



Buttonville Mandatory Frequency Area – Pilot Safety

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Agenda

- Executive Summary
- Safety First
- Buttonville MF Area Procedures
- CYKZ Procedures
- The Circuit
- IFR Implications
- Summary
- Q&A





Executive Summary

- Mandatory Frequency Area with No Advisory service
- No ATIS and No TAF
- The METAR transitioned to an LWIS with no ceilings or visibility
- No Tower providing runway conditions
- Control Zone ceiling at 2,000 feet ASL (1,350 AGL), precluding overflight of field at recommended airport elevation plus 500 feet
- **Prohibited*** VFR circuit procedures: straight into Final; directly onto the Base; 45 degree entry into the Downwind legs
- Mandatory Frequency **124.8**, London Radio at Buttonville **123.15**, Flight line **123.5** (Ground is inoperative, ATIS has pre-recorded looping message)
- See and be Seen
- See PDF documents for detailed information (VFR and IFR are separate docs)



Safety First - Best Practices

- See and be Seen assumes you know the basics
- If unfamiliar, fly with an experienced co-pilot
- Practice Crew Resource Management, dual radios, split comms
- Eyes out of the cockpit, unless in IMC on an IFR flight plan
- Communicate, position reports and intentions
- Use the tools at hand – AeroWeather (LWIS), London Radio, other aircraft in the circuit, Flight Line, Canadian Flyers dispatch radio relay, pireps, notams
- Interpolate TAF for Oshawa (CYOO), City Centre (CYTZ), Pearson (CYYZ)



Aviation Enforcement Example

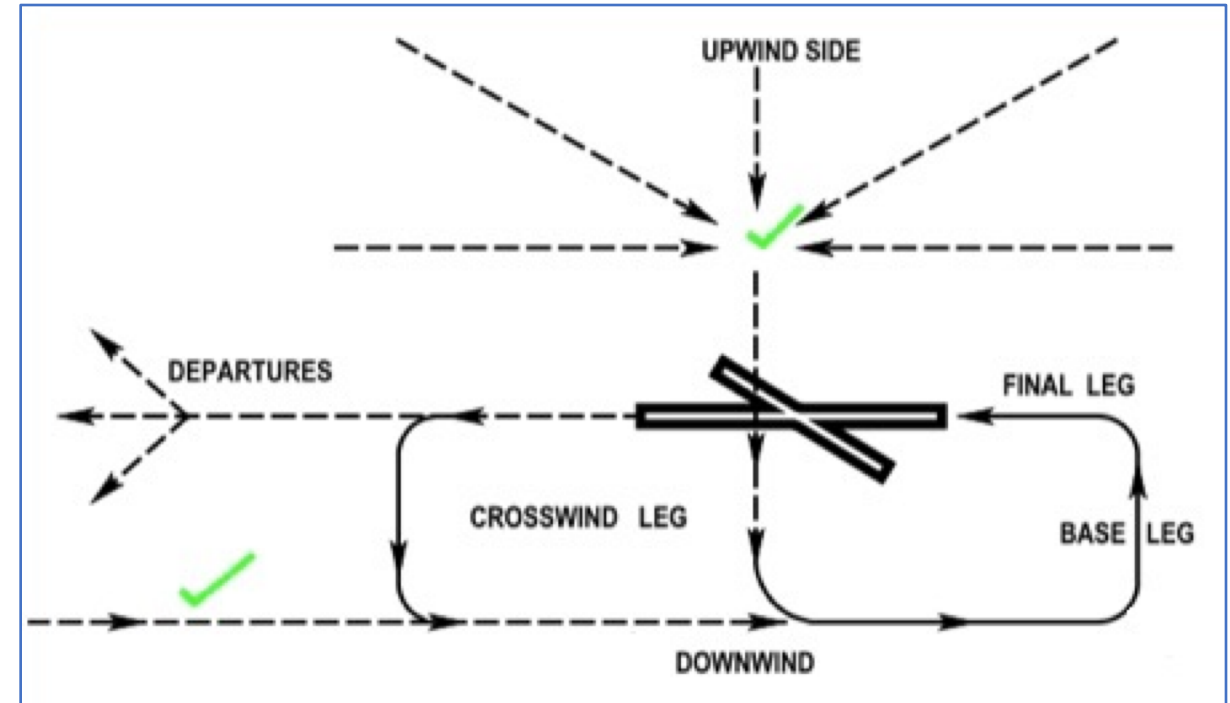
- TC Tribunal Report 0-3558-41 (Sept 2010)
- Incident at Muskoka (CYQA) between Learjet and C172F
- Learjet on IFR approach straight into Runway 36 and lands
- Several VFR aircraft in circuit, using Runway 18
- C172 executes Touch and Go on Runway 18, overflying landing Learjet, missing by 150 feet
- Who violated the CARs (602.21)?
 - C172 cut circuit short rather than extending downwind to accommodate Learjet's operational requirements
 - Risk of collision was immanent and C172 pilot's actions were not predictable
- Penalty – C172 pilot fined **\$5,000**



