### Arnprior Radio Control Club (ARCC) Site Rules (2025)

#### MAAC Approved June 20, 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.

#### **Administrative Rules**

Club: Arnprior Radio Control Club (ARCC) (#260, Zone: G)

Site Name: Field 5556 Logger Way Arnprior ON

Location: 5556 Loggers Way Arnprior, Ontario

Land Owner: Kingdon Holdings Ltd

Pilot Station Coordinates: 45° 27' 3.2"N, 76° 15' 12.3"W (45.450889, -76.253417)

Contact(s): Kevin Denton, 13086. President, <u>love2fly@hotmail.ca</u>, 613-883-3555 Ken Othman, 17669. Secretary, <u>kothman18@gmail.com</u>, 613-889-4839

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

- 1. be MAAC members in good standing.
- 2. be members of ARCC, or an invited guest of ARCC 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.

#### Site Administrative rules

- 1. Guests:
  - a. Guests are not allowed to fly unless the host member is present at the field and must stop flying in conjunction with the host member's departure.
  - b. It is the responsibility of the host member to ensure their guest is familiar with field rules.
  - c. Guests can only fly a maximum of 2 times a year plus they can attend our open fun fly events. any provisions for guests and spectators.
- 2. Maximum speed is 20 km/hr on access road. Never drive off the road allowance to avoid puddles or retrieve downed aircraft. If the road is muddy and you are leaving ruts in the road, please turn around and come back another day.
- 3. Smoking is only allowed in the parking lot or in your vehicle. If fire ban is in place, you are only allowed to smoke in your vehicle.

- 4. Please ensure your pets are leashed at all times when not in your vehicle. Pets are not allowed to roam freely at the field.
- 5. Overnight camping is allowed with prior Executive approval.
- 6. Please take home what you bring out to the field. We do not have garbage service so take home your empty fuel jug, crashed airplane parts, etc. Please do not leave any food items in the garbage since it attracts rodents and other larger animals.
- 7. These rules will be updated yearly by ARCC executive.

#### Site/event emergency response requirements

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

#### 5556 Loggers Way, Arnprior , Ont.

- 1. Class ABC on-site fire extinguishers are provided in pilot pit area suitable for all fires except LIPO. Sand filled buckets are provided for extinguishing of LIPO fires.
- 2. First aid kits are located in club house. Please replenish any first aid supplies used and please notify a member of the executive if any of the fire extinguishers have been discharged and requires refilling. Each member is otherwise responsible for their own safety equipment.
- 3. **Fire ban status of the municipality of Ottawa shall be checked prior to a flying session**. Anytime the City of Ottawa issues a Fire Ban for the municipal area, all aircraft driven by turbine motors will remain grounded while the Fire Ban remains in effect. The information is available via smart phone or computer.
- 4. For turbine operations a pilot supplied CO2 based fire extinguisher and leaf blower must be placed in pit #1 and in reach of pilot and spotter/helper. The operation of each shall be reviewed as part of flight pre-check.

#### 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 – <mark>1700 agl</mark>	
Tethered (Control-Line)	0.50ci/5kg 1 circle		
Free flight	Not approved		
Model Rockets			
Surface Vehicles	See below	Site racetrack	

#### 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 1700'agl	
RPAS Altitude and Weight >25kg	Not approved	
RPIC	See below 1700'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.
- 2. RPAS CAR requirements –All RPAS operating over 400' must conform to the MAAC Manufacturer Declaration/Safety Assurance provision.
- 3. Club/Site/Event requirements Flying from 8:00 am is now allowed only for those electrics flying up to a limit of 8000 rpm. EDF (Electric Ducted Fan) or noisy electrics shall be permitted to fly after 9:00 am only. All aircraft are allowed to fly after 9:00 am.
- 4. 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 here are no MAAC or CAR age restrictions on mRPAS flight.
- 2. RPAS Pilot CAR requirements. All RPAS pilots using this site below 400' must have as a minimum BASIC RPAS certification. An Advanced RPAS Certificate is required for operation over 400'agl.
- 3. Club/Site/Event requirements. All RPAS pilots shall have met the requirements of the MAAC wings program. New members shall successfully complete a first test flight under the observation of a ARCC club instructor before being permitted to fly at the ARCC field unattended.
- 4. MAAC Add-on requirements RPAS Pilots operating over 400' agl must comply with the MAAC/SFOC RPAS requirements listed in the add on section.

