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Aerodrome Traffic Circuit

- Review Slow Flight and Take-Off
- Definition and Motivation
- Aerodrome Traffic Circuit
- Summary and Questions
- Pre-Flight Briefing

Review Slow Flight and Take-Off

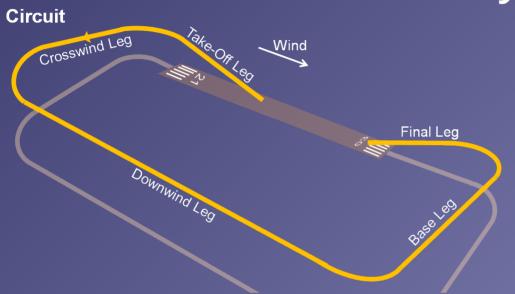
- Mentally perform a recovery from slow flight and state all observations and required actions.
- What actions have to be completed before initiating a take-off?
- Describe the take-off phases line-up, run and initial climb.
- What are the criteria for a normal take-off?
- Mentally perform a normal take-off and state all observations and actions.
- What causes wake-turbulence and how does it affect your take-off?

Definition and Motivation



- Standardized rectangular traffic circuit at aerodromes
- Ordered and organized flow of traffic to avoid conflicts
- Safety and traffic separation, stabilized approaches
- Types: controlled and uncontrolled aerodrome circuit
- Applications: portion of a circuit is flown in every single flight

Circuit Layout





- Sides: Upwind and Downwind
- Standard left-hand aerodrome circuit with 1000' AAE circuit height
- Standard crosswind and base legs transition between **500**' and **1000**' **AAE**
- Consult Canadian Flight Supplement for specific layout and procedures
- Modifications due to obstacles, noise abatement and points of interest

Circuit Procedures

- Climb to 500' AAE or as assigned on upwind leg
- Transition to Vy and perform cockpit checks (flaps up)
- Climb to 1000' AAE or as assigned on crosswind leg
- Perform cockpit checks on downwind (switches)
- Turn base leg at 45° or as assigned past threshold
- Configure for landing on downwind and final legs
- Establish stabilized approach on final leg
- Maintain speed and spot with stable descent rate
- Go around if necessary
- Maintain lookout and separation: situational awareness

Circuit Radio Procedures and SOPs





- Report entry leg
- Report downwind leg (standard left or right) and intentions
- Perform downwind leg midfield checks
- Report final leg check final items
- Assure clearances for landings and deviations or exercises if required in the environment