VFR Circuit – MF with No Advisory



- Plan your entry into the Zone
- Active runway is the one that you choose, but be mindful of existing traffic in the circuit
- Joining the circuit from the upwind side and into the downwind is **allowed**
- Joining the circuit is **prohibited***: straight into Final; directly onto the Base; 45 degree entry into the Downwind legs.



Weather

- No TAF, limited METAR
- METAR transitioned to LWIS (i.e. **CYKZ 301600Z AUTO 25011G17KT M17/M23 A2980**)
 - Wind direction, speed and gusts
 - Temperature and dew point
 - Altimeter setting
- No Visibility, ceilings
- Live RVR
- Impacts
 - EFBs and Weather Tools display VFR/IFR/LIFR (on charts), not correct
- Must interpolate between CYYZ, CYTZ and CYOO to determine VFR
- No Special VFR operations without Tower
- Weather reporting is Best Efforts and may not be accurate
- **Tools** – Nav Canada Website (browser), AeroWeather (now supports LWIS), London Radio 123.15
- Some EFB tools do not support LWIS



iPhone List 8:54

- CYKZ/YKZ** 9 m
180° 6 kts 32 °F
light showers snow
snow pellets
- CYYZ/YYZ** 8 m
150° 7 kts 34 °F
light showers snow
- CYTZ/YTZ** 6 m
120° 4 kts 34 °F



