

Waterloo Wellington Flight Centre

Client Manual

Version 2.4
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Waterloo Wellington Flight Centre

Company Policies – Flight Training Program Outline

Welcome to Waterloo Wellington Flight Centre and thank you for choosing this Flight Centre as your professional training institution. This manual will assist you in knowing the important procedures here at the Flight Centre and should serve as a guide to you through your experience.

We are excited to have you here as a client and are eager to make your time here a memorable one.

Our Vision

To be the top flight school in Canada, providing excellence in training, equipment and facilities creating the highest degree of customer satisfaction and success.

Our Mission

The mission of the Waterloo Wellington Flight Centre is to provide members of the aviation community with the opportunity to pursue their goals supported by the highest quality resources in the safest environment.

Our Values

Dedication to customers
Respect and recognition
Commitment to a culture of safety
Leadership and innovation
Collaboration and camaraderie
Honesty and integrity
Accountability to our stakeholders
Open communication

This Document

The Client Manual was written to provide clients with more detailed information that is critical to their success and is meant to be a supporting document to the Client Access Agreement. This document accompanies the Client Access Agreement.

Throughout this document you will find topics covered such as: Fleet, scheduling, making bookings, aircraft currency rules, weather, and more. For client policies and WWFC code of conduct please reference the Client Access Agreement.

WWFC Operations

As a large complex organization it is vital that all staff, students and customers are aware of the policies and procedures that are in place at WWFC. The following are a brief summary of the documents that outline operations here at WWFC. They are accessible to pilots for reference in the library behind dispatch. They include:

1. WWFC Flight Training Operations Manual/Training Manual
2. WWFC Maintenance Control Manual
3. Flight Instructor Guide (Transport Canada)
4. Human Factors for Aviation (Transport Canada)
5. Flight Training Manual (Transport Canada)
6. Current Charts and Maps for Operations
7. Aviation Information Manual (Transport Canada)
8. PCC Program Syllabus Documents (If applicable)

General Information

- WWFC is open seven days a week. Our hours of operation can be found on our website wwfc.ca. At times we will close early based on weather. You can get flight status updates live by following us on twitter.
- Twitter user name @wwfcstatus
- Day/Night times are posted on the authorization board and are regularly updated. All non-night rated pilots need to be on the ground one hour prior to sun down (Unless working on a night rating).

Private Pilots Licence and Stand-Alone Training

- A new client orientation and briefing meeting will be done by our customer relations manager, during this orientation you will be paired with your flight instructor
- Training plans will be set up, implemented and monitored by our Team Lead and/or the assigned flight instructor

Program Students

- All training will be conducted according to syllabus and program outline
- New student briefing and orientations will happen throughout the program

Instructional Staff

WWFC employs over 40 highly qualified Transport Canada licensed Instructors. From classes 1 through 4, they are professionals that provide the highest caliber of instruction and strive for you to be successful.

The Fleet

Waterloo Wellington Flight Centre is proud to offer a large variety of aircraft for its customers. The models currently operated are:

Cessna 152's
Cessna 172N's
Cessna 172S's

DA-40's
Piper PA-44's Seminoles
Piper PA28R's Arrows

ALSIM ALX – Level 2+ Transport Canada Approved

The ALSIM ALX at WWFC provides six different aircraft types and covers the entire flight training curriculum from A to Z: PPL to MCC, including jet transition training.

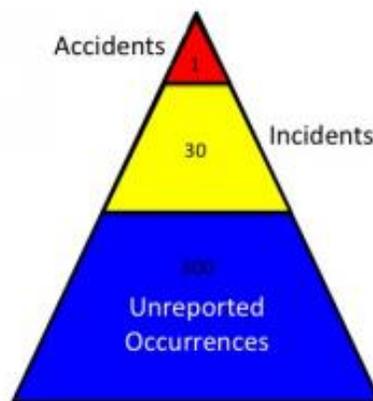
It offers the following flight models:

- Single piston, constant pitch propeller and fixed landing gear, with classic or EFIS instrumentation (i.e.C172)
- Single piston, variable pitch propeller and retractable landing gear, with classic or EFIS instrumentation (i.e.C172RG)
- Twin piston with classic or EFIS instrumentation (i.e. Piper Seminole)
- Light twin turboprop with EFIS instrumentation (i.e. King Air 200)
- Medium twin turboprop with EFIS instrumentation, complex systems and dual FMS. (i.e. ATR42)
- Light twin fanjet with EFIS instrumentation, complex systems and dual FMS. (i.e. CJ2)

It's also an excellent platform for pilots looking to renew their IFR, for recency, as well as initial IFR training.

