between circuit traffic
- Student must demonstrate the ability to maintain control of frequency during busy periods/when potential conflicts start to arise

#### 7.5 Tier 2 Tower - Endorsed

- Student has met the minimum competencies for *Tier 2 Tower - Solo*
- *Recommended - The student has controlled at least 10 hours on CYVR\_TWR and has shown competency in the above Tier 2 items.*
- Student has passed their S2 OTS

#### 7.6 S2 Pre-OTS Requirements:

- Has met the minimum competencies for *Unrestricted Tower - Solo*.
  - *If doing the OTS on CYVR\_TWR, the student must have met the minimum competencies for Tier 2 Tower - Solo.*
- Student must have shown commitment to controlling TWR positions prior to an OTS
  - *Recommended - Student has accumulated a minimum of 20 hours on TWR (excluding \_F\_TWR positions)*
- Student has demonstrated they are able to visualize and achieve separation in a 3D space
- Student has demonstrated an ability to maintain control of the frequency during busy periods
- Student must be mostly comfortable handling a relatively full circuit plus other aircraft
- Student must be able to sequence departures and IFR arrivals in between circuit traffic
- Student has demonstrated a strong ability to think ahead and plan for contingencies
- Student makes limited phraseology errors

**OTS NOTE 1:** *Students who have completed the Tier 2 Tower - Solo checklist prior to their OTS must attempt their S2 OTS on CYVR\_TWR.*

**OTS NOTE 2:** *Students attempting an OTS on CYVR\_TWR must only meet the minimum competencies for an unrestricted tower position to pass the OTS.*

### 7.7 Tier 2 FSS – Supervised:

- Student has met the minimum competencies for *Unrestricted Tower - Solo*
- Student has passed the FSS Tier 2 Endorsement Exam
- Student understands the differences between FSS and TWR
- Student demonstrates an understanding of FSS procedures
- Student demonstrates an understanding of FSS phraseology:
  - Relaying IFR clearances
  - Traffic advisories
  - Weather advisories
  - VFR traffic phraseology
  - Ground advisory phraseology
- Student has completed at least one sweatbox session on a FSS position

### 7.8 Tier 2 FSS – Certified:

- Student has met the minimum competencies for *Unrestricted Tower - Solo*
- Student has completed at least one supervised session on an FSS position on the network
- The instructor feels confident that the student would be able to handle a reasonable amount of traffic while solo on an FSS position

## 8. Terminal

### 8.1 Victoria Terminal - Supervised

- Student has passed their S2 OTS
- *Recommended - Student has completed the CZVR S3 Knowledge Check*
  - *NOTE: There is no minimum passing mark for this exam. However, if a student scores less than 80% the instructor may wish to have a debrief session with the student to cover where there may be gaps in their knowledge.*
- Recommended study material:
  - VATCAN Block 4 CBT
  - CZVR Block 4 CBT - Unrestricted Terminal presentation
  - CZVR Terminal SOP
  - KZSE/CZVR LOA
  - Nav Canada IFR Phraseology Guide
  - Nav Canada VFR Phraseology Guide
  - Nav Canada RNAV Phraseology Guide
  - Nav Canada Separation Standards
  - CZVR Phraseology Cheat Sheet (to be created)
  - CYYJ SID & STAR charts
  - CYLW SID & STAR charts
  - Unrestricted Airport document
  - VTA/VNC of the CYYJ\_APP and LW centre sector area
  - Any other assigned material
- Has completed VATCAN S3 exam
- Student successfully completes the training goals outlined in APP.CYYJ.LP1 sweatbox
- Student successfully completes the training goals outlined in DEP.CYVR.LP4 sweatbox
- Student has been familiarized with Comox (CYQQ\_APP) airspace and procedures

### 8.2 Victoria Terminal - Solo

- Student has met the minimum competencies for *Victoria Terminal - Supervised*
- Student successfully completes the training goals outlined in APP.CYYJ.LP2 sweatbox
- Student demonstrates an understanding of the CYVR\_APP SOPs
- *Recommended - Student has completed at least 5 hours of network experience on CYYJ\_APP with a mentor*