IIDS Web View

CYKZ | BUTTONVILLE MUNICIPAL

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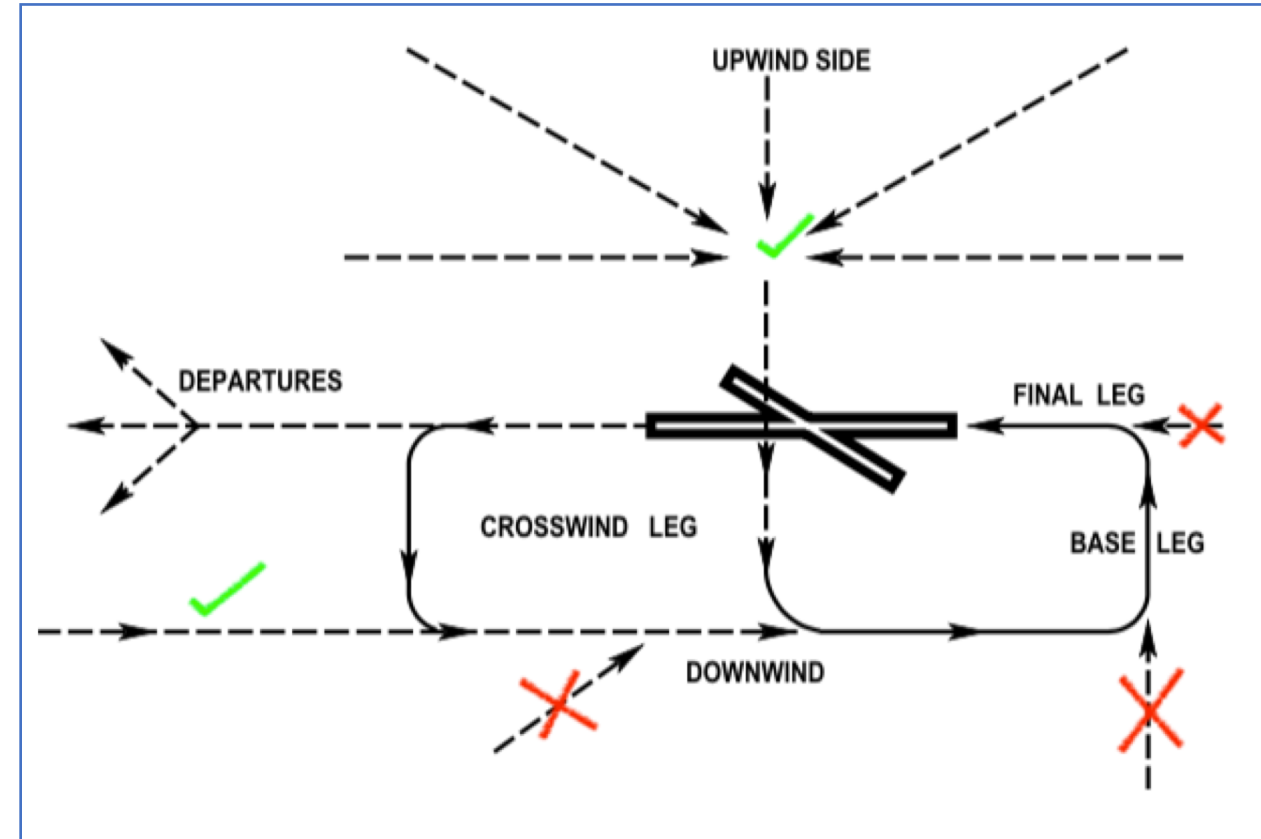
CYKZ information							CYKZ aerodrome			
Wind Direction:	Wind Speed:	Gusting:	Altimeter:	Updated:						
130	09	--	29.88	2019-02-07 21:12:54Z						
Runway	Wind +Head -Tail Steady	Cross Wind Steady	Wind +Head -Tail Gusting	Cross Wind Gusting	Light Setting	LOC	GP	DME		
03	-1 kts	9 kts	--	--	0	N/A	N/A	N/A		
15	+8 kts	4 kts	--	--	1	OK	N/A	OK		
21	+1 kt	9 kts	--	--	0	N/A	N/A	N/A		
33	-8 kts	4 kts	--	--	1	N/A	N/A	N/A		

Table colour coding is as follows:
Operational Status Unknown Not in Use

ATC MANOPS requires that the maximum crosswind or tailwind component include gusts.

CYKZ VFR Procedures

- Airspace ceiling at 2,000 feet
- Impact to overflying the field
- Right hand circuits Runway 15
- Call MF 124.8, 5 minutes out from penetrating MF Zone
- Transition airspace above 2,000 feet controlled by Toronto Terminal





VFR Radio Communications

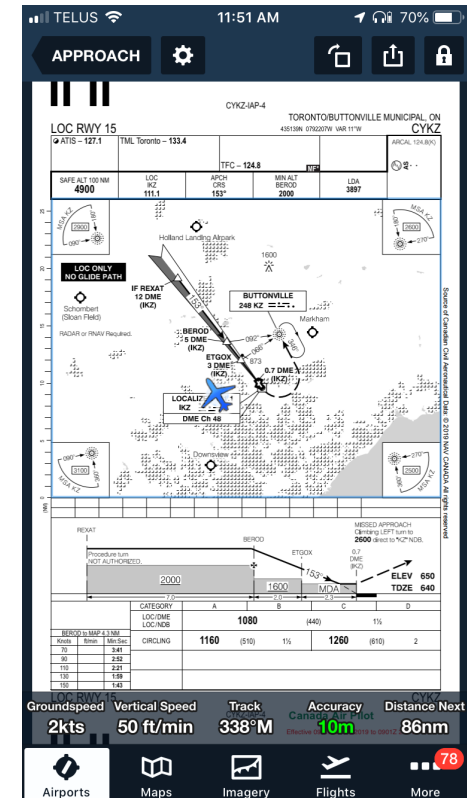
- WX (LWIS) on London Radio 123.15, 126.70
- Flight Line and Canadian Flyers have access to current weather
- Radio call on 124.8, 5 minutes before entering MF Zone
- At least 5 minutes prior to entering with position, altitude, estimated time of landing, and arrival procedure intentions
- Report joining the circuit, giving the aircraft's position in the circuit
- Report downwind and final
- Report clear of the runway
- Advise any possible conflicts