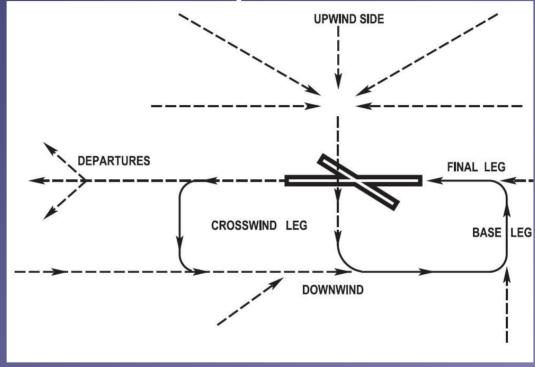
Controlled Airports





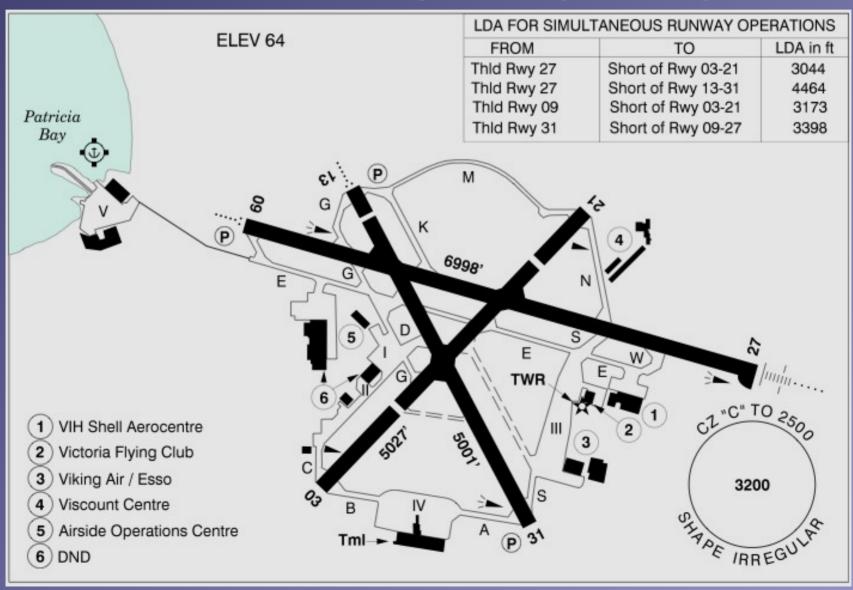
- Control zones with traffic patterns to join circuit
- Standard control zone extends 5 NM radius up to 3000' AGL
- Airspace requirements: weather minima, communication, clearances, equipment

Controlled Airports Procedures



- Concrete procedures are described in the CFS
- Instructions are to be followed on towered airports
- Advisories help decision making on non-towered airports
- Maintain constant lookout, separation and order

Towered Airports (CYYJ)





Towered Airports (CYYJ)

PRO

PPR for non-transponder ops within Victoria Twr class "C" airspace 250-655-2866. VFR dep acft ctc clnc del unless closed by ATIS. Rgt hand circuits Rwy 09, 21 & 31 (CAR 602.96). Ngt ops Rwy 03/21 not auth exc for tkof on Rwy 03. Rwy 03/21 restricted to max 65,000 lbs for tkof and ldg. No weight restriction for taxiing acft Rwy 03/21 south of Rwy 13.

VFR ARR/DEP ROUTES

ARRIVALS:

Beaver Point, Brentwood, Cordova, Cowichan, D'arcy Island, Shawnigan Lake, Stuart Island

ALL ROUTES - Obtain ATIS message

Contact outer twr 119.1

Squawk assigned transponder code

Fly assigned routing

Maintain 2000' until cleared lower or turning final

Contact 119.7 at arrival point for landing instructions

NOTE: If unable contact on 119.7 at arrival point, proceed to final approach and maintain 2000'

DEPARTURES:

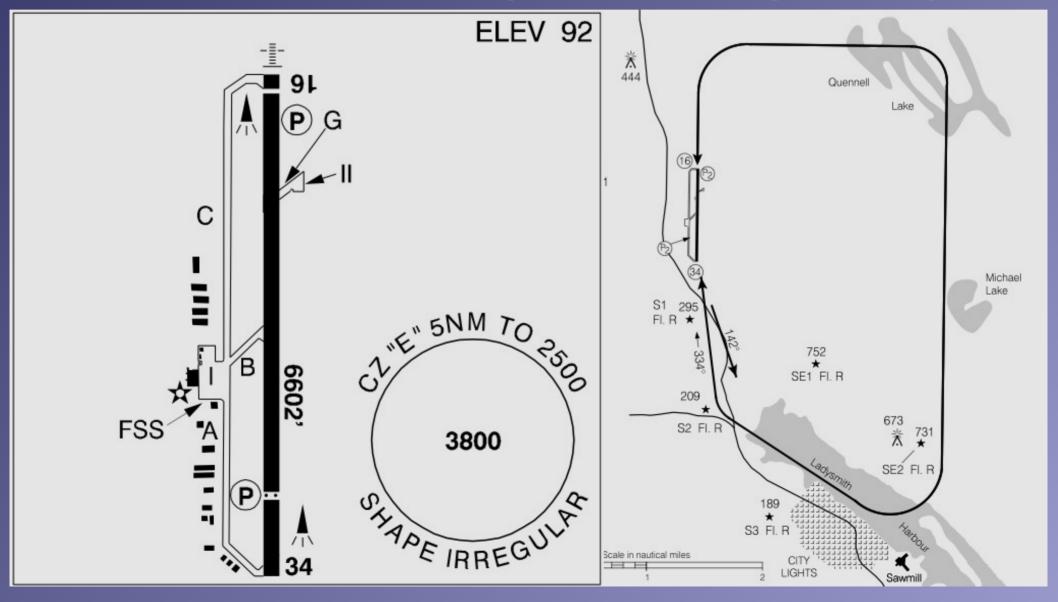
Beaver Point, Brentwood, Cordova, Cowichan, D'arcy Island, Moresby Island, Shawnigan Lake, Stuart Island