*NOTE: At the completion of this checklist, if a student wishes to begin Tier 2 training, and their instructor feels that the student is ready to do so, move onto the "Tier 2 - Vancouver Departure - Supervised" checklist. If not, renew the student's solo if necessary on CYYJ\_APP to prepare for their OTS and move onto the "S3 Pre-OTS Requirements - Unrestricted OTS (CYYJ\_APP)" checklist.*

### 8.3 Tier 2 - Vancouver Departure - Supervised

- Student has met the minimum competencies for *Victoria Terminal - Solo*
- Student has achieved their S2 Tier 2 endorsement
- *Recommended - Student has accumulated at least 10 hours of network experience on CYYJ\_APP*
- Recommended study material:
  - CZVR Block 4 CBT - Tier 2 Terminal presentation
  - CZVR Terminal SOP
  - Nav Canada Separation Standards
  - CYVR SID charts
  - CYVR Noise Abatement charts
  - Back of Vancouver VTA
  - VTA surrounding CYVR
  - Any other assigned reading material
- Student has passed the CZVR Tier 2 Terminal Endorsement Exam
- Student successfully completes the training goals outlined in DEP.CYVR.LP3

### 8.4 Tier 2 - Vancouver Departure - Solo

*The Vancouver FIR does not issue solo certifications for Vancouver Departure*

### 8.5 Tier 2 - Vancouver Terminal/Arrival - Supervised

- Student has met the minimum competencies for *Tier 2 - Vancouver Departure - Supervised*
- Recommended study material:
  - CZVR Terminal SOP
  - Nav Canada Separation Standards
  - CYVR STAR charts
  - Any other assigned reading material
- Student successfully completes the training goals outlined in DEP.CYVR.LP5 sweatbox
- One of the two options:
  - Student successfully completes the training goals outlined in APP.CYVR.LP1 sweatbox
  - Student has attempted APP.CYVR.LP2 sweatbox and been debriefed
    - OR
  - Student has completed the training goals outlined in APP.CYVR.LP2
    - With this approach the instructor should ideally run the session a couple times to ensure the student has a strong understanding of methods of resolving conflicts
    - *This approach is recommended for stronger students*
- *Recommended - Student has completed at least 5 hours of network experience on CYVR\_DEP with a mentor*

### 8.6 Tier 2 - Vancouver Terminal/Arrival - Solo

- Student has met the minimum competencies for *Tier 2 - Vancouver Terminal/Arrival - Supervised*
- *Recommended - Student has accumulated at least 10 hours of network experience on CYVR\_APP or DEP with a mentor*
- Student successfully completes the training goals outlined in APP.CYVR.LP2 sweatbox
- Student successfully completes the majority of training goals outlined in APP.CYVR.LP4 sweatbox
- *Recommended - Student successfully completes the training goals outlined in one or both of the APP.CYVR.LP3 and/or LP3B sweatboxes*

NOTE: Students with a CYVR\_APP solo are also authorized to control CYYJ\_APP solo.

### 8.7 Tier 2 Terminal - Endorsed

- Student has completed the S3 Pre-OTS - CYVR\_APP checklist
- Student has passed the S3 OTS

### 8.8 S3 Pre-OTS Requirements - CYYJ\_APP

- Student has met the minimum competencies for *Victoria Terminal - Solo*
- *Recommended - Student has accumulated at least 25 hours combined on any terminal position within CZVR*
- Student completes the training goals outlined in the APP.CYYJ.LP3 **(to be created)** sweatbox
- Student has attempted the APP.CYYJ.LP4 **(to be created)** sweatbox and has been debriefed
- Student demonstrates an ability to maintain control of a busy frequency
- Student has been briefed on holds if not already covered in a sweatbox session
- Student makes limited phraseology errors

### 8.9 S3 Pre-OTS Requirements - CYVR\_APP

- Student has met the minimum competencies for *Tier 2 Tower - Vancouver Terminal/Arrival - Solo*
- *Recommended - Student has accumulated at least 25 hours on Tier 2 terminal positions*
- Student has attempted APP.CYVR.LP5 sweatbox and has been debriefed
- Student demonstrates an ability to maintain control of a busy frequency
- Student has been briefed on holds if not already covered in a sweatbox session
- Student makes limited phraseology errors

OTS NOTE 1: Students who have completed the Tier 2 - Vancouver Terminal/Arrival - Solo checklist prior to their OTS must attempt their S3 OTS on CYVR\_APP.

