

# WTM - Golden Horseshoe Airspace Enhancements

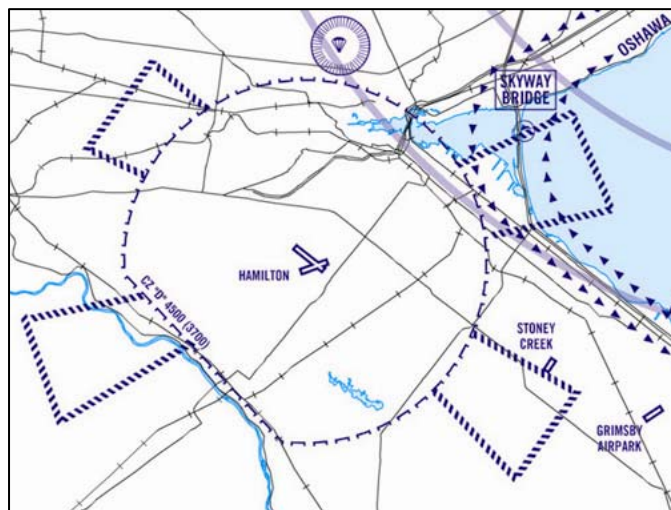
The Last time a comprehensive review was completed around the golden horseshoe was 1989. A lot has changed in the two decades since. In the fall of 2007, a number of stakeholders and industry associations such as COPA, RAA, SAC and UPAC met with NAV CANADA to look for ways to improve VFR operations and infrastructure under and around the Toronto Terminal airspace. With the benefit of input from a number of major flight training establishments, NAV CANADA collected information about the nature and concentration of VFR operations which surround the 26nm terminal airspace, and the wide disparity in performance of different VFR aircraft operating today. Insights and suggestions were also provided through written reports from the TSB and Transport Canada, including their “Safety Review of VFR Operations within the Greater Toronto Area” completed in 2000/01.

**On March 12<sup>th</sup>, 2009, a number of airspace changes will be implemented:**

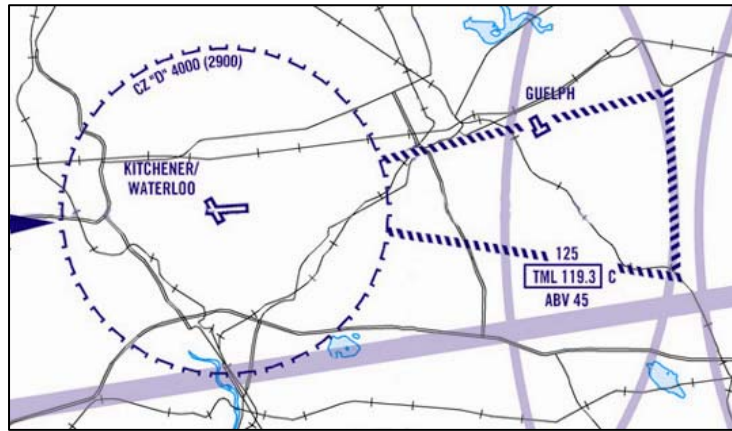
- [Hamilton \(CYHM\)](#)
- [Waterloo \(CYKF\)](#)
- [City of Toronto, below the Class C airspace](#)
- [Downsview \(CYZD\)](#)
- [Southern edge of the Pearson Control Zone](#)
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- [Brampton \(CNC3\)](#)
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The Hamilton (CYHM) control zone will be expanding up to 4,500’ MSL and out to 7nm in most directions, excluding the portion over the Grand River. This expansion is designed to reduce the potential for conflicts between unknown VFR aircraft, and larger air carrier type aircraft operating at low altitude. Extending out from the Control Zones are boxes outlined with hash markings named ‘Approach Awareness Areas’. They are designed to reflect final approach course for IFR aircraft on approach to Hamilton below 4,000’ ASL.

The awareness areas are not part of the control zone, and VFR aircraft are permitted to transit through them without contacting ATC. Their purpose is to provide VFR aircraft with knowledge of where they would be most likely to encounter air carrier type IFR aircraft at low altitude in the vicinity of Hamilton. This enhanced situational awareness will enable VFR pilots to make decisions which minimize their potential for conflict with fast moving IFR air carrier type aircraft.



The dimensions of the Waterloo (CYKF) Control Zone are not changing. However, an approach awareness area has been added east of the Control Zone for runway 26. Pilots are encouraged to be particularly vigilant in this area given the density of IFR training, and air carrier operations in this area.