ALL ROUTES - Fly direct to assigned departure point

Maintain 1500' until cleared higher

Contact 119.1 leaving 1000'

Non-Towered Airports / MF (CYCD)



Non-Towered Airports / MF (CYCD)

PRO

AIRPORT RESTRICTION: Pursuant to CAR 602.96 (3)(d) aprt use rstd acft with a wingspan of less than 118'

Circuit alt 1200 ASL. Avoid flt over built-up areas below 1000 ASL.

Rwy 34:Rgt hand circuits (CAR 602.96). Maintain 1200 ASL til over Ladysmith Harbour, See VTPC.

Rwy 16:Climb to safe alt. Left turn hdg 142° til over Ladysmith Harbour. Climb over Harbour to 1000 ASL BPOC. See VTPC.

Gliders:Circuits to W of aprt.

Procedures for crossing the southern Strait of Georgia within Tml Class C airspace refer to Vancouver Intl, VTPC for Crossing the Southern Strait of Georgia.

ATS REQUIREMENTS:

All VFR acft arriving, departing or transiting the Vancouver or Victoria Tower Class C or D airspace require a transponder code.

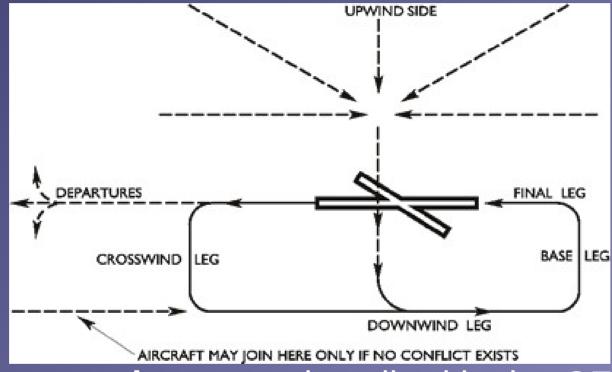
- All acft departing Vancouver or Victoria Intl (including Water Aerodrome) call Kamloops FIC at 866-992-7433 (866-WXBRIEF) or 866-541-4101 for code assignment at least 30 min prior to flight or file a VFR Flight Plan/Flight Itinerary.
- All acft arriving Vancouver, Victoria Intl (including Water Aerodrome) or transiting Vancouver or Victoria Control Zones obtain a code from one of the following ATS units: Vancouver Harbour, Nanaimo, Victoria Harbour, Boundary Bay, Langley, Abbotsford or Pitt Meadows, or call Kamloops FIC at 866-992-7433 (866-WXBRIEF) or 866-541-4101.
- All acft arriving Victoria Intl from a non NAV CANADA site call Kamloops FIC at 866-992-7433 (866-WXBRIEF) or 866-541-4101 for code assignment at least 30 minutes prior to flight or file a VFR Flight Plan/ Flight Itinerary.

Uncontrolled Aerodromes



- Located in uncontrolled airspace (G)
- Airspace does *not* require radio contact, clearances or special equipment

Uncontrolled Aerodromes Procedures



- Concrete procedures are described in the CFS
- Advise other aircraft of your position and intentions
- Be aware of and lookout for potential NORDO traffic
- Maintain constant lookout, separation and order

Uncontrolled Aerodromes / ATF (CAM3)

