Hespeler Model Aviators Inc 2400 Hespeler Road Rules (2025)

MAAC Approved September 17, 2025

The following rules package must be available to all RPAS Pilots while operating RPAS at this site, either electronically or in print. Nothing in these rules relieves the RPAS pilot of their individual CAR compliance requirements.

This site is located in controlled airspace. All RPAS operators shall conform to the Canadian Aviation Regulations, MAAC policies and site rules contained in this document.

Administrative Rules

Site Operator Name: Hespeler Model Aviators Inc (#496, Zone E)

Site Name: 2400 Hespeler Road

Location: 2400 Hespeler Road, Cambridge, Ontario N3C 2V3

Pilot Station Coordinates: 43° 27' 45.10" N, 80° 18' 38.0" W

(43.462528, -80.310556)

Site Contact(s): Paul Quinlan, President

p quinlan@rogers.com, 519-241-4136

Conditions for Use - All persons using this modelling site must:

- 1. be MAAC members in good standing.
- 2. be members of Hespeler Model Aviators Inc, or an invited guest of Hespeler Model Aviators Inc and
- 3. agree to follow the MAAC Safety code and all other site rules.

Any MAAC member attending an Event at this site must agree to attend any modeller briefing, or otherwise read and follow all site/Event rules. The site operator is responsible to take reasonable steps to ensure a modeller briefing occurs for each modeller using the site.

Site Administrative rules

- 1. Guests are welcome, must receive pilot briefing explaining club rules, policies, no fly zones etc.
- 2. Guest must sign waiver acknowledging club rules.
- 3. Flying FPV is not permitted over 400'AGL.
- 4. The Club Executive is responsible to ensure there are procedures in place to brief all visiting RPAS pilots at any event this site may hold.
- 5. Spectators are welcome and will remain in the designated spectator area.
- 6. No children under 12 can be left unattended anywhere on the property. Flying your plane while your kids are running around in the pits is considered leaving them unattended.

MAAC SFOC # 930433 Page 1 of 20

- 7. Pets are welcome, should be kept on a leash. Pet owners must clean pet droppings. Pets to remain in spectator area.
- 8. The Johnny on the spot is maintained and should be used. The barbeque is provided for the benefit of all members.
- 9. The rules will be reviewed by the club at least annually and updated as needed.

Site/event emergency response requirements

In the event of an emergency, call (9-1-1 or phone number) - the site address to be provided to first responders is:

2400 Hespeler Road, Cambridge Ontario N3C 2V3

- 1. First Aid Kit and Fire Extinguisher located in box on deck.
- 2. Flight stands with restraints to be used when starting i.c. model engines or arming electric motors. Pilots are responsible for providing restraints for larger models during start up procedures on the ground.

Modelling Rules

MAAC Approved Modelling Categories

The following categories of MAAC modelling are approved at this site/event. In addition to the MAAC Safety Code, there may be site specific rules contained in this document.

Approved Category	Weight/Power Limits	Altitude/operating limits
mRPAS	Less than 250 grams	400'agl
RPAS	25kg or less	400'agl
Tethered (Control-Line)		
Free flight	Not Approved	
Space Models		
Surface Vehicles		

MAAC Approved Site Add-ons

The following "add-ons" have been approved at this site, provided all relevant MAAC rules, policy and SFOC conditions are adhered to by the site and its users.

Approved Add-on	Weight/Power Limits	Altitude/operating limits
RPAS Weight (25-35kg)	Not approved	
RPAS Altitude	Less than 25kg	As approved by NAV CAN or a
		maximum of 1700'AGL
RPAS Altitude and Weight >25kg	Not approved	
RPIC	See section below	As approved by NAV CAN or a
		maximum of 1700'AGL

MAAC SFOC # 930433 Page 2 of 20

RPAS/Model technical specifications or requirements or restriction

- 1. mRPAS requirements
 - a. Members may operate mRPAS at this site without any RPAS pilot certification, registration or additional airspace permission provided the following conditions are met:
 - All mRPAS must be flown in direct control mode only. "Drones" are prohibited.
 - Members are responsible to ensure the RPA weight is below 250 grams ready to fly.
 - b. mRPAS cannot be registered with Transport Canada. mRPAS are however regulated under CAR900.06 and part VI of the CAR. Compliance with MAAC safety code meets those requirements. mRPAS at advertised events must comply with the MAAC Event SFOC.
- 2. RPAS CAR requirements –All RPAS must conform a Manufacturer Declaration/Safety Assurance provision, either MAAC's (if above 400 or over 25kg) or another manufacturers (controlled airspace only). Operation over 400'agl is only permitted under the MAAC Manufacturer Declaration.
- 3. Club/Site/Event requirements This site open for flying activities all year during daytime, ½ hour before sunrise till ½ hour after sun set. Night Time flying is permitted, electric models only, and with the use of navigation/position lights. No nitro/gas power aircraft before 9 a.m. Monday toSaturday and 10 a.m. on Sunday. Nitro/gas power aircraft restricted during night time. Only mRPAS and RPAS (R/C model aircraft) may be flown at the field. RPAS powered by gas turbines are prohibited.
- 4. MAAC Add-on requirements RPAS operated over 400'agl must comply with the MAAC/SFOC RPAS requirements listed in the add on section and any requirements from the controlling agency. All event visitors must be briefed to ensure compliance with these requirements.