Safety Program

WWFC's flight operations are subject to a Safety Management System (SMS). The objective of the SMS is to identify hazards to safety and reduce risks. By collecting safety data and identifying the systemic causes of minor occurrences, corrective actions can be implemented, in the goal of reducing the occurrence rate. A key principle of aviation SMS is that an overall reduction in the rate of minor occurrences should lead to a reduced likelihood of a major accident.



Source: https://www.skybrary.aero/index.php/Heinrich_Pyramid

To function effectively, our SMS requires safety information. This is gathered from various sources:

- Internal Safety Management System reports (link can be found on our website wwfc.ca)
- External occurrence reports (CADORs, airport/ATC SMS reports)
- Flight data collection

All pilots are urged to report any aviation occurrence, near-miss, regulation or rule violation or hazardous conditions to WWFC's Safety Management System (www.flightschoolsms.com/Public/ReportForm.aspx/wwfc). These reports are reviewed and categorized and used by WWFC personnel to monitor safety trends and direct corrective action initiatives.

Corrective actions take many forms, but please pay attention to any safety emails that are distributed, and please take the time to review the safety board at dispatch regularly.

Scheduling & Making Bookings

Booking Flights Using Wingman

At WWFC we use a program called Wingman to book flights. Once you've paid your client access fees you will be given a link to Wingman. Your username will be your email address.

Bookings can be made 30 days in advance, to do so login to <http://www.wingmanreservations.com>, find a date and time that works for both you and your instructor.

In order for all clients of WWFC to obtain flights, aircraft utilization is a top priority. When booking, please only book your flight time. For example, if you would like a 1.7 air time, then book a 2.0. The 2.0 would include the time it takes to dispatch and walk around the aircraft.

When booking flights, feel free to use our stand-by option. If you cannot find a time that is suitable to you, try using the find function or book a standby flight. Once a time becomes free, dispatch will schedule your standby reservation for you.

From time to time, our aircraft go into maintenance for issues beyond our control. If this happens your booking may be moved to the standby line and you will be given priority over other standby bookings.

If at any time you need assistance with booking flights, please call dispatch at 519-648-2213

Remember these guidelines when booking flights:

- 300 nm and flights over 4 hours can only be booked by the dispatch team, to do this please call 519-648-2213.
- Any booking four hours or more requires an extended rental form to be filled out and approval from CFI prior to booking the flight. This also includes transborder and overnight flights.
- If a student cannot keep a scheduled flight, they must cancel their bookings as soon as possible with their instructor.
- If your booking is canceled by you with less than 24 hours' notice, a charge of 1.0 ground instruction may be charged to you, unless the cancellation is weather-related or due to extenuating circumstances.
- If a you need to cancel a dual flight, always make sure you have talked to your instructor.
- If you cannot fly due to reasons like weather, dispatch can cancel the flight..
- Renters must show valid pilots license including ratings, radio license, valid medical and be current with the aircraft type.
- Progress rides must be booked by the Team Leads thru your instructor.

Fleet Captain

Always arrive at least 15 minutes prior to your scheduled flight time. In Fleet Captain and enter your name, your instructors name, aircraft type and exercises. (Computers are located in the flight planning room for convenience). Once your briefing is done, see dispatch and press ready on the tablet. This will send a message to the dispatch team letting them know that you are ready to go. The dispatch team will verify the weight and balance based on the information given in the fleet captain request and request any fuel that is needed. You will receive the aircraft document binder at this time.

You will sign both copies of the flight authority and if it is a dual flight, then you will have your instructor sign as well. One signed flight authority stays at dispatch and one goes with you on the flight. Keys will be given out once both pages are signed by the appropriate people.

If for any reason we are experiencing technical issues, like internet or power outages, we will revert to a paper system. Please ask dispatch for details.