5 Minutes from CYKZ Zone Chart				
Ground Speed in Knots	60	90	120	150
Distance to CYKZ ZONE to make call(NM)	5	7.5	10	12.5
Distance to CYKZ to make call (NM)	10	12.5	15	17.5



IFR Implications

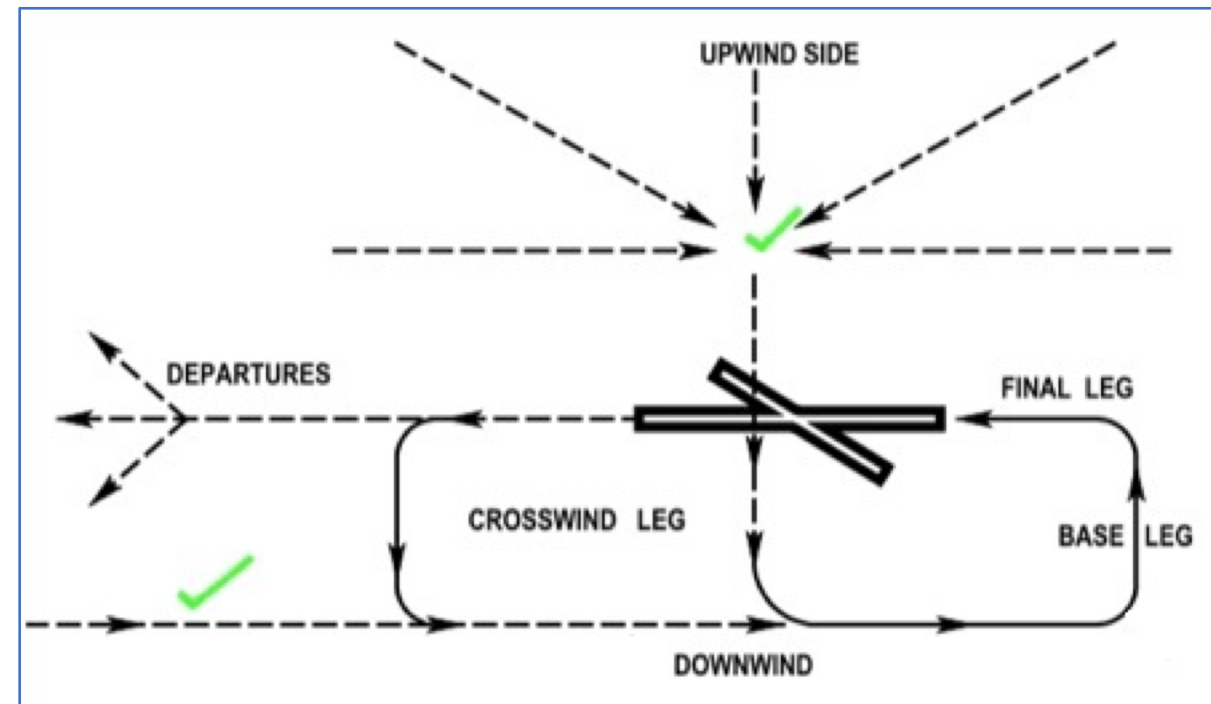
- Impact of Buttonville not in IMC conditions, i.e. VFR at or below 2,150 feet ASL, 3 miles visibility, 1 mile horizontal, clear of cloud
- Need to obtain runway conditions to comply with CapGen
 - Pirep from other pilots in the circuit
 - Flight Line
 - Canadian Flyers
- Communicate on MF Freq **5 minutes** before starting the Approach
- Able to execute straight in landing with known Runway Conditions
- Contact approach with no visuals allowed
- May circle to land below circuit altitude