#### CREW qualifications or requirements.

- 1. mRPAS requirements mRPAS do not normally require crew under the CAR.
- 2. RPAS CAR requirements A Visual Observer is required for over 400'agl.
- 3. Club/Site/Event requirements Spotters are optional for daily operations below 400' RPAS operation. Gas turbine RPA must have a spotter at all times. Event requirements will be specified in event rules.
- 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 mandatory for RPAS operations 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. Prior to commencing RPAS operations above 400'agl, the VO shall be briefed to pay extra attention to the East for VFR training 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. The VO shall be briefed on the VFR training area.
  - e. 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.
  - f. 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.
  - g. While operating RPA above 400', the VO or other non-flying responsible adult nearby shall be equipped with a VHF radio to monitor 123.2 MHz for full scale aircraft traffic (VFR training area). If radio monitoring is not possible, all flying above 400' shall cease until radio monitoring resumes.
  - h. The VO may also be an RPIC.
- 2. These rules ensure a clear 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'AGL), 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'AGL), 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. A PPL+ only holder cannot supervise another PPL+ only holder while in controlled airspace at least one person must have at least a valid basic RPAS operators certificate. If the PPL+ has a valid and current RPAS operators certificate, then the higher of either provision applies.
- 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 they meet 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**

Demonstration flights, below 400', may be provided to non-members provided the instructor is using a "buddy-box" type control system where they are able to take immediate control of the model. Physically handing off of the transmitter is not allowed.

Pilots undertaking training for altitude determination above 400' do not need to follow any special procedures other than those listed in the add-on section.

#### **Spotters**

Spotters are optional for casual RPAS flying, but mandatory to gas turbine powered RPA. Members are expected to use good judgement – if there are enough models airborne that communications between pilots could be difficult, use a spotter.

If 4 RPAS are airborne or formation flying is being conducted then the use of spotters is obligatory

If a spotter is required during flight operations. It is essential for the pilot to brief the spotter-helper in normal and emergency procedures during start, taxi, flight, landing and shutdown

#### Airspace requirements or permissions

This site is in uncontrolled Class G airspace.

The nearest controlled airspace vertically is Montreal FIR/CAE/CYOW Class C TCA at 2500'msl (2221'agl) and various Class E Airways at 2200'agl.

The nearest controlled airspace laterally is CYOW Class C control zone (SFC-2600'agl) located 13.4nm east and CYOW Class C TCA at 2500'msl located 10.4nm southeast.

Site elevation is 279'asl (85m)

#### 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.

#### 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
- 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 (broken or overcast sky) estimated lower than 1000'agl if the site approved altitude is less than 400', or no cloud ceiling estimated 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. 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 CYOW aviation weather or Ottawa city weather channel time to determine legal night.
  - a. RPAS Operation above 400'AGL are not permitted at night.
- 5. The club recommended maximum number of simultaneous airborne RPAS is four (4) but that number may be increased provided all pilots present at the field agree to any additional airborne

RPAS and all pilots can stand in the same colour zone of pilot's stations. Pilots may fly in formation provided they agree to do so.

- a. If 4 RPAS are airborne or formation flying is being conducted then the use of spotters is obligatory.
- 6. Refer to the attached site setup diagram ARCC 1 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. spectators are to remain behind the log barrier on the aft side of the pits at all times unless escorted by an ARCC member.
  - c. Helicopter flying on the main runway is allowed at all times, if the flight line is busy there is an alternate helicopter flying area to the right of the pits on top of the hill.
- 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. Pilots are responsible to ensure that all pre-flight assembly and daily testing requirements are met:
  - a. Any pilot operating an RPA above 400'AGL is relying on the MAAC manufacturer declaration and must confirm all RPA fail-safe settings are active at least once per flying session.
- 9. All models, including electric powered models, will be restrained before being armed or started in the designated startup areas.
  - a. The parking lot area is open to the public. Under no circumstances are the public allowed in the assembly/pit area, starting stations, and pilot stations unless they are escorted by and ARCC member.
  - b. The assembly/pit area is not to be used for fuelling, starting, running of engines, arming/or disarming of electric models.
  - c. Starting of glow, gas, and electric powered aircraft is only permitted when properly restrained either on the ground or starting tables located at the runway entrances at either end of the field.
  - d. A jet blast deflector is required and shall be supplied by the turbine pilot and set up at either of the engine start boxes. Start and shutdown should be into the wind to assist cooling of jet turbine. If there is more than one turbine jet operating, pilots shall share the start box and jet blast deflector for engine starting.
  - e. Spectators and other pilots should be clear of the tail pipe and turbine rotational axis prior to starting and shall be made aware that a start is about to commence. Wheel brakes shall be set on before start in addition to pilot and helper (or suitable securely affixed to the ground restraining device) restraining the aircraft during start-up.
  - f. Complete full power and calibration runs while still in front of jet blast deflector. Complete control check prior to taxi.
- 10. Refer to the attached flying site map for 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. There is a single runway orientated East -West.
  - b. All pilots must stand in the designated pilot stations