Returning From Your flight

If you have a QR reader on your mobile device, you can scan the QR code on the bottom of the flight authority sheet from the plane and enter your HOBBS start and stop, time up and down.

Or go to dispatch and enter your flight information into the tablets at the dispatch desk, please see the dispatcher to pay for your flight.

Aircraft Currency Rules by Aircraft Type

The following is a clarification of the currency rules which are in place at the Waterloo Wellington Flight Centre and apply to all clients. Occasionally, these rules may be overridden by the Chief Flight Instructor.

Non-Complex Aircraft:

C152, C172N and C172S (Including G1000 Equipped 172S)

- (1) If you have 150 total hours or less:
 - a) If it has been more than 30 days since you last flew the C152, C172N or C172S, but less than 60 days, a circuit check is required.
 - b) If it has been more than 60 days, a complete checkout is required.
- (2) If you have more than 150 total hours:
 - a) If it has been more than 60 days since you last flew the C152, C172N or C172S, but less than 90 days, a circuit check is required.
 - b) If it has been more than 90 days, a complete checkout is required.
- (3) All renters:
 - a) Flying the C152 does not maintain currency on any other aircraft type.
 - b) Flying the C172N or C172S does not maintain currency on the C172RG.
 - c) Flying the C172S does maintain currency on the C172N, provided an initial full checkout on each type has been completed.
 - d) Flying the C172N does maintain currency on the C172S, provided an initial full checkout on each type has been completed.
 - e) G1000 Equipped Cessna 172s
 - f) If you have less than 10 hours of flight time with G1000 equipped aircraft (at WWFC or elsewhere)
 - i. If it has been more than 30 days since you last flew a G1000 equipped aircraft at WWFC, but less than 30 days, a circuit check is required.
 - ii. If it has been more than 60 days since you last flew a G1000 equipped aircraft at WWFC, a complete checkout is required.
 - iii. (b) If you have more than 10 hours of flight time with G1000 equipped aircraft (at WWFC or elsewhere), the Cessna 172S currency rules apply with no additional restrictions.
 - iv. (c) Provided you have been checked out on the non-G1000 equipped C172S, flying the G1000 equipped C172 maintains currency on all 172S models.

Information Note: An initial full checkout is required on the C172S, even if you are already checked out on the C172N. Pilots who are current on the C172S must complete differences training in order to fly the G1000-equipped C172S. It is the intent of these policies that after initial training and a minimum level of experience with the G1000 system as stated in 9.18.1(4), all Cessna 172S aircraft can be treated as a common fleet.

Complex Aircraft:

C172RG (Cutlass), PA28R (Arrow) and DA-40 G1000

- (1) To rent the C172RG (Cutlass), PA28R (Arrow) or DA-40, renters must have:
 - (a) 75 hours total time
 - (b) 15 hours post-private flying experience
 - (c) Flown the C172RG, PA28R or DA-40 for at least one hour in the previous 30 days
- (2) If it has been more than 30 days since you last flew the C172RG, PA28R or DA-40, but less than 60 days, a circuit check is required.
 - (a) If over 60 days have lapsed, a complete checkout is required.

Information Note: Flying the C172RG, PA28R and/or the DA-40 does not maintain currency on any other aircraft type.

PA-44 (Piper Seminole)

- (1) To rent the PA-44 (Piper Seminole), renters must have:
 - (a) 150 hours total time
 - (b) 15 hours of Multi-Engine time.
- (2) If it has been more than 30 days since you last flew the PA-44, but less than 45 days a circuit check is required.
- (3) If it has been more than 45 days, a complete checkout is required.

Information Note: Flying the Piper Seminole does not maintain currency on any other aircraft type.

Weather

WWFC may limit flight operations based on forecast or actual crosswind conditions. This takes into account surrounding weather reports and PIREPs. The limits for each aircraft are set at the (Demonstrated Crosswind Limitation or DCWL) outlined in the specific aircraft model's POH.

Minimum Weather Conditions: VFR Student Solo

1. Day restrictions apply to the following:
 - (a) SPP holders
2. Night restrictions apply to the following:
 - (b) PPL holders who do not hold a Night Rating

A student's flight instructor may from time to time specify greater restrictions than those listed below. This will be noted the student's PTR.

