# Stetson Flyers Model Airplane Club Stetson Flying Field Rules 2025

#### MAAC Approved May 26, 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: Stetson Flyers Model Airplane Club (#97, Zone G)

Field Name: Field - 5800 Frontier Rd. Ottawa

Location: 5800 Frontier Road, Vars ON, KOA 3H0

**Pilot Station Coordinates:** 45° 20′ 3.9″ N, 75° 25′ 15.2″ W

(45.334420, -75.421198)

Contact(s): Pierre Coulombe, MAAC #85284President,

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Field Coordinator, Michael lalonde@rogers.com 343 558-0416

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

- 1. be MAAC members in good standing.
- 2. be members of Stetson Flyers, or an invited guest of Stetson 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. A pilot briefing is held prior to the start of each event consisting of: Welcome/Intro.; General Rules and Amenities; Personal Safety, Flying Safety, Pre Flight; Circuit and General Flying; Runway; altitude AGL limit; Spotters, Field Calls; Crashes and Recoveries; Cooperation, Cooordination, Courtesy, Common Sense and Overall Schedule.
- 2. A portable washroom and handwash station is onsite, picnic tables, benches, a gas BBQ, and two sun shelters are provided for members and guests. There are limited camping spots(no hookups) available for members or for pilots registered for an event.
- 3. In the event that a pilot misses the briefing, he/she is provided a written copy and is required to read it at the time of registration. If available, a club representative will give the pilot the briefing and to answer any questions.
- 4. These rules will be reviewed and updated at least annually by the club

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#### <u>Site/event emergency response requirements</u>

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

#### 5800 Frontier Rd., Vars, Ont.

- 1. Responding to Medical Emergencies
  - a. The incident scene provides information to gauge the severity of injury and can help to determine if a person is having a medical problem or has suffered a traumatic event. Ask witnesses if you did not observe the incident.
  - b. Take charge of the situation and recruit help from members.
  - c. Make the area safe.
  - d. Have someone retrieve the first aid kit.
  - e. Protect yourself by using personal protective (PPE) equipment (e.g. gloves).
  - f. Apply emergency first aid to the best of your ability.
  - g. You need to decide if the person requires <u>immediate</u> professional medical attention. If so, have a member call 911 right away. If you are unsure call 911.
  - h. Provide information to emergencies services.
  - i. Perform crowd control.
  - j. Reassure the injured person and make comfortable.
  - k. Treat the person for shock.
  - I. Place the person in the recovery position and monitor until help arrives.
  - m. Have someone go to Frontier Road to meet Emergency Services.
  - n. Never drive someone to the hospital, let the Emergency Services come to you.
  - o. Prepare notes, contact stetson executive and complete the MAAC Repotring Form and submit promptly.
- 2. Fire extinguishers: Dry chemical fire extinguishers are located at both ends of the field near the runway entrances. A third one is in the impound stand, or in the winter shelter during wintertime. CO2 fire extinguishers are not available and must be provided by the pilots (e.g., for turbine aircraft).
- 3. First Aid Kit: There is a first aid kit in a clearly marked deck box in the impound stand, or in the winter shelter during wintertime.
- 4. Documents: the deck box also contains a binder with MPPD3 occurrence reporting forms, emergency procedures, club rules, and other useful documents.

#### **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/700'agl

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Tethered (Control-Line)	3.5kg/15cc, 42volt, 10N static	1 flying circle	
Free flight			
Space Models	Not Approved		
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	Not approved		
RPAS Altitude	Less than 25kg 700'agl		
RPAS Altitude and Weight	Not Approved		
RPIC	See Section Below		

#### 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 There are no special CAR restrictions on RPAS operating below 400agl. All RPAS operated over 400'agl, must conform to the MAAC Manufacturer Declaration/Safety Assurance provision.
- 3. Club/Site/Event requirements Flying fuel burning models before 9:00 am is prohibited
- 4. MAAC Add-on requirements RPAS 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: Stetson mRPAS pilots are required to have passed their wings training program under recommended/mid-sized aircraft. mRPAS do not require an RPAS operators' certificate however are regulated under CAR900.06 and part VI of the CAR. Except at Advertised Events there are no MAAC or CAR age restrictions on mRPAS flight.
- 2. RPAS Pilot CAR requirements: All RPAS pilots operating below 400'agl must have **BASIC** RPAS certification. RPAS pilots operating over 400'agl must have an Advanced RPAS certificate
- 3. Club/Site/Event requirements: Stetson pilots are required *to* be a qualified ("winged") pilot (RPAS and/or mRPAS) unless flying under the supervision of a qualified pilot or instructor.
- 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.

#### CREW qualifications or requirements.

- 1. mRPAS requirements No requirement for crew.
- 2. RPAS CAR requirements A visual observer is required for operation over 400'agl.

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- 3. Club/Site/Event requirements One spotter/ mRPAS or RPAS pilot required at Stetson field during special events regardless of how many pilots are at stations. C/L flight line supervisor required at special events.
- 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.
  - 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.
- 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.

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#### **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. 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.
- d. If the PPL+ has a valid and current RPAS operators certificate, then the higher of either provision apply.
- 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

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#### **Instructors/Demo flights**

Students are only permitted to fly at the Stetson field under the supervision of a recognized instructor as follows:

a. Utilizing a dual instruction arrangement, the instructor is on the master transmitter ready to take over when necessary. When the student is in an advanced stage of learning, they are permitted to fly without the dual instruction setup, under the supervision of an instructor.

Prospective new Club member wanting to first experience RPAS:

- b. MAAC and Club Member, no RPAS certification limited to a demonstration flight(s) or one onone instruction which must be conducted by an appropriate RPAS certificate holder.
- c. Non-MAAC or Club member, no RPAS certification limited to a demonstration flight(s) only and must be conducted by an appropriate RPAS certificate holder.

