Spectrum Flyers (#730, Zone H) 48th Avenue Field Rules (2025)

MAAC Approved – May 12, 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.

Club: Spectrum Flyers (#730, Zone H)

Site Name: 48th Avenue

Location: West end of 48th Ave off of 176 th Street, Surrey BC

Pilot Station Coordinates: 49° 05' 27.77" N 122° 44' 56.06" W

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

- 1. be MAAC members in good standing.
- 2. be members of Spectrum Flyers and or an invited guest of Spectrum Flyers 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 Club or site operator is responsible to take reasonable steps to ensure a modeller briefing occurs for each modeller using the site.

- 1. Only current members in good standing are permitted to fly at the field. Guest Flying is by special exception only. Please see the President for more information. All invited guests must be supervised by the Spectrum member.
- 2. Pets (dogs) are to be leashed and supervised at all times while on the property and kept clear of the aircraft area.
- 3. Park 30 meters behind flight line. Park on our property only. Respect our neighbours' and drive slowly along 48 th Ave
- 4. Take your garbage home.
- 5. Please exercise proper flying etiquette with your fellow pilots and have fun.
- 6. These rules will be reviewed and updated annually by the club

Site/event emergency response requirements

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

West End of 48th Ave off of 176 th Street, Surrey, Coords of the main gate 49°05'22.86" N 122°44'56.99"W.

- 1. Fire Extinguishers and first Aid kit are located in the Club House.
- 2. Salt water filled bucket is located by the west side of the club house for all damaged batteries.

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/1400'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	1400'agl	
RPAS Altitude and Weight >25kg	Not approved		
RPIC	See below	1400'agl	

RPAS/Model technical specifications or requirements or restriction

- 1. mRPAS requirements –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.
- RPAS CAR requirements There are no special CAR restrictions on RPAS models operated under 400'. all RPAS operating over 400 or under at public events must conform to the MAAC Manufacturer Declaration/Safety Assurance. All RPAS operating over 400'AGL must be equipped with highly visible lights.
- 3. Club/Site/Event Requirements-

- a. Internal combustion aircraft can be flown by Grand Fathered members only from 10:00 am to 5:00 pm Saturday, Sundays, Wednesdays and holidays. Please ensure your aircraft uses all reasonable care to minimize noise levels. Pitts or other straight pipe exhausts are not permitted at this site.
- b. Only 2.4 GHz radios are allowed.
- MAAC Add-on requirements RPAS Pilots operating over 400'agl must comply with the MAAC/SFOC RPAS requirements listed in the add on section. 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 CAR900.06 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 *Basic* RPAS certification.
- 3. Club/Site/Event requirements. This site recommends all mRPAS/RPAS Pilots have MAAC Wings, however its use is not mandatory.
- 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.

CREW qualifications or requirements.

- 1. mRPAS requirements mRPAS do not normally require crew under the CAR.
- 2. RPAS CAR requirements Visual observers are mandatory.
- 3. Club/Site/Event requirements (*Helpers/spotters etc.*) Spotters shall be used at any time there are 4 or more pilots stations in operation.
- 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.

Crew Rules

Visual Observers

- 1. Visual observers (VO) are are **mandatory for RPAS operation over 400'agl, RPAS events open to the public** or where specified by MAAC. 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.
 - 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 Visual Observer shall or other responsibly non-pilot monitor pilot located at the pilot stations shall monitor Langley ATC Tower frequency of 119.1 pay attention to fixes CLOVERDALE, COURTHOUSE, AUTOMALL and WHITEROCK.
 - i. The VO or responsible person shall be briefed
 - To reference the charts in the RPAS operations over 400'agl add-on section and what to listen for, namely aircraft reporting inbound or outbound to any of the previous fixes
 - And that radio monitoring is an aid and does not replace an active sky scan for aircraft.
- 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 of any airplane that might pose a hazard with modeling activities, the VO shall yell in a loud clear voice "AIRPLANE". If in doubt, issue the warning.
 - c. 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.
 - d. 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.
 - e. 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".
 - f. 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.
 - g. Thereafter modeling activities may resume as normal.

Program Director, Air Boss, ATC Coordinator

This site is in uncontrolled airspace – a Program Director or an Air Boss is not required

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**.