VFR Student Solo Standards					
Day	Visibility	Ceiling	Temperature	Wind	Minimum Fuel
Circuit	5+ SM	1500' AGL	Minimum -25°C (ambient)	Crosswind: DCWC Gust: 25 knots OR Limitation noted in PTR (whichever is more restrictive)	1 hour reserve For solo XC, max allowable fuel (min 1 hour)
Local Flight	6+ SM	2000' AGL			
Cross-Country	6+ SM	3000' AGL			
Night	Visibility	Ceiling	Maximum +35°C (ambient)	Limitation noted in PTR (whichever is more restrictive)	For solo XC, max allowable fuel (min 1 hour)
Circuit	6+ SM	1500' AGL			
Local Flight	8+ SM	3000' AGL			

Minimum Weather Conditions: VFR Licenced Pilots

1. Day restrictions apply to the following:
 - a. A student who holds a RPP or PPL or CPL.
 - b. Flight instructors who are conducting flight training under VFR flight rules.
 - c. Rental flights.
2. Night restrictions:
 - a. A student who holds a PPL with a Night Rating or CPL.
 - b. Flight instructors who are conducting flight training under VFR flight rules.
 - c. Rental flights.
3. In certain instances the Duty Pilot may authorize specific flights in accordance with CARs.
4. Training flights conducted by pilots who hold a RPP or PPL and/or a night rating may have weather restrictions greater than these minima written in their PTR by their flight instructor.
5. The night restrictions assume that the pilot has a night rating or a licence that is not restricted to "Day only".

VFR Licenced Pilot Standards					
Day	Visibility	Ceiling	Temperature	Wind	Minimum Fuel
Controlled Airspace	3+ SM	1500' AGL	Minimum -25°C (ambient) Maximum +35°C (ambient)	Crosswind: DCWC Gust: >30 knots OR Limitation noted in PTR (whichever is more restrictive)	1 hour reserve For solo XC, max allowable fuel (min 1 hour)
Uncontrolled Airspace (1000' AGL and above)	1+ SM	2000' AGL			
Night	Visibility	Ceiling			
Control Zones	3+ SM	1500' AGL			
Outside Control Zone	5+ SM	2000' AGL			

Minimum Weather Conditions: Special VFR

1. Intentional flight in Special VFR is permissible only by day.
2. All SVFR flights are subject to prior approval by the CFI or Duty Pilot.
3. Student pilots are to use Special VFR for the purpose of landing only (this should happen only in the case of inadvertent encounter with SVFR conditions).

Special VFR		
Day	Visibility	Ceiling
Control Zones	1 SM	500' AGL
Night	Visibility	Ceiling
Control Zones (arrival only)	1 SM	500' AGL

Minimum Weather Conditions: IFR

1. All flights in actual IMC are subject to approval by the CFI or Duty Pilot.
2. IFR flights are limited to CARs, Canada Air Pilot and WWFC minimums/maximms.
3. The CFI or Duty Pilot can place higher limitations on IFR flights on a case by case basis.

Minimum Operating Altitude for Cross-Country VFR Flights

1000 feet above the highest obstacle or built-up area located within a horizontal distance of 2000 feet from the aircraft, and 500 feet from any person, vessel, vehicle or structure.

Fuel and Oil Reserve Requirements

Minimum fuel requirements for WWFC operations are as follows:

Flight Operation	Minimum Fuel Requirement sufficient for:	
VFR flights	The planned flight plus	
	Dual and solo circuits	1.0 hr reserve
	Dual cross country	1.0 hr reserve
	Solo cross-country	1.0 hr reserve
	Plus a further contingency reserve if required by any factors that may affect the planned duration of the flight. A minimum 20% contingency is highly recommended.	
IFR flights	The planned flight plus	
	Conducting an approach and a missed approach	
	A flight to the alternate aerodrome	
	A minimum 1.0 hr reserve at normal cruising speed	
	Plus a further contingency reserve if required by any factors that may affect the planned duration of the flight. A minimum 20% contingency is highly recommended.	

Flight operations shall follow the guidelines set forth by the manufacturer in regards to minimum and maximum oil requirements. These guidelines are outlined in the Pilot Operating Handbook under Airplane Handling, Service and Maintenance Section.