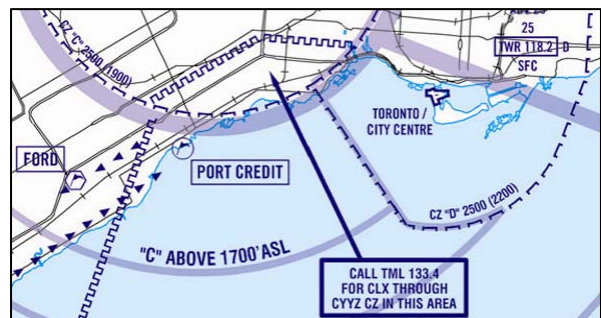


Over the city of Toronto, below the Class C airspace, between the Toronto City Centre and Buttonville Control Zones is a very busy VFR corridor. Many pilots have expressed confusion about which practices to follow and/or frequencies to monitor in this area. An airspace change will close the gap between the Buttonville and Toronto City Centre Control Zones which will now meet along Lawrence Ave, between Yonge Street and Victoria Park Ave. The Don Valley Parkway/Hwy 404 route will be the main route for aircraft transiting between the two Control Zones and NAV CANADA procedures have been developed to keep the flows organized. Traffic southbound will be primarily routed on the west side of the highway with the northbound flow along the east side. Aircraft transiting between zones will be 'handed off' from one tower to another, with the tower controller assigning the frequency change. Both Control Zones will now extend from 2,500' ASL to the surface. Depending on the active runways at Pearson, Controllers will restrict traffic to 2,000' ASL and

below in limited portions of the Control Zones. This ensures the required wake turbulence separation is provided with the large jets on approach to Pearson.

The Downsview (CYZD) Class E Control Zone will be lowered to 1,700' ASL to align with the Class C airspace floor. The shape has also been adjusted to line up with roads in the area, Yonge St. to the east, Eglinton Ave. to the south, and the Railyards/Hwy407 to the north.

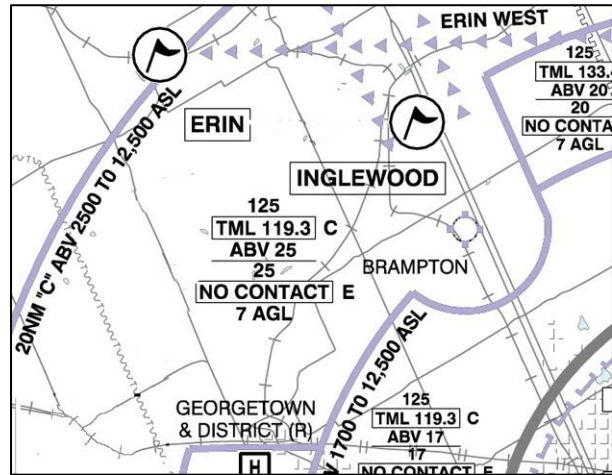
The existing Pearson (CYYZ) Control Zone reaches the Lake Ontario shoreline forcing VFR aircraft to transit the area over the lake. Further, because of the terminal airspace floor, many aircraft in this area operate at the same altitude east and westbound – requiring pilots to track farther from shore. In order to permit aircraft to fly along the Gardiner/QEW, a portion of the



Pearson Control Zone has been delegated to Toronto Terminal. As a result, with a clearance from Toronto Terminal (133.4) will be permissible to transit through the southern edge of the Pearson Control Zone.

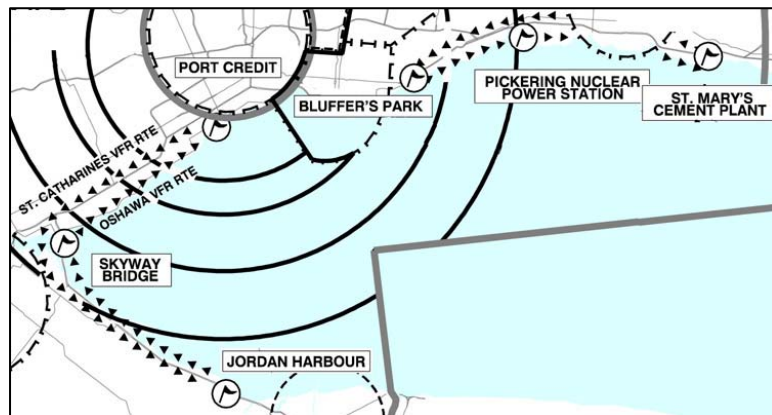
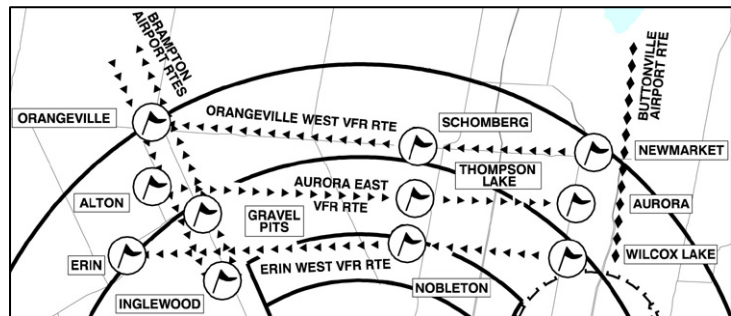
Also effective March 12<sup>th</sup>, will be some minor alterations to the Toronto Class C terminal airspace structure. The airspace floors will be changed to an “above altitude” (ABV) to enable VFR aircraft to operate at even altitudes - VFR aircraft will be able to fly beneath the Class C airspace at 1700’ASL, 2000’ASL, 2500’ASL or 3500’ASL, etc... without a clearance from ATC.