- 1. **Basic RPAS Certificate Holder Direct Supervision options** any MAAC member with a current and valid Basic RPAS certificate may perform RPIC duties as follows:
 - a. supervise a **single** non-certificate holder at a Basic site
 - b. Shall not supervise a group of other people regardless of any certificates.
 - c. Shall not supervise any other member in any "advanced scenario".
- 2. 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 at any site or Basic scenario,

- b. supervise up to 5 "Basic" Certificate holders in **uncontrolled airspace** advanced scenarios (above 400'), as outlined in site rules.
- 3. **PPL+ with no RPAS Certificate Direct Supervision options** any MAAC member with a current or expired PPL, may perform RPIC duties as follows:
 - a. supervise a single non-certificate holder at any Basic site,
 - b. supervise up to 5 Basic Certificate holders in **uncontrolled airspace** advanced scenario (above 400'), as outlined in site rules.

Notes:

- c. PPL+ only holders may not independently operate an RPAS in basic or advanced scenarios unless supervised by an appropriately rated RPAS Certificate holder.
- 4. **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.

NOTE - While able to provide direct supervision (only), RPIC members cannot operate an RPAS on their own, unless meeting the CAR RPAS Pilot certification level (Basic or Advanced). Meaning a member with a PPL **only** cannot legally fly an RPAS in Canada, unless supervised by a Basic or Advanced RPAS Certificate holder. Equally, two PPL holders do not equal one RPAS Certificate holder and cannot supervise one another – one of them must have a valid RPAS certificate for the airspace/scenario being conducted.

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

Instructors/Demo flights

Instructor/Demo flights are not allowed.

Spotters

Spotters are required when there are more than four (4) RPAS in the air.

Airspace requirements or permissions

This site is located in Class G airspace uncontrolled

The lowest level of controlled airspace vertically over the site is Class E Pitt Meadows CAE at 1500'msl (Class E @ 1500'msl - 3'msl site elevation = 1497'agl).

The nearest controlled airspace laterally is Langley Region Class C Control Zone located 1.67nm E of the site.

Site elevation is 3'msl.

Adjacent Aerodrome Procedures (within 3nm)

There are no aerodromes within 3nm of this site, therefore MAAC see and avoid procedures are deemed adequate for aviation safety.

Langley Region Airport (CYNJ) is located 4.67nm East of the site.

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) estimated at 1000'agl if the site approved altitude is less than 400', or less than 1000' above any higher 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. an estimated horizontal visibility of 3sm (5km) or more around the flying area, and

d. no other obscuring conditions (fog, smoke, haze etc.) which could make spotting full-scale aircraft difficult.

NOTE – RPAS pilots may estimate cloud ceilings and visibility, provided they do so in good faith understanding the purpose of weather limits is to ensure we can see approaching full-scale aircraft.

- 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.
- 4. Night operations are permitted at this site. 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 Surrey weather channel time to determine legal night.
- 5. Pilots may fly in formation provided they agree to do so.
- 6. See attached drawing in the Diagrams/Maps section for normal site set-up areas such as parking, 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. No flying is allowed if there are people in the adjoining farm field or during field maintenance.
- 8. All RPAs aircraft must complete a full range check and surface checks at the beginning of each day as per the Maufacturers specifications. Fail safes must be checked and active on all aircraft at the start of each day.
- 9. All models, including electric powered models, will be restrained before being armed or started in the designated startup areas. Planes are to be pointed out towards the runway directed away from the pit area prior to arming.
- 10. See attached drawing for 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. Area's outside of the flying area on the map are NO FLY ZONES
- 11. The following are the site take-off, approach, landing and recovery procedures:
 - a. Pilots, or their spotter, shall call out all model movements.
 - b. Hand launching and bungee launching shall be done in agreement with any pilots flying normally off to one side of the pilot stations/dock.
 - c. Pilots shall take off into the prevailing winds, or otherwise in agreement with all pilots flying.
 - d. No person shall proceed past abeam the pilot stations without permission of other pilots flying.

e. The recovery of downed models in the flying area shall not be done without the agreement of all pilots flying. Thereafter no new models may take-off until the downed model is recovered. No flying directly over the recovery crew.