RPAS Pilot/operator qualifications or requirements

- 1. mRPAS requirements mRPAS do not require an RPAS operators' certificate however are regulated under CAR 900.06 and part VI of the CAR. Except for Advertised Events, there are no MAAC or CAR age restrictions on mRPAS flight.
- 2. RPAS Pilot CAR requirements. All RPAS pilots using this site must have Advanced RPAS certification.
- 3. Club/Site/Event requirements. All members wishing to fly rpas must have MAAC Wings and current Advanced RPAS. This includes all fixed wing aircraft, and helicopters be they hand launch, bungee launch, or take off under their own power. Student pilots who are members must fly under the direction of a Flight Instructor. Pilots with Basic Certification may fly an advanced registered model aircraft under the supervision of a RPIC. No more than 4 Basic RPAS pilots may be airborne at once under the supervision of a RPIC.
- 4. MAAC Add-on requirements RPAS Pilots operating over 400'agl must comply with the MAAC/SFOC pilot requirements listed in the add on section of this document and any requirements from the controlling agency.

CREW qualifications or requirements.

- 1. mRPAS requirements mRPAS do not normally require crew under the CAR.
- 2. RPAS CAR requirements Visual Observers are required. Visual observers shall be certified RPAS pilots (basic or advanced).
- 3. Club/Site/Event requirements A Spotter shall be used at any time there are four or more rpas in the air. Spotter shall be used during club events where non club members are present. Spotters are at member discretion for mRPAS operation.

MAAC SFOC # 930433 Page 3 of 20

4. MAAC Add-on requirements - RPAS Pilots operating over 400'agl must comply with the MAAC/SFOC pilot requirements listed in the add on section of this document and any requirements from the controlling agency.

Crew Rules

Visual Observers

- 1. Visual observers (VO) are mandatory for RPAS operations in controlled airspace, above 400'agl, RPAS events open to the public or where specified by MAAC. However, the use of visual observers to alert pilots to presence to full sized air traffic is strongly encouraged. When required at this site, no member shall operate an RPAS unless:
 - a. A visual observer(s) is present who has been briefed or trained on any site/event procedures upon spotting a potential conflict with full-scale aircraft.
 - i. Prior to commencing operaions over 400'AGL the VO shall be briefed on:
 - CYKF Runway 26 circuit and IFR approach paths, focusing on aircraft using those traffic patterns when runway 26 is active,
 - the current CYKF VFR Terminal Procedures Chart (VTPC) focusing on the CYKF departure route to "HWY401/PUSHLINCH LAKE" reporting point (regardless of active runway at CYKF),
 - b. A minimum of one visual observer per flight line is required.
 - c. VO must not watch the models their sole role is to scan the surrounding sky for approaching full-scale aircraft.
 - d. Position the VO where they have unobstructed sight lines sitting in the shade beside a camper/structure is not acceptable. Equally they must be situated to have a reasonable communication ability with all pilots/modellers.
 - e. Use visual aids as required sunglasses, wide brim hats, sunshades, binoculars or similar. If positioned far from pilot stations, provide suitable notification means such as air horns, lights, radios etc.
 - f. The VO or other responsible person may be assigned duties to monitor ALL cell phone numbers provided in the individual NAV DRONE approvals. Under no circumstances shall pilots flying monitor their cell phones for ATC coordination.
 - g. While operating RPAS over 400'AGL:
 - i. The VO, or other responsible and qualified adult shall be briefed on acceptable MAAC VHF communication etiquette
 - ii. Unless otherwise directed by NAV CANADA monitor CYKF Tower on 126.0.
- 2. Per CAR (901.23(vii)) each site must have rules to ensure a clear full-scale detection and avoidance command/response protocol is in place there is no time for debates or confusion. MAAC has adopted the following minimum:
 - a. MAAC models/RPA shall give way/get out of the way of full-scale aircraft in all circumstances no exceptions. There is never any onus on full-scale pilots to yield to models ever.
 - b. Upon spotting/hearing or being advised (ATC or otherwise) of any airplane that might pose a hazard with modeling activities, the VO or any other person on site, shall yell in a loud clear voice "AIRPLANE". If in doubt, issue the warning.
 - c. For operations in controlled airspace, if the VO or the person monitoring communications with ATC were to yell "AIRPLANE" the response by RPA pilots is expected to be the same.

MAAC SFOC # 930433 Page 4 of 20

- d. Upon hearing this command, all pilots shall descend to as low as altitude as safely possible, and if required land. The goal is to vacate the airspace vertically and then determine if RPA can continue to operate safely.
- e. Lateral deconfliction maneuvers are prohibited above 60'AGL. Descending to 60'agl (tree top level) is the accepted Transport Canada initial response. Members operating near/off aerodromes have different specific response requirements.
- f. Upon determining the full-scale aircraft is no longer a threat, the VO or other persons shall yell in a loud clear voice "ALL CLEAR".
- g. If any "official person" such as a peace officer, ATC or their delegate, has given a stop flying order, guidance or similar, all model flying **shall** stop immediately and shall not resume until permission to do so is obtained from person or body that issued the stop flying order.
- h. Thereafter modeling activities may resume as normal.