The 2,500’ ASL Class C “cut-out” around Brampton (CNC3) will be extended to the east, parallel to Hwy 10, and to the railroad tracks in Georgetown to the southwest.



Currently, many aircraft which transit the Toronto area do so just outside and/or below the Class C airspace. This results in opposite direction VFR traffic conflicts.

To address this risk, charted unidirectional VFR Routes are being added to the Toronto VTA. These are the common routes that have been used in the Toronto area for many years.

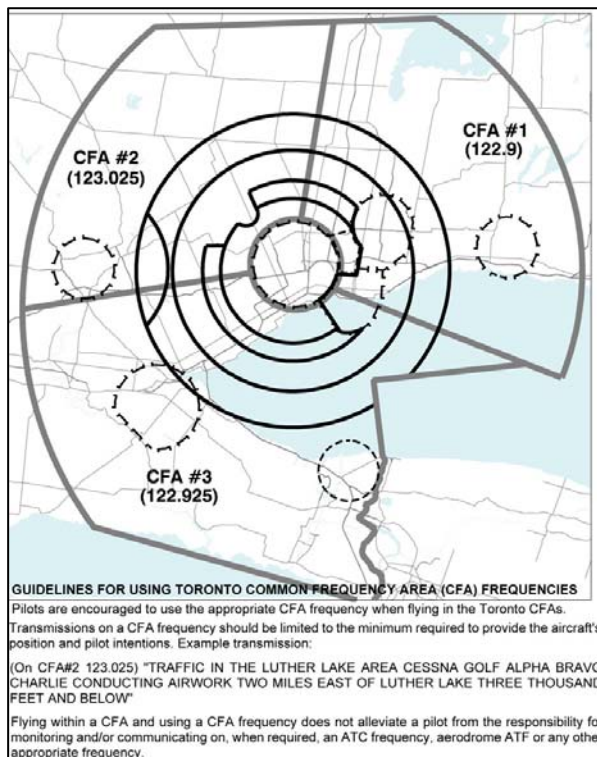


Publishing them is intended to increase situational awareness and thereby reduce possible VFR conflicts. The routes are named by the last checkpoint they pass, so, all communications you will hear will tell you where the aircraft is going – not where they’ve been. These routes can be used by VFR pilots below Class C airspace, or with a clearance from ATC they may be transited within the terminal airspace structure.

Communication and situational awareness go hand in hand. There are many aircraft operating in the area with different needs. Private flight training is a large part of recreational flying in the Toronto area and the number of training flights is increasing all around the Greater Toronto

Area. In the past, airspace depictions had been made using CYA(T) or Training Areas on the VTA to show where you could expect to encounter training aircraft. If we were to make that depiction today the majority of the airspace just outside of the 26nm ring of Toronto Class C would be marked for training. Different schools use different frequencies in their areas for information purposes, but this fails the itinerant pilot who is unfamiliar with their frequencies. 'One frequency for one airspace' is a way to enhance situational awareness.

Within 45nm of Toronto, three Common Frequency Areas (CFA) are being created. Common Frequency Area (CFA) is a new term designating a frequency for use by any aircraft in a defined area. A CFA is not a class of airspace, not monitored by ATC or for use at uncontrolled airports. It is intended to be used for air-to-air communications to provide an awareness of traffic in your vicinity. These frequencies will be available to all aircraft unless an aircraft is required to be on an ATC or airport frequency. The CFA should be used by pilots to update other aircraft of your position and intentions, or progress on a VFR route. Guidelines for CFA use will be in the CFS Planning Section and on the new Toronto VTA.



All of the changes mentioned will be included on the revised VTA chart. Centered on the back of the new VTA, will be a planning map. While not for navigation, it will include the new VFR route structure and instructions for their use. The Common Frequency Area's will be depicted, including examples of proper phraseology. It will have depictions of common IFR flight paths and approach paths to increase awareness about areas in which VFR pilots should be particularly vigilant. Surrounding the main map will be VTPC like depictions of the regional airports with some local data incorporated. Information has been drawn from a multiple sources and incorporated to create an improved and valuable product for operating around the Golden Horseshoe.

All these changes are effective on March 12<sup>th</sup> 2009. NAV CANADA and Transport Canada have again teamed up and will be conducting briefings about these changes. More than a dozen presentations are planned starting with the MASS at 4900 Yonge St in Toronto on February 18<sup>th</sup>, and finishing up with the Hanover Rust Remover on April 26<sup>th</sup>. New VNC and VTA charts reflecting the changes have been finalized for printing and should be available before March 12<sup>th</sup>.

For more information about the changes, or about the dates when the briefing team will be near you, please check [www.navcanada.ca](http://www.navcanada.ca) and click on "Windsor Toronto Montreal Airspace & Services Review" or contact NAV CANADA Level of Service at [aerostudy@navcanada.ca](mailto:aerostudy@navcanada.ca) or 1-800-876-4693.