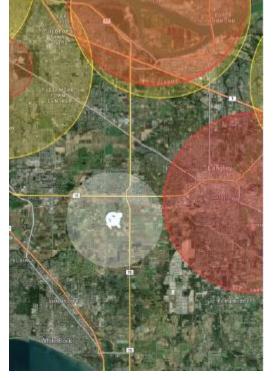
Emergency procedures

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 flyaway situation.
- 2. MAAC has assessed this site and determined the following:

This site is wholly in uncontrolled airspace. The nearest controlled airspace volume is



a.	Lateral	lv

Nearest Controlled Airspace – Fly-away - Laterally				
Altitude	Name, Class,	Distance and	Altitude	Contact Info
	Туре	Direction		
Below 400'	Langley Class C	2.01nm East	SFC-1900'	Langley ATC Tower emerg only
	CZ			604-534-9443
Above 400'	Langley Class C	1.67nm East	SFC-1900'	Langley ATC Tower emerg only
	CZ			604-534-9443
All other				Vancouver Area Control -
directions				Center (ACC) Shift Manager –
				780-586-4800

b. Vertically

If you experience a fly away while operating at higher altitudes (above 400'), or if the model is climbing uncontrollably and in the pilot in command's judgement may enter overlyingor adjacent controlled airspace, contact the listed agency as soon as possible.

Nearest Controlled Airspace – Fly-away - Vertically				
Location	Name, Class Type	Based at	Other	Contact Info
Over site	Pitt Meadows Class E CAE	1500'MSL		Vancouver Area Control; Center (ACC) Shift Manager – 780-586-4800

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.
 - 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 <u>MTOW (maximum take-off weight)</u> 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.

- 2. 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 Add-ons

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 requirements for members to operate an RPAS above 400' at this site.

Airspace Assessment

There are **multiple controlled airspace volumes** (based at the SFC or starting higher) within 5nm laterally of this site. The nearest controlled airspace laterally is Langley Regional Airport (CYNJ) CLass C Control Zone located 2.01nm East of the pilot stations.

Controlled airspace vertically over this site is based at 1500'MSL (Pitt Meadows Class E Control Area Extension (CAE)).

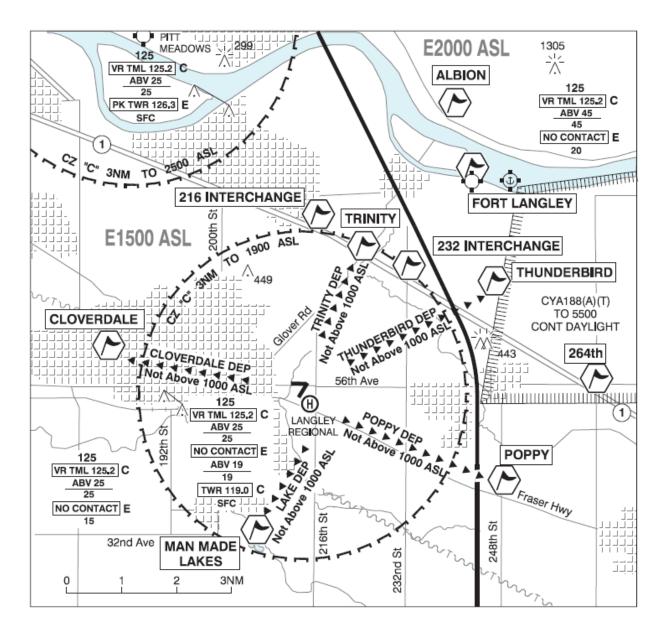
- To determine the maximum permissible RPAS altitude above ground level, subtract site elevation (3') from the base of overlying controlled airspace. In this case, the base of controlled airspace is 1500'agl
- 2. RPA are required to remain 500' below the base of any overlying controlled airspace, and 2nm laterally clear of any controlled airspace volume. However, MAAC may authorize reductions in of 100' below a Class E CAE, therefore **the highest altitude MAAC can approve is 1400' AGL (above ground level).**