Program Director, Air Boss, ATC Coordinator

NAV CANADA Airspace - This site has not been approved for a Program Director or an Air Boss. RPAS pilots must obtain individual airspace approval as listed below.

RPIC – RPAS Pilot in command

These are the options for any MAAC member to provide RPAS Pilot in Command (RPIC) direct supervision to another person at this site. **THESE RULES ARE SPECIFIC TO THIS SITE**.

This site is in NAV CANADA controlled airspace. The Advanced Certificate holder who obtained NAV DRONE permission must be on site at all times.

- 1. **Advanced RPAS Certificate Holder Direct Supervision options** any MAAC member with a current and valid Advanced RPAS Certificate may perform RPIC duties as follows:
 - a. supervise a single non-certificate holder, or
 - b. supervise a single Basic Certificate holder.
- 2. **RPAS Flight Reviewer Direct Supervision options** any MAAC member with a current and valid Flight reviewer Certification may perform all the duties of an Advanced RPAS Certificate holder. RPIC does not affect the Transport Canada flight reviewer program or CAR regulations associated with it.
- 3. As this site flying area is wholly or partially in controlled or restricted airspace:
 - a. Any RPA student must be a MAAC member but does not need to possess any type of RPAS certificate to be supervised by an appropriate type of RPIC,
 - b. The ratio of RPIC to students of any type is one-to-one, and
 - c. The RPIC shall not assume any other roles while supervising a student.

See RPIC Add-on Section below for rules, procedures and details

Instructors/Demo flights

Non RPAS holders may operate a RPAS under the direct supervision of an advanced RPAS certificate holder. Communication of who has control and how control will be passed must be established before flight. Advanced RPAS holder must be able to assume control of the RPAS immediately when circumstances require it.

MAAC SFOC # 930433 Page 5 of 20

Spotters

Spotters are required when four or more RPAS are in the air at the same time. Spotters will position themselves next to the pilot. Spotters will advise pilots of other RPAS or aircraft that may pose a risk. Spotters purpose is to assist in preventing risk of conflicting air traffic, RPAS leaving designated flight area, and preventing RPAS risk to persons and property on the ground.

Airspace requirements or permissions

This site is in the CYKF Class C control zone (SFC-3000) controlled airspace. Controlling agency is Nav Canada.

Grid altitude is 400'AGL

All RPAS pilots must obtain individual airspace approval from NAV CANADA using NAV DRONE

Site elevation is: 313m/1027' ASL

Adjacent Aerodrome Procedures (within 3nm)

This site operates within 3nm of an aerodrome as listed in the CFS or CWAS and is required to provide all members with the following information.

- 1. The aerodrome's name is Kitchener Waterloo Airport "CYKF" and it is located 2.98 nautical miles on heading of 275' true from Hespeler Model Aviators.
- 2. The aerodrome has Runway 08 may use extended circuits for VFR flights that may fly over our field before turning onto base leg. IFR traffic uses straight in approach to runway 26 aprox 1.75nm north of Hespeler Model Aviators. IFR traffic taking off from runway 08 follow runway heading aprox 1.75nm north of our field. VFR traffic using runways 32, 08 and 14 typically use left hand circuits. As a result there is no conflict between full size aircraft and Hespeler Model Aviators. It is extremely rare that aircraft departing or arriving at CYKF fly over our field. Their flight paths take the well north, or south of our position. Aircraft performing circuits using runway 26 are what is mainly encountered at our field. Our field of view allows for easy and early detection to achieve conflict resolution, (we descend to aprox. 60 agl).
- 3. There are no other procedures listed for CYKF in the CFS that affect operations for Hespeler Model Aviators.
- 4. In the event of a "fly-away" towards CYKF, you may call the aerodrome operator FIC at 886-541-4104 and advise them of the issue.
- 5. Hespeler Model Aviators Executive has met with CYKF Airport Operations. CYKF has expressed no issues with our site.

MAAC SFOC # 930433 Page 6 of 20

Normal mRPAS/RPAS/model operating procedures

- 1. Prior to daily operations, an RPAS Wilco site survey shall be consulted. MAAC endorses the use of a single shared RPAS Wilco site survey provided:
 - a. A new site survey is conducted/checked at least once every 56 days (NAV CANADA schedule), and if there are changes the updated site survey is made available to all members.
 - b. All site survey information is readily available to all RPAS pilots on site (electronically or in print).
 - c. Prior to each flying session, members must check Aviation NOTAM for critical flight safety information, or changes to airspace or aerodromes. Members may share NOTAM information verbally or in print with other members at the site.
 - d. Members must confirm there are no changes to site layout affecting distances to unsheltered bystanders
 - e. Members must each visually confirm no changes to site obstructions, local obstacles and that weather conditions stipulated in any MAAC requirements are met.