Performance Limitations on Soft Field Surfaces

- Flights to/from soft fields should account for extended take-off/landing distances. It is the PIC's responsibility to pre-calculate the required distances when conducting operations into/out of unprepared surfaces. The aircraft's POH will supply the minimum performance limitations. (A good rule of thumb is to add 100% to calculated field lengths to allow for safe operations.)
- In calm wind conditions (less than 10 knots headwind component) and on grass fields, the C-152 is restricted from practicing obstacle clearance operations.

All pilots are to request prior authorization from the CFI and/or Duty Pilot to operate in or out of soft or unprepared fields (Grass). Pilots will require prior experience to attempt these operations solo. A list of pre-approved fields is posted on our flight authorization board. Please note, loose gravel runways will not be permitted due to damages that occur on this type of surface.

Information Note: Approved fields for dual and solo practice are listed on the Approved Soft Field List located on the Flight Authorization Board and authorization needs to be given by the Duty Pilot.

Airports Without Winter Maintenance

All pilots will be restricted from operating into or out of airports that state in the CFS "No Winter Maintenance", until authorization is posted on the authorization board by the Duty Pilot. Generally, the restriction will be posted from October to May and may vary year to year due to annual conditions.

Use of Checklists

Checklist will be supplied and stored in the aircraft. These checklists contain all the required manufacturer suggested checks and additional checks deemed important by WWFC. Pilots using WWFC aircraft are to use the checklists while operating WWFC aircraft to ensure safety. If checklists are missing from the aircraft, additional ones can be obtained by dispatch. Use of the POH checklist is also permitted in absence of a WWFC checklist. It is important to ensure that checklist items and equipment set-up are to be completed during stopped phases of ground operations to allow the pilot 100% concentration on taxi manoeuvres. Only checklist items requiring motion as stated in the POH shall be done by WWFC pilots.

Securing of Items in the Aircraft

All loose items in the aircraft during ground and flight operations shall be secured. Pilots are not to exit the aircraft outside of the apron at WWFC during ground taxi to retrieve any items unless it is an emergency. Please have airport personnel notified of any objects on the airfield that may have been ejected from an aircraft.

Securing Aircraft

Every effort shall be made to secure an aircraft when not in use at all locations where a ground stop is required. Adequate securing of the aircraft is dependent on the duration of the layover and the current forecast weather. The proper procedure for securing an aircraft is as follows:

1. Park aircraft in the designated parking location following direction of a Marshall (if present).
2. Every effort should be made to park the aircraft into the prevailing wind.
3. Secure the aircraft in such a manner that it would not move. Chocks are preferable to the parking brake as the parking brake is prone to failure and may cause aircraft damage if towing is attempted with brake engaged.
4. If the winds are forecast or exceed 15 knots for the period the aircraft is to remain stationary, the aircraft shall be secured with tie down ropes on the wings and tail.
5. Aircraft parked overnight shall always be tied down or put in a hanger.

Tie down ropes are available from line crew. It is recommended tie down ropes be carried on-board for flights in which they may be required.

Maintenance Problems – Away from CYKF

In the unlikely event maintenance problems are encountered away from home base during a flight, the pilot must call the WWFC Dispatcher toll free at 1-877-359-9932 and get in touch with our maintenance staff and/or Duty Pilot for advice to rectify the problem. All repairs must be authorized by our Maintenance staff.

The customer is expected to safeguard the aircraft until it is ready to be flown back. WWFC is not responsible, financially or otherwise, to provide alternate travel arrangements when such problems might occur.

Unscheduled Landings

Should a forced or unscheduled landing become necessary, follow all procedures in the POH to ensure a safe landing. After landing, WWFC emergency procedures are in the aircraft's document binder to assist in securing the aircraft and acquiring help. As soon as practical, contact WWFC through the quickest means. Information on contact numbers are in each aircraft's document bag.