*OTS NOTE 2: Students attempting an OTS on CYVR\_APP must only meet the minimum competencies for an unrestricted tower position to pass the OTS.*



## 9. Centre

### 9.1 Centre - Supervised

- Student has passed S3 OTS
- Recommended study material:
  - VATCAN Block 5 CBT
  - CZVR Block 5 CBT
  - CZVR Centre SOP
  - KZSE/CZVR LOA
  - PAZA/CZVR LOA
  - CZEG/CZVR LOA
  - Nav Canada IFR Phraseology Guide
  - Nav Canada VFR Phraseology Guide
  - Nav Canada RNAV Phraseology Guide
  - Nav Canada Separation Standards
  - CZVR Phraseology Cheat Sheet (to be created)
  - Charts for various controlled and uncontrolled airports within the FIR
  - Any other assigned reading material
- Student has achieved their S3 Tier 2 endorsement
- Student has completed VATCAN C1 exam
- Student has passed the CZVR Tier 2 Enroute Endorsement Exam
- Student successfully completes the training goals outlined in CTR.CYVR.LP1 sweatbox
- Student successfully completes the training goals outlined in CTR.CYVR.LP2 sweatbox
- Student demonstrates an understanding of items covered in the CYVR\_CTR SOPs
- *Recommended - Student has spent at least 3 hours monitoring and watching CZVR CTR controllers as an observer*

### 9.2 Centre - Solo

- Student has met the minimum competencies for *Centre - Supervised*
- *Recommended - Student has accumulated at least 5 hours of network experience as a centre controller while being mentored*
- Student successfully completes the training goals outlined in CTR.CYVR.LP3
- Student has demonstrated a working knowledge of the CZVR/KZSE LOA, CZVR/PAZA LOA, and CZVR/CZEG LOA and their contents with relation to CTR operations
- The student has demonstrated a working knowledge of the recommended procedures with KZAK as outlined in the SOP
- *Recommended - Student has attempted one of the reduced workload CTR.CYVR.LP4 sweatboxes (LP4E and/or LP4W) and has been debriefed*

### 9.3 C1 Pre-OTS Requirements

- Student as met the minimum competencies for *Centre - Solo*
- *Recommended - Student has accumulated at least 30 hours combined on any centre position within CZVR*
- Student successfully completes the training goals outlined in CTR.CYVR.LP4
- Student demonstrates an ability to maintain control of a busy frequency
- Student demonstrates the ability to prioritize the correct aircraft on a busy frequency
- Student makes limited phraseology errors
  - Especially important for uncontrolled airport procedures

## 10. Visitor & Transfer Induction Policy

### 10.1 VATCAN Controller - Unrestricted S3

- Visiting controller has been briefed on the following items either immediately prior to or during a supervised session on the network:
  - Initial scope set-up as required
  - SIDs at CYYJ & CYLW
  - PDC usage
  - LOA procedures with CZEG/KZSE/PAZA from a DEL perspective
  - Runway layout & taxiway restrictions at CYYJ
  - Circuits at CYYJ & CYLW
  - STARs at CYYJ
  - Terrain/MVAs surrounding CYYJ, CYLW, and CYXX
  - Familiarization of the location and names of airports within the CYYJ\_APP airspace
  - CYCD procedures with & without FSS online
  - CYYJ\_APP airspace dimensions
  - CYQQ\_APP airspace dimensions
  - Any other information deemed pertinent by the instructor
- Visiting controller is supervised for no less than 30 minutes on the network AFTER the above items have been completed