NAV CANADA 56-Day Publication schedule - ensure you complete a new RPAS Wilco Site Survey on these dates:

2025	2026	2027	2028
20-Feb-25	22-Jan-26	18-Feb-27	20-Jan-28
17-Apr-25	19-Mar-26	15-Apr-27	16-Mar-28
12-Jun-25	14-May-26	10-Jun-27	11-May-28
07-Aug-25	09-Jul-26	05-Aug-27	06-Jul-28
02-Oct-25	03-Sep-26	30-Sep-27	31-Aug-28
27-Nov-25	29-Oct-26	25-Nov-27	26-Oct-28
	24-Dec-26		21-Dec-28

- 2. The MAAC mandated minimum weather conditions to commence or continue MAAC RPAS operations are:
 - a. no cloud ceiling (BKN or OVC) at or below 1000'agl if the site approved altitude is 400'AGL or less, or no OVC or BKN ceiling at or below 1000' above the site approved altitude, and
 - b. the RPA will be able to remain 500' vertically and 1 sm (statute mile) horizontally clear of any cloud, and
 - c. a horizontal visibility of 3sm (5km) or more around the flying area exists, and
 - d. no other local obscuring conditions (fog, smoke, haze etc.) exist which could make spotting full-scale aircraft difficult.
- 3. Each RPAS pilot is responsible to ensure the following MAAC procedures and requirements have been met prior to commencement of any RPAS operation:
 - a. Any <u>required</u> MAAC manufacturer declaration provisions have been met, including all RPAS technical specifications verified, pilot and crew requirements, and
 - b. All RPA and required equipment have been maintained and all mandatory actions completed before the flight, in accordance with the manufacturer declaration and
 - c. all paperwork such as pilot declarations, required operating manuals or similar is present, and
 - d. That any required crew members are properly qualified, have made any required declarations and are briefed on the operation.

MAAC SFOC # 930433 Page 7 of 20

- 4. Members shall not operate an RPAS at night unless it is brightly lit, weighs less than 25kg, and remains below 400'agl. Members shall use the local weather channel time to determine legal night.
- 5. Formation flying is permitted at our field. Limit of four rpas may be flown in formation. Pilots must first agree to flying in formation together, decide on each aircraft position within formation and who will call a break off information.
- 6. Refer to the attached map for normal site set-up areas such as spectator areas, pit, or assembly areas, and start-up/run-up areas.
- 7. MAAC required buffer distances are variable and at this site are:
 - a. 7m from flight line to pilot stations, 10m from flight line to pits, and 30m from flight line to spectator and parking.
 - b. There are no provisions for tethered models, free flight, rockets or surface vehicles.
 - c. Caution tape will be used for spectator areas during advertised events.
 - d. RPAS operation is prohibited during maintenance (such as grass cutting) on active runway.
- 8. All models will be assembled in the pit or designated assembly area. Unpowered testing of controls and failsafe may occur here as well. All powered testing must occur in a start up area.
- 9. All models, including electric powered models, will be restrained before being tested, armed or started in the designated startup areas
 - a. Pilots and students shall perform a thorough pre-flight check of their equipment at the beginning of each flying day which must include a range check and confirmation that fail-safe settings are active.
 - b. mRPAS pilots must confirm that their models weight less than 250 g.
 - c. All models shall be restrained before starting or arming of the power system.
- 10. Refer to the attached map for a depiction of the flying area, including any no-fly zones, a description or depiction of the flight line, safety line, runways, taxiways, and any other pertinent flying area demarcation.
 - a. Flying area is as depicted on the flying area map below.
 - b. Area outside the marked flying area are no fly zones.
 - c. No flying is allowed over the road and areas to the east.
- 11. The following are the site take-off, landing approach, and recovery procedures are to be followed:
 - a. Pilots, or their spotter, shall call out all model movements.
 - b. Hand or bungee launching will be done with the agreement of pilots already flying. In these cases, if it is necessary to do so from the field, then the launcher shall announce, "on the field to hand launch". When completed the launcher will announce, "off the field".
 - c. Circuit direction to be determined by prevailing winds, or agreement of pilots flying. Takeoffs and landings should be facilitated into the wind. Proper procedure is to taxi to the downwind side of the field and turn your plane into the wind. After coming to a stop and checking the surrounding airspace, pilots will announce out loud "taking off" to indicate his intentions to the other pilots. Upon takeoff the first turn should always be away from the flight stations after which the aircraft will then join the circuit. For multiple RPAS, inquire with active pilot(s) direction of circuit prior to take off.

MAAC SFOC # 930433 Page 8 of 20

- d. We also require loud announcements for "landing". Communication between pilots at the flight line is always encouraged so people are aware of what is going on. Dead stick landings have priority in all situations. Upon landing, all pilots will taxi back from the runway to the area between each flight station. The movement of the plane shall stop before it is past the front fence of the pilot station and the plane shall be promptly walked back to the pilot's work area.
- e. No person shall proceed past abeam the pilot stations without permission of other pilots flying.
- f. Recovery of downed aircraft within flying area shall be done with agreement of pilots flying. No new models may be launched until the area is clear. No flying over recovery crew. In the event of a dead stick landing or a stalled motor, the plane can remain on the field until it is established that it is safe to recover. Before entering the field to recover the plane the person shall announce in a loud voice, "on the field" and upon recovery of the plane shall announce, "off the field" so the other pilots can continue in a safe manner. After announcing "on the field" you should always wait for flying pilots to acknowledge before proceeding onto the flight line. Please be cautious and alert when retrieving planes from an active runway. Also please do not dawdle! Retrieve the aircraft as quickly as possible or alternatively wait until it is safe to do so.

Emergency Procedures

Fly-away or lost link.