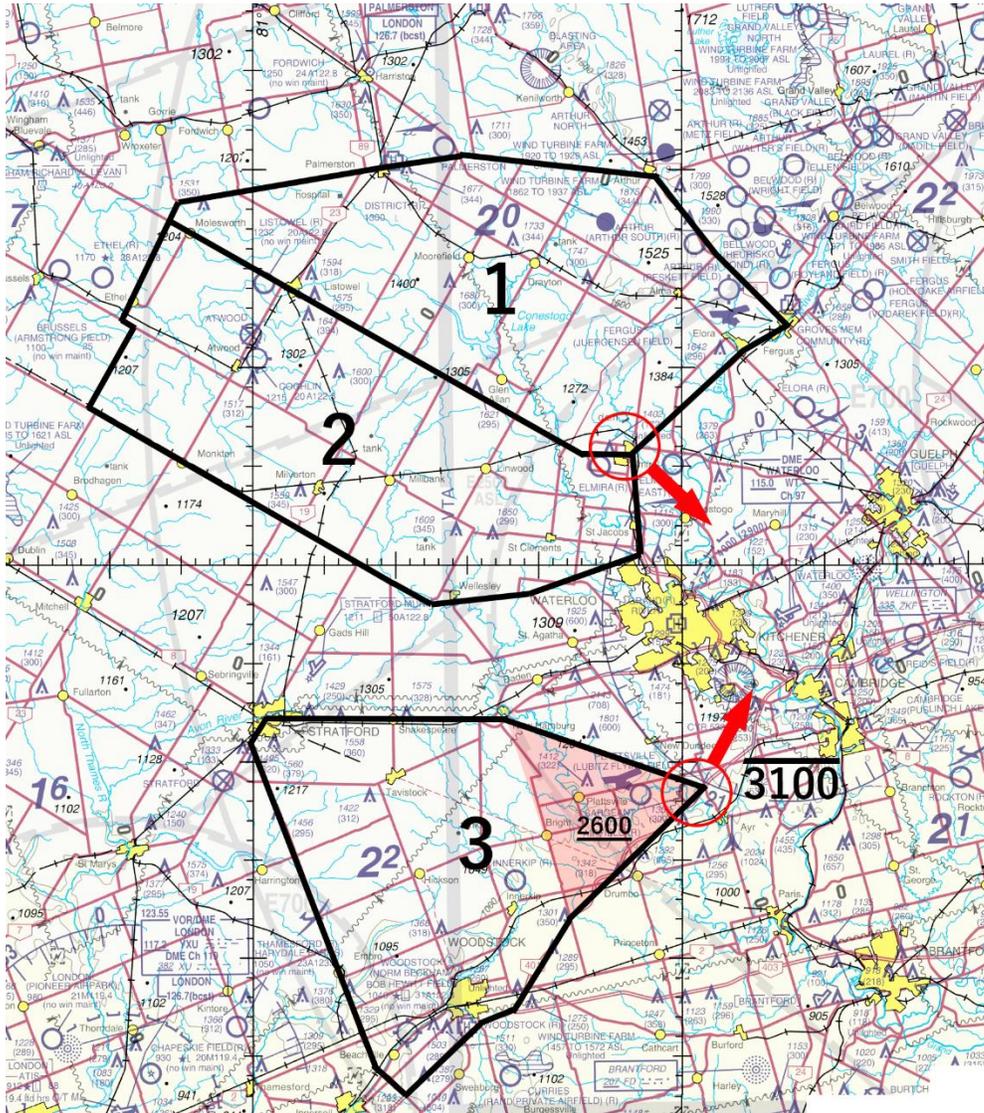
Warning:

1. Do not attempt to take off from the landing area
2. Do not move or disturb the aircraft unless absolutely necessary to prevent injury

Practice Areas

Unless sanctioned by an instructor, all practice shall be conducted within one of the designated practice areas. The practice areas are designed to minimize the risk associated with crowded airspace and inhospitable terrain. Our frequency for reporting your position(s) in the practice area is 123.025 and regular reports should be made indicating position, altitude and intentions to "Waterloo traffic". On return from one of the practice areas, please try to use one of the entry points detailed below: Elmira or Ayr. Contact with ATC should be established at a minimum of 10 nm from the airport and not immediately outside the control zone due to risk of entering before a clearance has been granted.

Practice Area Map



Practice Area	Departures To	Returns From
1	Head N (pass east of Elmira)	Return via Elmira
2	Head WNW (pass south of Elmira)	
3	Head WSW (pass over New Dundee)	Return via Ayr & 401 (at or below 3100' and above 2600')

Please note the shaded area denotes - not below 2600' ASL