### 10.2 VATCAN Controller - Restricted S3

- Visiting controller has passed the CZVR S3 Visitor Tier 2 Endorsement Exam
- Visiting controller has been briefed on all the briefing items listed in the “VATCAN Controller - Unrestricted S3” Checklist
- Visiting controller has been briefed on the following items either immediately prior to or during a supervised session on the network:
  - CYVR SIDs
  - CYVR taxiway layout including taxiway restrictions and uncontrolled taxiways
  - CYVR gates/aprons/areas
  - CYVR runway layout including
    - Dependent Parallel Ops from both a TWR & APP perspective
    - Independent Parallel ops from both a TWR & APP perspective
  - CYVR circuits
  - CYVR noise abatement procedures
  - CYVR APP/DEP airspace dimensions
  - CYVR STARs
  - CYVR MVAs
  - Familiarization of the location and names of airports within the CYVR\_APP airspace
  - Any other information deemed pertinent by the instructor

- Visiting controller is supervised for no less than 30 minutes on the network AFTER the above items have been completed

### 10.3 VATCAN Controller - Restricted C1+

- Visiting controller has passed the CZVR C1 Visitor Tier 2 Endorsement Exam
- Visiting controller has been briefed on all the briefing items listed in the “VATCAN Controller - Unrestricted S3” & “VATCAN Controller - Restricted S3” Checklists
- Visiting controller has been briefed on the following items either immediately prior to or during a supervised session on the network:
  - Airspace and airport familiarization
  - Initial descents into various airports such as
    - CYVR
    - CYYJ
    - CYLW
    - CYYC
    - PAKT
    - KSEA
    - Other uncontrolled airports
  - LOA procedures with CZEG/KZSE/PAZA from a CTR perspective
  - CYLW STARs
  - Oceanic entry procedures
  - Common overflight routes
  - Any other information deemed pertinent by the instructor

### 10.4 Non-VATCAN Controller - Unrestricted S3 & Restricted C1+

- Visiting controller has completed the CZVR Entrance Knowledge Check
- Visiting controller has completed the CZVR Familiarization checks consisting of at least one sweatbox session for each position from DEL to TWR covering all necessary procedural and phraseology items. Generic controller competency items do not need to be specifically checked (e.g. “Student has demonstrated they are able to visualize and achieve separation in a 3D space”)
  - *NOTE 1: This is best done by following the new student checklists for phraseology and procedural items required for each position. DEL and GND sessions may be merged. This means there will be a minimum of two sweatbox sessions that need to be run (CYVR\_DEL & CYVR\_GND, CYYJ\_TWR). These sweatbox sessions may be combined into one or two longer sessions at the instructor’s discretion. CYYJ DEL and GND items should also be briefed.*
- Visiting controller successfully completes the training goals outlined in APP.CYYJ.LP3 sweatbox **(to be created)**
- Visiting controller has completed the CZVR Competency Check.
  - *NOTE 1: This takes place on CYYJ\_APP. It will be a 2 hour “OTS-style” check. It must be completed within 90 days of the controller joining the FIR. Upon*

*successful completion of the Competency Check, the controller will be certified as an S3 with unrestricted controller privileges in CZVR.*

- *NOTE 2: If the controller rejects doing familiarization training, a training note shall be made, and the grading of the competency check should be more stringent. However, all controllers will receive 2 attempts within 90 days to pass the competency check, regardless of whether or not they complete familiarization training.*

*NOTE: The following items are for C1+ visitors/transfers only.*

- Visiting controller successfully completes all the TWR and APP Tier 2 checklists including Tier 2 exams.
- Visiting controller successfully completes the training goals outlined in CTR.CYVR.LP3
- Visiting controller has been briefed on all the briefing items listed in the “VATCAN Controller - Unrestricted S3”, “VATCAN Controller - Restricted S3”, & “VATCAN Controller - Restricted C1+” Checklists if not already covered in the sweatbox sessions.