RPAS pilots are required to know who to notify in the event of a RPAS fly-away outside our MAAC approved flying areas **which could reasonably enter** the nearest controlled airspace volume. Note this process is not required for temporary flight immediately outside the MAAC approved flying area, or for known crashes/off site "landing" outside the MAAC approved flying area.

- 1. If you experience a RPA fly-away, and in your judgement as the RPA pilot in command (including RPIC scenarios) the RPA has sufficient energy or capability to fly to and enter the identified controlled airspace volume (either laterally or vertically, or both), you are legally required to attempt contact with listed agencies below and advise them of the fly-away situation.
- 2. MAAC has assessed this site and determined the following:

This site is located in NAV CANADA controlled airspace CYKF Class C control zone. Refer to the NAV DRONE agreement for current contact information.

Controlled Airspace – Fly-away -				
Location	Name, Class Type	Based at	Other	Contact Info
Site	CYKF Class C Control Zone	SFC to 3000		Per NAV CANADA approval notice OR ATC Tower Emergency Number 519-648-3055

Incident Accident

 If there is any type of near miss or safety concern between a full-scale aircraft, bystander and our RPA/models, ALL FLYING/MODELLING SHALL cease immediately. The members involved should fill out a MAAC reportable occurrence report and submit that to MAAC and the Site/Event organizer and follow MAAC policy.

MAAC SFOC # 930433 Page 9 of 20

- a. If the member(s) involved believe the risk was very minimal, they may complete their own self declaration or risk assessment using the MAAC form. Submit a copy of the form to the Site/Event organizers when able and recall if this involved RPAS you must keep this form for one year (CAR901.49 (2)). Resume flying/modelling when done.
- b. If the member or Site/Event operators deems the event serious, flying/modeling will not resume until members are given permission by the Site/Event organizers in writing.
- c. If there is physical contact between a full-scale aircraft, a by-stander, a spectator and a MAAC RPAS/model all flying/modelling will cease until MAAC confirms you may resume operations.
- d. This process is for **your** protection.

Transportation Safety Board (TSB) Protocols

- 1. In addition to MAAC reporting requirements, according to TSB Regulations and policies, RPAS occurrences shall be reported to the TSB to 819-994-3741 or 1-800-387-3557 as soon as possible after the occurrence:
 - a. if an RPA with a MTOW (maximum take off weight) greater than 25 kg is involved in an accident as defined in 2(1)(a) of the TSB Regulation;
 - b. if a person is killed or sustains a serious injury as a result of coming into direct contact with any part of an RPA, including parts that have become detached from the RPA; and
 - c. if a collision occurs between any RPA and a traditional aircraft.

A full report shall be forwarded to the TSB within 30 days of the occurrence: https://www.tsb.gc.ca/eng/incidents-occurrence/aviation/index.html

Model damage/repair protocol

- 1. In the event of any normally expected modelling mishap which requires any degree of repair, the model may only be "field repaired" if all normal modelling supplies and tools are present and used in accordance with established modeling practices or manufacturer instructions.
 - a. Any repair other than minor (replacing broken propeller etc.) shall be treated as a maiden flight/operation. Ensure RPAS logbook entries are made.
 - b. Any repair that cannot be fixed at the field, shall only be repaired at the modellers/owners shop or other repair facility. Ensure RPAS logbook entries are made.

Service Difficulties

A service difficulty is defined as any condition that affects or that if not corrected, is likely to affect the safety of aircraft or any othe person. As MAAC has made a safety assurance declaration to Transport Canada that is used in many of our RPAS flying privileges, it is critical and a regulatory requirement MAAC is informed of any issues related to our safety assurance declaration. Bear in mind MAAC has fully adopted a Just Culture and will not penalize or discipline members for reporting safety concerns, not matter how large or small, when done in good faith.

- 1. If a mRPAS or an RPAS is being operated under any manufacturer declaration (MAAC or other), the RPAS pilot shall ensure, without delay, a report is filed with the manufacturer if they encounter any of the following:
 - a. Any inability to meet the position determination standards (Standard 622) associated with the manufacturer declaration, related to equipment or the performance of equipment.
 - b. Any failure of a critical command and control component not attributable to normal wear and tear or obvious misuse (example dead/low battery), and
 - c. any other aspect of RPAS operation where the safety assurance declaration was not met.

MAAC SFOC # 930433 Page 10 of 20

MAAC Add-ons

This site is in the Kitchener Waterloo International Airport Controlled Airspace (CYKF Class C Control Zone). In the event of a conflict between this document and any stipulations or conditions contained in any NAV CANADA approval, NAV CANADA requirements shall prevail. However, NAV CANADA does not have authority to remove, reduce, revise or revoke the MAAC Transport Canada Manufacturer Declaration requirements, or the MAAC technical specifications. Please contact MAAC national office immediately if a NAV CANADA representative attempts otherwise.

RPAS Operations Above 400'AGL

MAAC has conducted an airspace and site review per the SFOC SORA (specific operations risk assessment) and determined the following **MAAC minimum requirements** for members to operate an RPAS above 400' at this site.