- c. The runway is for takeoff and landing only (this includes touch and go practice). All other flying should be conducted a minimum of 7m from far side of active pilot stations.
- d. No flying operations shall be conducted during field maintenance activities, this include grass cutting.
- 11. The following are the site take-off, approach, landing and recovery procedures:
  - a. Pilots, or their spotter, shall call out all model movements especially LANDINGS, TAKE-OFFS, and DEAD STICK situations.
  - b. If a pilot or spotter needs to remove an aircraft from the runway, they will announce their intentions to enter the runway by stating "On the runway" and wait for acknowledgement from any pilots flying. Similarly, once the spotter or pilot is clear of the runway they shall announce "Clear of Runway".
  - c. No person shall proceed past abeam of the pilots stations without the permission of other pilots flying.
  - d. Hand launching and bungee launching shall be done in agreement with any pilots flying, normally off to the side of the pilot stations.
  - e. Take-offs and landings shall be conducted into the prevailing wind.
  - f. Pilots, or their spotter, shall call out all model movements especially Landings, Take-Offs and Dead Stick.

Additional procedures for turbine operations:

- g. When ready to taxi, manually push aircraft away from start box and up to the flight line so as not to blast the parking area and the rest of the pits. Operate to minimize grass scorching.
- h. Disconnect taxi tank and proceed to takeoff position. If possible provide initial push to start aircraft rolling to minimize grass scorching.
- i. Line up and open throttle smoothly for takeoff. No "brake stand" prior to takeoff roll is to be considered.
- j. After landing, taxi cautiously off the runway and shutdown parallel to flight line so as not to blast other pilot stations, parking area or other pits. Use jet blast deflector if possible, for cool down shutdown.
- k. In the event of a crash, immediately head to crash site with vehicle and fire extinguisher. Note vehicles must remain on access road and are not permitted on flying field or in adjacent farming fields. Request help from pilots and spectators if available.

#### Non-RPAS Normal Modeling procedures

#### **Tethered model operations**

Tethered model (control line) operations are not allowed during RPAS flying. Control line operations are not permitted when the car track is in use due to the close proximity of the CL circle and the track.

#### **Public safety**

1. The flying area/circle edge is located well away from the spectator area on top of the hill to the right of the PITS in the same area as the alternate helicopter area.

- 2. Should any non-flying person (spotter) observe a person moving towards the circle they will move towards the individual while raising their hand and yelling **STOP!** repeatedly until the person has stopped. The spotter will counsel the person as to where it is safe to stand. Understand some people may not speak English.
  - a. The pilot will upon hearing STOP! will climb the model to a 30-degree high level flight altitude immediately and monitor the situation until it is resolved by the spotter.
  - b. If the person continues their approach, the spotter SHALL continue to try to establish communications/visually warn with the individual. The pilot SHALL continue high level flight at 30 degrees and evaluate the situation.
  - c. If the pilot can walk with model over to another area they should do so, or as a last resort ground the model.
- 3. In all cases the pilot shall take all actions to prevent contact between a flying model and a person regardless of reason.

#### Member safety

- 1. Members shall ensure any control line models are restrained in a start up area prior to tuning or other powered maintenance.
- 2. Prior to operating a tethered model, the operator shall ensure all other members/crew/spectators are aware of the flying area/control-line circle dimensions, either verbally or with surface markings.
- 3. Members shall not use the control line circle if any RPAS activities are occurring, without permission of the pilots present. Conversely, RPAS pilots shall not start or make flight ready any RPAS until the control line circle has finished their current flight. Any disagreements shall be referred to the most senior site member, but in any event RPAS have priority for field use.
- 4. Members may use the control line circle while the RC car track is active.

#### Surface Vehicles (cars/boats) model operations

The weight and power limits are limited to off road vehicles such as a Tamiya Grasshopper and below.

Electric vehicles are authorized, Internal combustion powered vehicles may be allowed subject to club executive approval.

The track can be used during RPAS operations provided the drivers have a spotter on the driver stand to keep track of RPAS operations and to advise RPAS ops of a drive away.

Use of the car track is not permitted while the Control line circle is in use due to the close proximity of the CL circle and the track.