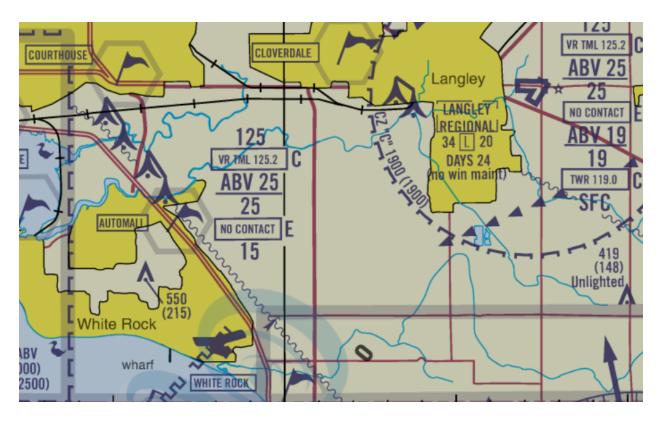
Sufficient Communication requirements

While there are no aerodromes within 3nm of this site, **there are** multiple protected airspace volumes, depicted air routes, or commonly used tracks near this site that require communication capabilities. Assessment of the normally expected traffic patterns yields the following:

a. Seasonally, prior to commencing RPAS operations above 400'agl, site leaders shall attempt to contact the NAV CANADA Unit Operations Specialist (UOS) at Langley Airport and advise them of the site and intended operations. NAV CANADA permission is not required. The use of NOTAMS is not required or endorsed by MAAC. If there are concerns, contact MAAC for assistance.

- While operating RPA above 400', the VO or other responsible non-pilot located at the pilot stations shall monitor Langley ATC Tower frequency of 119.1 - pay attention to fixes CLOVERDALE, COURTHOUSE, AUTOMALL and WHITEROCK.
- c. The VO or responsible person shall be briefed
 - a. To reference the following charts and what to listen for, namely aircraft reporting inbound or outbound to any of the previous fixes
 - b. And that radio monitoring is an aid and does not replace an active sky scan for aircraft.





Visual Observer (VO) assessment

he 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 a VHF radio capable of monitoring Langely Tower on 119.1 mHz.
- 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 2nm laterally or 500' vertically of adjacent controlled airspace, the VO cannot assume any other roles.

The Club/site/event shall:

- 1. Ensure a copy of the MAAC SFOC #930344 and SFOC application form 26-0835 are present and available to all RPAS pilots when operations are occurring.
- 2. Ensure a copy of these rules, in their entirety are available to all RPAS pilots at the site.
- 3. 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. **Only** operate an RPAS registered, declared and meeting the MAAC Manufacturer Declaration requirements. Other manufacturer's declarations are **not** transferable to this policy.
- 2. 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.

- 3. 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.
- 4. Ensure a recent site survey and NOTAM check have been completed,
- 5. Ensure any crew declare themselves as properly trained in accordance MAAC policy. Verbal confirmation is sufficient.
- 6. 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.
- 7. 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.
- 8. 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,
- 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

RPAS Operations Above 25kg - not approved

RPAS Operations Above 400'AGL and Above 25kg - not approved

RPAS Pilot In Command

General site rules – More than one-to-one Direct Supervision

This site is in **uncontrolled airspace.** MAAC allows more than one-on-one direct supervision provided the terms of this program are met. 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:

- The primary role of the RPIC is to provide airspace regulatory compliance, safety and situational awareness. In one to five scenarios, the RPIC is not expected to provide hands-on "instruction" to each student, which is why each student must possess at least a Basic RPAS operator certificate and competent RPA piloting experience.
- 2. In all cases, the RPIC is the "control station" and while RPIC is being provided their decisions, directions, and commands on the flight line are final and definitive as follows:
 - a. No other person, including Club or event officials, shall attempt to override or countermand a RPIC command related to the provision of the RPIC program.
 - b. The RPIC, however, shall obey all cease flying orders based on decisions or directions of Site, Club or event officials.
 - c. The RPIC shall obey any flight safety directions issued by other members, such as detect and avoid call outs "Airplane" and shall direct an appropriate response to all students without reservations or delay.
- 3. All students shall be briefed and agree the RPIC is in charge and all his decisions, commands and instructions are final and shall be complied with immediately, including up to potential destruction of the RPA (intentional crashing in a safe location/manner).
 - a. Students shall not start or arm or otherwise make an RPA ready for flight unless directed by the RPIC.
 - b. No student shall move an RPA from any designated start up area until directed to by the RPIC. The intent being an orderly "launching" of all models under the RPIC control.
 - c. No student shall take off or launch an RPIC unless permitted by the RPIC. Such permissions may be issued to all students/pilots or given individually.
 - d. Thereafter, once their RPA is airborne, the students shall operate their RPA independently, but under the general direction of the RPIC.
 - i. RPA to RPA traffic patterns, collision avoidance and similar remain the domain of the students, unless spotters or other parties intercede.
 - ii. Any commands a RPICs issue to an individual RPA shall be acknowledged by the individual pilot (student)
 - iii. Any group RPIC commands shall be acknowledged by all students.
 - e. Students, upon hearing any flight safety directions such as "airplane" are free to comply with stipulated site responses without waiting for the RPIC to issue the command. They shall, however, confirm any such action with the RPIC as soon as possible thereafter.
 - f. Any student experiencing a dead stick or urgent landing situation is permitted to take whatever actions they deem appropriate to ensure the safety of their model, and the site occupants.
 - g. In the event of a disagreement between RPIC and students, other site officials or members, the student shall follow the RPIC directions or commands.

- 4. The maximum number of students to one RPIC ratio is five,
 - a. all students shall possess a "Basic" RPAS operators certificate and be able to independently operate their RPA.
 - b. The RPIC shall have a valid advanced/flight reviewer RPAS certificate or PPL+
 - c. The type of "instructional control" system is irrelevant (buddy-box or voice command)
- 5. The RPIC shall be positioned and remain within earshot, at a normal conversational level, of all students while any RPA is airborne.
 - a. Conversely, regardless of physical pilot stations arrangements, RPIC shall not occur unless all students are within earshot of the RPIC.
 - b. Where this is not possible, additional RPIC shall be utilized or limitations placed on the number of students to remain within earshot.
- 6. The site shall ban or otherwise prohibit all extraneous noise to ensure a solid verbal communication ability between RPIC and students.
- 7. The site rules shall contain provisions mandating the operating condition for all other categories of models.

Rules for other attendees/pilots at a site where multiple students are receiving RPIC

- 8. IF forming part of an RPA flight line (at the pilot stations) that includes one of the maximum allotted "student" spaces (up to 5), and where there is more than one-on-one RPIC supervision be provided,
 - a. Other RPA pilots agree they shall follow all RPIC commands related to RPA operation as if they were a student receiving direct supervision. If they do not agree, either suspend RPIC operations or do not permit individuals to operate other RPA during the time RPIC is active this is a site responsibility.
 - b. The RPIC direction will most commonly be associated with commands to descend, land or otherwise cease RPA operations because of aviation safety concerns.
 - i. This rule is intended to ensure there is ultimately no confusion about who is doing what. All other active modellers must comply, so the RPIC knows the scenario is safely under control.
 - ii. Other pilots may still exercise independent control authority for landings etc., provided they inform the RPIC of their intentions.
- 9. NO other RPA pilot may join an already active multi-student RPIC session without the permission of the RPIC.
 - a. Thereafter they agree to follow the same RPIC rules as if they were there at the start of the session.

Event Approval (Permanent or individual)

This site has not been approved for permanent event approval – all events must be processed per below. If you have any doubts about your event, contact your Zone Director or the SAG directly.

- 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, you must meet the MAAC SFOC requirements (the SAG will work with clubs on the rules required). 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 (MPPD14 approved July 2023). Foreign pilots simply join MAAC and follow the provisions of MPPD14 (on the website). Also see the RPAS Wilco NOTAM (2024-02).

Over 400'agl and above 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 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 the MAAC events warning sign is posted for the event.
 - e. Ensure all attending modellers/RPAS pilot are current MAAC members.
 - f. Take reasonable steps to ensure all attending modellers/RPAS 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 and
 - e. A visual observer is always present 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.

Diagrams/maps

Flying Area



Site layout







AEROMODELING MAY CAUSE SERIOUS INJURY!

PROCEED AT YOUR OWN RISK!

AVERTISSEMENT !

L'AÉROMODÉLISME PEUT CAUSER DES BLESSURES GRAVES!

PROCÉDEZ À VOS PROPRES RISQUES!