Airspace Assessment

- Regardless of altitude, no member may operate an RPAS without NAV CANADA written approval.
 NAV CANADA may add other conditions, that will be listed in the individual NAV DRONE permissions.
 Members are required to comply with all NAV CANADA requirements.
- 2. Subject to NAV CANADA approval, the maximum permissible RPAS altitude MAAC approves is 1700' AGL (above ground level).

Sufficient Communication requirements

The Kitchner Waterloo Airport (CYKF- Certified) aerodrome is within 3nm of this site (2.98nm west). This site is located immediately adjacent to a published VFR departure route ("HWY401/PUSHLINCH LAKE"). **Unless NAV CANADA specifies otherwise**, assessment of the normally expected traffic patterns yields the following:

- 1. Prior to commencing RPAS operations above 400'agl:
 - a. The VO shall be briefed on CYKF Runway 26 circuit and IFR approach paths, focusing on aircraft using those traffic patterns when runway 26 is active,
 - The VO shall be briefed on the current CYKF VFR Terminal Procedures Chart (VTPC) focusing on the CYKF departure route to "HWY401/PUSHLINCH LAKE" reporting point (regardless of active runway at CYKF),
 - c. The VO, or other responsible and qualified adult shall be briefed on acceptable MAAC VHF communication etiquette (see attached)
- 2. While operating RPA above 400', the VO or other nearby responsible and qualified adult shall:
 - a. Monitor CYKF ATC Tower frequency 126.0 and
 - b. Pay closer attention to aircraft departing via HWY401/PUSHLINCH Lake, and
 - c. Not transmit on ATC frequencies unless clearly instructed to do so by ATC

Visual Observer (VO) assessment

The location of the pilot stations, general assessment of the topography and direction of the flight line and flying area generate the following requirements for the VO:

- 1. At least one VO shall be positioned near the flight line, within earshot at normal conversational voice levels. If need be, equip the VO with a noise-making device to supplement any aircraft warnings.
- 2. The VO shall be equipped with any required aviation communication devices, such as VHF radios, cell phones or other devices.

MAAC SFOC # 930433 Page 11 of 20

- 3. The VO shall be equipped with any support equipment determined by the club to be relative to the duration of duties, such as water, a chair, or shade from the sun provided it does not interfere with VO duties.
- 4. Non-essential ambient noise shall be kept to an absolute minimum (generators, music, etc.)
- 5. As the MAAC approved altitude flying area is within controlled airspace, the VO cannot assume any other roles.

The Club/site/event shall:

- 1. Ensure a copy of these rules, in their entirety are available to all RPAS pilots at the site.
- 2. Communicate to all Club members and mark this site as closed for RPA operations above 400'AGL, if there are any substantial changes to the site survey criteria (CAR901.27 a through h), unless or until MAAC has been advised, has conducted a new SORA, and issued new permission.

The RPA pilot shall:

- 1. **Obtain NAV CANADA approval** for all operations above 400'agl and keep such approval on site while operating the RPA.
- 2. **Only** operate an RPAS registered, declared and meeting the MAAC Manufacturer Declaration requirements. Other manufacturer's declarations are **not** transferable to this policy.
- 3. Not operate an RPAS above 400'agl unless in possession of a valid and current Advanced RPAS operators' certificate, or under the direct supervision of an RPIC in accordance with MAAC policy.
- 4. Ensure all RPAS pilot CAR and SFOC paperwork requirements have been met and are available,
 - a. Certificates of registration, pilot RPAS certification and recency proof,
 - b. Govt issued photo identification,
 - c. Manufacturer owner's declaration for each RPA,
 - d. An altitude determination declaration as appropriate (pilot or each RPA) and
 - e. RPAS Pilot has completed Crew training and fitness requirements and signed declaration.
- 5. Ensure a recent site survey and NOTAM check have been completed,
- 6. Ensure any crew declare themselves as properly trained in accordance MAAC policy. Verbal confirmation is sufficient.
- 7. Ensure the RPA meets the MAAC technical requirements, including the MAAC Manufacturer declaration, before flight commences, and terminate any flight if technical requirements are no longer met.
- 8. Ensure the RPA is operated VLOS only (no FPV permitted including with a spotter) and that it remains within the site approved flying area at all times.
- 9. Ensure the RPA does not carry "cargo" or any other items onboard that are not required for flight. On board cameras and associate gear are permitted provided all components are securely affixed to the airframe or housed in a compartment that cannot be easily opened in flight.

Any RPAS Crew shall:

- 1. Ensure all SFOC paperwork requirements have been met and are available (crew training declaration)
- 2. Comply with the instructions of the pilot in command
- 3. Perform their duties diligently and in accordance with MAAC policy and
- 4. Inform any person responsible of any issue that prevents them from meeting their obligations.

The RPA shall be equipped with

- 1. Functional "fail- safe" type device(s) or design per the MAAC manufacture declaration.
- 2. Anti-collision beacon/light(s) per MAAC policy,

MAAC SFOC # 930433 Page 12 of 20

3. Sufficient fuel/energy to complete the intended flight duration, plus 25% at the minimum throttle setting sufficient for controlled level flight and includes a MAAC required minimum reserve to enable one balked landing/missed approach and circuit back to a successful landing. Fuel/energy spent taxiing to the pits or any shut down procedures thereafter does not count in these calculations. Non-powered RPA (gliders) must have sufficient receiver battery power for the flight plus reserves as noted above, excluding a balked landing attempt.