- 1. ARCC has an active surface track for buggies and other off road type RC related vehicles. It is separate from the active flying area and includes a drivers stand.
  - a. Arming/De-arming of electric powered vehicles is to be conducted at the track, there is no arming of vehicles allowed in the aircraft assembly/pit area. All vehicles are to be carried to the track.
  - b. Surface vehicles are not permitted on the runway during aircraft flying sessions, when flying is complete vehicles can use the runway provided approval is given from pilots using the airfield area of ARCC.

- c. It is the responsibility of ARCC members to advise any spectators on where they can view RC track activities from safely.
- 2. Safety is always paramount; drivers are required to ensure their vehicles are in safe operating condition at all times.
  - a. If multiple vehicles are in operation, spotters should be used to upright overturned machines.
  - b. Spotters will advise drivers immediately if any unsafe conditions develop, such as a spectator entering the track area.
  - c. All vehicles shall be operated within the confines of the track.
  - d. If damage is noted or an unsafe condition arises with the drivers stand, ARCC executive should be notified asap.

### **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 wholly in uncontrolled airspace.

a. Laterally. The nearest controlled airspace volume is:

Nearest Controlled Airspace – Fly-away - Laterally				
Altitude	Name, Class, Type	Distance and	Altitude	Contact Info
		Direction		
Below 400'	CYOW Class C CZ	13.1nm East	SFC-3000'	Montreal Flight Information
Above 400'-	CYOW Class C TCA	10.4nm	2500'MSL	Region
1600'		Southeast	(2221'AGL)	(514) 633-3365

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	Various Airways	2200'AGL		Montreal Flight Information Region
				(514) 633-3365

#### **Incident Accident**

- 1. 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 fullscale 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 Protocols**

- 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 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 other 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.

- a. 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 no controlled airspace volumes (based at the SFC or starting higher) within 2nm laterally of this site. The nearest controlled airspace laterally is the Ottawa international airport Class Control Zone located 13.4nm East. Controlled airspace vertically over this site is based at 2200'AGL (various Class E Airways)

1. RPA are required to remain 500' below the base of any overlying controlled airspace, and 2nm laterally clear of any controlled airspace volume, therefore the highest altitude MAAC can approve is 1700' AGL (above ground level).

#### **Sufficient Communication requirements**

There are no aerodromes within 3nm of this site. There are no protected airspace volumes, depicted air routes, or commonly used tracks near this site that require communication capabilities. However there is a non-published VFR training area near the site from the surface (SFC) to 4000'ASL. Assessment of the normally expected traffic patterns yields the following:

- 1. Prior to commencing RPAS operations above 400'agl, the VO shall be briefed to pay extra attention to the East for VFR training aircraft.
- 2. While operating RPA above 400', the VO **or** responsible person shall monitor the VFR training area frequency of 123.35mHz.
- 3. If radio monitoring fails or is not possible, all RPA shall remain below 400'AGL until radio monitoring resumes.

#### 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 needed, equip the VO with a noise-making device to supplement any aircraft warnings.
- 2. The VO, or a responsible adult nearby, shall be equipped with a VHF radios to monitor 123.35.
- 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. As the MAAC approved altitude flying area is more than 2nm or 500' or more below the base of controlled airspace, the VO may also be an RPIC.

#### The Club/site/event shall:

- 1. Ensure a copy of the MAAC SFOC #930433 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	

#### **<u>RPAS Operations Above 25kg</u>** - 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:

- 1. 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 an RPIC 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

- 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

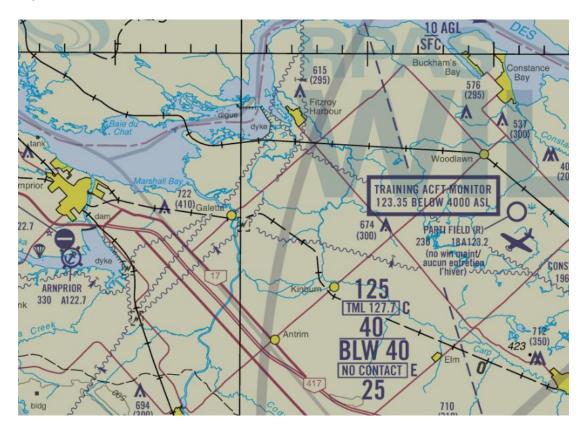
### ARCC 1 Site setup diagram



### Site Flying Diagram



Note: Areas outside the designated flying area are No Fly Zones. No flying is permitted over houses at any altitude.







## AEROMODELING MAY CAUSE SERIOUS INJURY!

## PROCEED AT YOUR OWN RISK!

## **AVERTISSEMENT !**

# L'AÉROMODÉLISME PEUT CAUSER DES BLESSURES GRAVES!

# PROCÉDEZ À VOS PROPRES RISQUES!