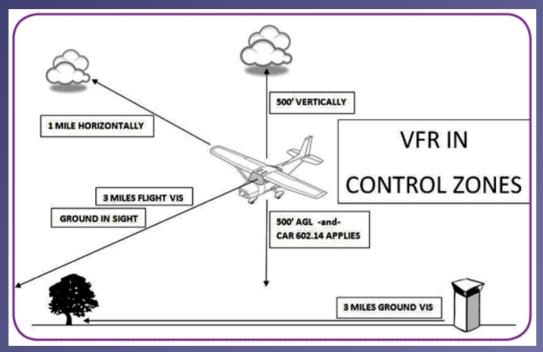
DUNCAN BO		CAM3			
REF	N48 45 30 W123 43 00 Adj SSW 17°E (2013) UTC-8(7) Elev 300' VTA A5004	ELEV 300 Q			
OPR	Duncan Flying Club 250-216-8001 Reg				
PF	B-1 C-2,3,4,5,6	Q APOIUS SAME E			
FLT PLN FIC	NOTAM FILE CYCD Kamloops 866-WXBRIEF (Toll free within Canada) or 866-541-4101 (Toll free within Canada & USA)				
SERVICES S	4,5				
RWY DATA	Rwy 13/31 1520x30 asphalt. Rwy 31 up 0.5%. Thld Rwy 13 displ 70'. Opr				
LIGHTING	13-(TE LO), 31-(TE LO)				
COMM	tfc 122.8 2NM 3300 ASL				
PRO NOISE	Rgt hand circuits Rwy 13 (CAR 602.96). Noise Abatement Procedures: dep Rwy 31, climb rwy hdg, then climb hdg 291° when safe, til clear of subdivision. Avoid noise sensitive area to the E.				
CAUTION	Ravines at both ends; gravel pit & 4' windrow W side rwy. Downdrafts, crosswinds & windshear may be encountered. Trees on apch to Rwy 31. <u>Strongly</u> recommended that only pilots familiar with aprt & Icl terrain should use this aprt dur hrs of darkness.				

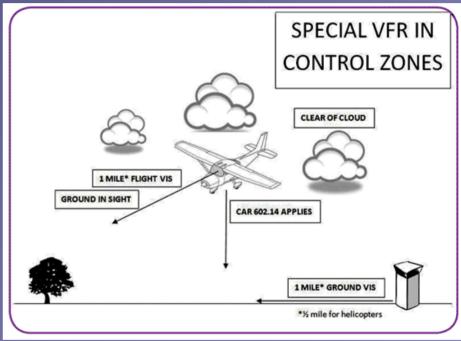
Crossing Control Zones



- Crossing requirements depend on airspace structure
- Radio contact, transponder, clearance, routing
- Refer to Terminal Chart and CFS procedures

Special VFR





- Allows to enter a control zone in IMC under VFR
- Special VFR has to be requested by the pilot
- Special VFR can be denied due to IFR traffic

Summary / Quiz

- What are the two main types of circuits and how do they differ?
- Describe the standard circuit with respect to legs, sides, directions and heights.
- Where do you find what particular circuit and procedure applies to an aerodrome?
- Assume you want to join the Nanaimo traffic circuit approaching from Victoria. The ATIS informs you that the weather is VFR and the active runway is 34.
 Mentally perform the procedure and state all observations and required actions.

VFR Minima

Figure 2.7 - VFR Weather Minima*

AIRSPACE		FLIGHT VISIBILITY	DISTANCE FROM CLOUD	DISTANCE AGL
Control Zones		not less than 3 miles**	horizontally: 1 mile vertically: 500 feet	vertically: 500 feet
Other Controlled Airspace		not less than 3 miles	horizontally: 1 mile vertically: 500 feet	_
Uncontrolled Airspace	1 000 feet AGL or above	not less than 1 mile (day) 3 miles (night)	horizontally: 2 000 feet vertically: 500 feet	_
	below 1 000 feet AGL – fixed-wing	not less than 2 miles (day) 3 miles (night) (see Note 1)	clear of cloud	_
	below 1 000 feet AGL – helicopter	not less than 1 mile (day) 3 miles (night) (see Note 2)	clear of cloud	_

Pre-Flight Briefing

- Exercise
- Training Area
- Departure and Arrival Procedures
- Weather Briefing / NOTAMs
- Aircraft and Documents
- Time and Fuel Requirements
- Safety Considerations and Responsibilities

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The Circuit (Ex. 17, LP. 3-10, 20)

- Objective
- Review
- Motivation
- Howto
- Summary / Questions
- Preflight Briefing



Terminal and Transition Airspace