MAAC Declared minimum fuel/energy guidelines 25%		
Intended flight duration	Required reserve (@25%)	Total Fuel/energy required
15 mins	3.75 mins	18.75 mins
10 mins	2.5 mins	12.5 mins
6 mins	1.5 mins	7.5 mins
5 mins	1.25 mins	6.25 mins
3 mins	45 seconds	3 mins 45 seconds

Controlled Airspace VHF Communication Guide:

Unless NAV CANADA/Controlling Agency specifies otherwise, members will adhere to the following:

- 1. ATC frequencies are for full scale aviation, do not speak unless spoken to or as required to do so as per NAV Canada approval.
- 2. The reason for VHF communication capability is to assist in flight safety. In all instances where VHF communications are confusing or unclear, RPA pilots should descend and land immediately to determine what is required or occurring.
- 2. MAAC Sites and operators DO NOT have the authority to issue instructions, advice or guidance to any other party using ATC frequencies.
- 3. Do identify yourself on the start of all calls, MAAC recommends you use the following name, unless NAV CANADA specifies otherwise.

"MAAC Hespeler drone ops"

4. If you encounter any problems, please contact your Zone Director.

RPAS Operations Above 25kg

Not Approved.

RPAS Operations Above 400'AGL and Above 25kg

Not Approved.

RPAS Pilot In Command

General site rules

This site is in controlled airspace, MAAC does not allow more than one-on-one direct supervision. RPIC in this regard is not to be considered RPA instruction or how to fly – its intended to be supervised flying of **competent students** who do not possess the correct ratings or paperwork. The following constitutes the MAAC program under the MAAC Manufacturer declaration instruction provisions:

MAAC SFOC # 930433 Page 13 of 20

- 1. The primary role of the RPIC is to provide airspace regulatory compliance, safety and situational awareness. The RPIC may or may not provide hands-on "instruction" to any student at their discretion.
- 2. The RPIC shall be positioned and remain within earshot, at a normal conversational level, of the student while the RPA is airborne.
 - a. Conversely, regardless of physical pilot stations arrangements, RPIC shall not occur unless the student is within earshot of the RPIC.
- 3. The site shall ban or otherwise prohibit all extraneous noise to ensure a solid verbal communication ability between RPIC and students.

Event Approval

RPAS Event approval requires permission from NAV CANADA. At a minimum they will require the event organizers to appoint a "Program Director" who will be the contact point for all event processing and approvals. Please contact your Zone Director directly for information on how to begin the event approval process. The following is MAAC only process – NAV CANADA has the right to ask for additional requirements and information.

- 1. ALL MAAC events that require approval or want MAAC insurance must occur at SOC sites and be approved by MAAC. All outdoor events with operable RPAS must be approved by MAAC.
- 2. Outdoor events that are clearly listed as "member-only" events (regardless of reason such as competitions, fun-fly's, fly-in's, airshows, air racing, demonstrations or any other organized gatherings) do not require MAAC Event SFOC compliance. All advertising/notice including internal to MAAC must include the following phrase:

This event is closed to the public - only MAAC members and crew may attend. Invited guest(s) of a MAAC member are permitted provided they are supervised.

3. "Advertised events" - regardless of what you "named" your event, if your outdoor event includes operable (flying) RPAS and is open/advertised to the general public in any fashion, must meet the MAAC SFOC requirements. All advertising/notice, including internal to MAAC must include the following phrase:

This event is open to the public and all MAAC members, crew, and their invited guests. MAAC Event SFOC compliance is required.

Foreign RPAS Pilots (US or other)

MAAC has already obtained Transport Canada approval for foreign RPAS pilots to operate RPAS at our MAAC sites and events (Policy approved July 2023). Foreign pilots must join MAAC and follow the provisions of MAAC policy (on the website). Also see the RPAS Wilco NOTAM (2024-02).

Events with RPAS operations above 400'agl and/or weighing more than 25kg - not approved.

The following are the normally expected process and rules for an event.

- 1. The club/event organizers shall:
 - a. Prior to submitting an event approval application, ensure they have read all MAAC policy and

MAAC SFOC # 930433 Page 14 of 20

- have submitted an event package indicating they have complied as best as possible.
- b. Ensure the site meets all MAAC event organizational and logistic requirements such as signage, parking control, spectator safety barriers, washroom and food provisions, and fire/medical safety requirements commensurate with the expected attendance.
- c. Ensure the event complies with MAAC event policy and any CAR or SFOC requirements.
- d. Ensure all attending modellers/RPAS pilot are current MAAC members.
- e. Take reasonable steps to ensure all attending modellers pilots <u>receive a briefing</u> on site or event rules using the MAAC minimum checklist (attached).
- 2. In addition to all the above and the club rules, at any event where the public is in attendance under the MAAC SFOC, the event organizers are responsible to ensure:
 - a. MAAC warning signs are posted at all public entry points.
 - b. A copy of the MAAC SFOC and application are on site and available to all RPAS pilots.
 - c. All RPAS pilots sign the Transport Canada sign in sheet.
 - d. All RPAS pilots receive a briefing on site rules using the MAAC minimum checklist (attached).
 - e. A visual observer is always present when RPAS are flying.
 - f. Ensure all follow up actions are completed after the event, most notably any Transport Canada paperwork.
- 3. Any member attending an event shall
 - a. Comply with all CAR, SFOC, MAAC and club/event rules as required.
 - b. Not operate a model or RPAS unless they attend or obtain a pilot briefing.