## 11. Emails and Links

Training Email: [training@czvr.ca](mailto:training@czvr.ca) (will automatically forward to all executive staff)

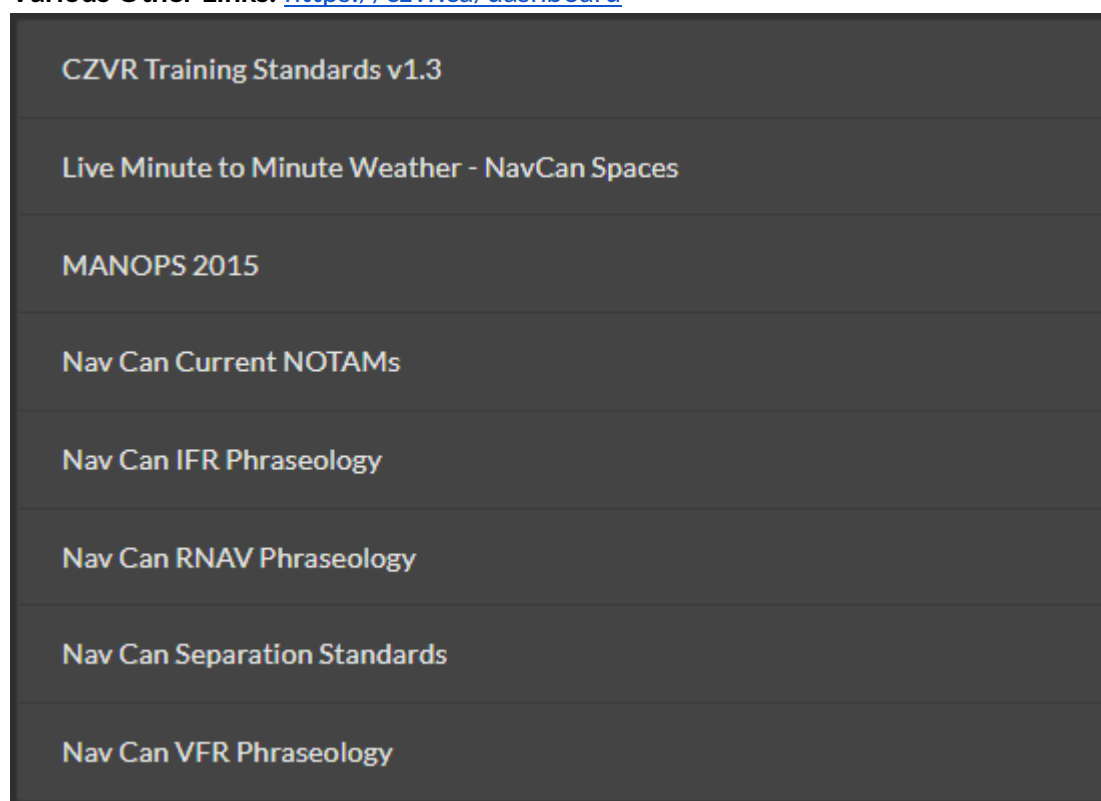
Individual Staff Member Emails: <https://czvr.ca/staff>

VATCAN CBT: <https://vatcan.ca/my/cbt>

CZVR CBT: <https://vatcan.ca/my/cbt/CZVR>

CZVR Policies: <https://czvr.ca/policies> (includes SOPs, LOAs, and vAICs)

Various Other Links: <https://czvr.ca/dashboard>



Here are some of the important ones:

- 2015 Nav Canada MANOPS - the real world standard for air traffic controllers in Canada as of 2015
- Nav Canada VFR Phraseology Guide - How to talk to VFR aircraft
- Nav Canada IFR Phraseology Guide - How to talk to IFR aircraft
- Nav Canada RNAV Phraseology Guide - How to talk to IFR aircraft for radar controllers
- Nav Canada Separation Standards - An in-depth guide to how airplanes are to be separated in tower, terminal, and enroute airspace