Traffic Avoidance



- Wind at 190 at 15 knots
 - Flight school using runway 21
 - Jets conducting straight into runway 15
 - Larger VFR aircraft using 15
 - I.E. executes RNAV33, but break off the approach entering the downwind for runway 15
- Aircraft overshooting or taking off 21 with traffic in the right hand circuit 15
- IFR flights circling to ANY runway at or below circuit altitude
- Radio calls are critical to avoiding traffic
- Cowboys = Midair



Recommended Circuit Joining

- Winds favoring Runway 15
- Enter zone at 1700 feet ASL
- From the West, North West, plan to position route of flight from the East before entering Zone
- From the South, straight into downwind 15
- From the East, overfly the field at 1,650 ASL and join the circuit
- Exit zone at 2,000 feet ASL





Departure and Circuit Limitations

- Do not turn on course until 1,650 feet ASL
- Recommended to Turn Back to airport at 2,000 feet ASL
- Continuous circuits are fine:
 - Crosswind turn at 500 AGL
 - Must join downwind at 1,000 feet AGL
- Noise abatement rules now redundant
- Call intentions to depart the circuit
- Call when exiting the Zone





Questions and Answers

- You are in the circuit for 33 with a wind change favoring 21 – What do you do?
- Aircraft reports joining final for 15, you are in the left base 21 – What do you do?
- Just landed Runway 15, you want to backtrack on Runway 21 – What should you do?
- Your aircraft just came out of Annual and you want to orbit the airport – What should you do?
- Your flight planning a CN Tower tour – what do you do?
- How do you activate the ARCAL?



Summary

- Transition period over next 6 months
- Mentor other pilots (low time and transient)
- Head on a swivel
- Understand the CARS, AIM and CapGen
- Have a mental picture before launching or entering the MF Area
- Communicate – more is better
- Transponders always ON – some of us have Traffic Avoidance
- Cadors will become the norm in an effort to illustrate the problem to NAV Canada and TC



Notes



- "MUST" & "PROHIBITED" are words being used to enhance a common approach to good airmanship and overall safety in aircraft operations on the aerodrome surface and in the airspace around the aerodrome. They are both used to mean that the actions are recommended (or not), rather than being illegal
- The CARS and the AIM are written to promote overall safety and good airmanship, not to be seen as unnecessary bureaucratic interference of our flying privileges
- Everything we have presented and included in the accompanying documentation are for operations at the Toronto Buttonville Airport and its airspace are under the principle that exercising good judgement and airmanship will lead to increased safety for all



About the Circuit Diagrams

- This is a representation of what people should do
- The CARs do not preclude you from doing something other than outlined in the diagram
- What is in the diagram is highly recommended
- VFR Traffic may see circumstances where deviations from this diagram are the safest thing to do
- The CARs do not require you to “join a circuit” before landing
- IFR Traffic may make landings via patterns that are not recommended for VFR traffic or do not conform to the VFR traffic: i.e. straight into Final, directly on to the Base, 45 degree entry to the Downwind



Resources

- **Nav Canada Forecasts** <https://flightplanning.navcanada.ca/cgi-bin/CreePage.pl?Languge=anglais&Page=Fore-obs%2Fmetar-taf-map&TypeDoc=html>
- **Live RVR** <http://atm.navcanada.ca/atm/iwv/CYKZ>
- **Transportation Appeal Tribunal**
Case: http://www.tatc.gc.ca/decision/decision.php?dc_id=1372&lang=eng
- **CARS:** <http://www.tc.gc.ca/eng/acts-regulations/regulations-sor96-433.htm>
- **AIM:** <https://www.tc.gc.ca/eng/civilaviation/publications/tp14371-menu-3092.htm>