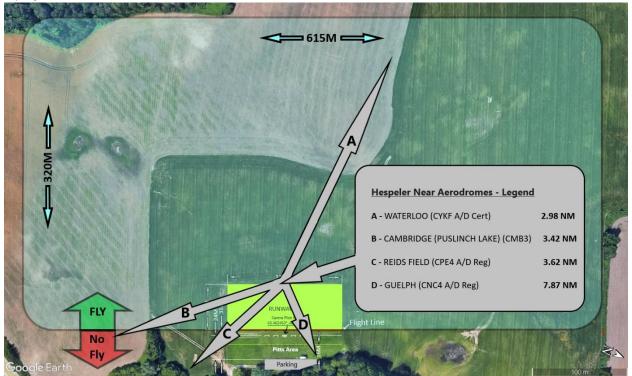
MAAC SFOC # 930433 Page 15 of 20

Diagrams/maps

Field set up:



Flying Area

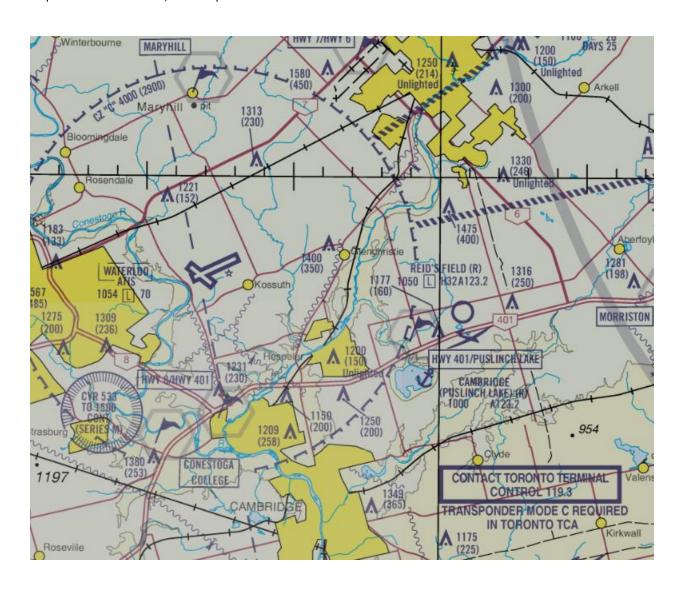


MAAC SFOC # 930433 Page 16 of 20

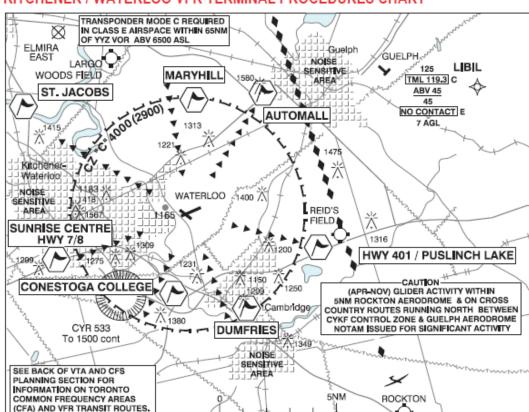




MAAC SFOC # 930433 Page 17 of 20



MAAC SFOC # 930433 Page 18 of 20



KITCHENER / WATERLOO VFR TERMINAL PROCEDURES CHART

NAME	IDENT	LAT/LONG
AUTOMALL	VCHWE	N43° 32' 12" W080° 19' 02"
CONESTOGA COLLEGE	VCCOL	N43° 23' 22" W080° 24' 38"
DUMFRIES	VCAYT	N43° 23' 12" W080° 20' 15"
HWY 401 / PUSLINCH LAKE	VCFOR	N43° 26' 00" W080° 16' 00"
MARYHILL	VCMYH	N43° 32' 04" W080° 23' 27"
ST. JACOBS	VCJCB	N43° 32' 00" W080° 33' 00"
SUNRISE CENTRE HWY 7/8	VCSRS	N43° 25' 01" W080° 31' 02"

ARRIVALS

NOT BELOW 2600 ASL until advised by ATC. Follow route as depicted then join circuit as per Tower clearance.

DUMFRIES: Remain south of Hwy 401 until passing DUMFRIES flyover. Then follow route inbound. Not BELOW 2600 FT ASL.

MARYHILL: Follow route inbound. Pass one mile west of the MARYHILL. Not BELOW 2600 FT ASL.

SUNRISE CENTRE HWY 7/8: Proceed to the SUNRISE CENTRE HWY 7/8 then follow route inbound. Not BELOW 2600 FT ASL.

MAAC SFOC # 930433 Page 19 of 20

WARNING!



AEROMODELING MAY CAUSE SERIOUS INJURY!

PROCEED AT YOUR OWN RISK!

AVERTISSEMENT!

L'AÉROMODÉLISME PEUT CAUSER DES BLESSURES GRAVES!

PROCÉDEZ À VOS PROPRES RISQUES!

MAAC SFOC # 930433 Page 20 of 20