#### **Spotters**

Special Event Model Retrieval: A spotter/lookout must be positioned along the pilot stations when members enter the flying area to retrieve models on the active runway.

- a. Spotters highly recommended: during maiden flights, retrieval of downed aircraft, when a pilot has a hearing impairment.
- b. Spotters are recommended during general flying.
- c. The pilot spotter, or just spotter, is a safety person for the pilot. The pilot and spotter should be a team working together for the safety of the pilot, the spotter, the aircraft, and everyone at or near the field.
- d. While the pilot has the responsibility of flying the aircraft in a safe manner, the spotter has many other responsibilities, which include:
- e. Relay messages from the flight line to the pilot about landing aircraft, aircraft emergencies, or deadstick landings by other aircraft on the field. The pilot may be concentrating on his aircraft and may not hear or pay attention to background messages on the field.
- f. Relay messages from the pilot to the flight line about the pilot's intentions including landing, landing direction, touch and go's, dead stick etc. The spotter must speak loudly to be heard at all pilot stations.
- g. Be the eyes of the pilot away from the aircraft. Watch the flight line and inform your pilot of aircraft taxiing in front of the pilot, people on the runway and obstacles on the ground.
- h. Watch the other aircraft in flight and inform your pilot of any that may cross or come close to his flight path. Pay attention to changes in wind direction in preparation for landing.
- i. Keep the pilot advised of the type of aircraft that are being started for flight. Your pilot may be flying an aerobatic pattern and want to know if a 3-D plane is readied for take-off. He might then want to change altitude, flight space and orientation.
- j. Minimize the distractions to the pilot in flight. The spotter is the eyes and ears for the pilot. Anything that could distract the attention of the pilot should be explained so that the pilot can keep his/her eyes on the aircraft and not look at the distraction.
- k. A pilot spotter may also assist the pilot at contests, such as our pylon contest, by providing information to the pilot about the laps completed so far.

#### <u>Airspace requirements or Permissions</u>

The Stetson field is in uncontrolled Class G airspace.

The nearest controlled airspace vertically is CYOW Class C TCA at 1500'msl (1254'agl).

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The nearest controlled airspace laterally is Ottawa International Airport (CYOW) Class C Control Zone located 3.41 NM W.

Site Elevation is 246' ASL

#### Adjacent Aerodrome Procedures (within 3nm)

There are no published (CFS/CWAS) aerodromes located within 3nm. Therefore, MAAC see and avoid procedures are deemed adequate for aviation safety.

The closest aerodrome to the site is Embrun(CPR2): 7.5 NM south-east of the field.

#### 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 (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

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- 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 the Stetson Flyers flying field. 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 Ottawa weather channel time to determine legal night.
- 5. Pilots may fly in formation provided they agree to do so and if it is communicated with other pilots. No more than five RC aircraft are allowed in the air at the same time (Note: a member of the executive or event coordinator may temporarily authorize a higher number in specific circumstances when appropriate safety measures are briefed to all pilots. For example, New Year's Day First Flight launch).
- 6. See map below 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. The centre of the control line circle is located 30m south of the main (East-West) runway flight line at the west end of the field, about 26m west of the North-South safety fence (see diagram; the centre of the circle is off to the left of the diagram).

Conflict with RC aircraft flying off the main runway is avoided by having the control line circle away (30m) from the main runway and having a spotter looking towards the main runway when RC aircraft are flying off the main runway.

The area where the circle is located is also shared with helicopters and drones. When both RC and C/L are operating at the same time in that area, RC flying alternates with C/L flying.

- 8. Pre Flight assembly and daily testing requirements:
  - a. Refrain from actions that could distract pilots who are flying or assembling a model.
  - b. A pre-flight inspection of control surfaces, linkages, and components must be done for each model before its first flight of the day.

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- c. A radio equipment range check must be done for each model before its first flight of the day.
- d. Fail-safe must be set to terminate the flight upon loss of radio signal.
- e. Fuel powered aircraft must have a means to shut down the engine from the transmitter.
- f. Electric aircraft must have a means to disable the throttle, preferably from the transmitter.
- 9. All models, including electric powered models, will be restrained before being armed or started in the designated startup areas.
  - a. All aircraft must be restrained when starting or running engines/motors.
  - b. Electric airplanes must be restrained when the battery is connected. Flight batteries should be disconnected when not needed. Where possible, the throttle must be disabled when the battery is connected and the aircraft is on the ground.
  - c. When control line aircraft are flying, the safety rope in the gap between the 'helicopter' fence and the north-south section of the main fence must be in place. Spectators must remain on the pit side of the fence.
  - d. Pilots must ensure that no one is standing in the rotational plane of propellers or turbine components of running engines/motors.
  - e. Propellor slipstream, jet and EDF exhaust must be directed away from other models and pilots.
  - f. Turbine aircraft must be positioned to direct exhaust gases over the concrete pads and/or through the blast deflector.
  - g. Turbine aircraft must be taxied promptly for take-off and after landing to avoid burning the grass. Avoid stopping on the runway with the engine running.
  - h. Taxiing aircraft in the pit area is prohibited.
  - i. Smoking in the pit area or at the pilot stations is prohibited.
- 10. See map below 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. All RC flying, takeoff and landing must be conducted at least 7 meters away from the pilot stations (about 6 meters or 20 feet away from the fence). High energy maneuvers (high speed and/or large models) must be conducted at least 30 meters (100 feet) away from the pilot stations (no closer than the far edge of the runway). Fast and/or large models must be maneuvered to avoid flying towards the pit and spectator areas. For example, horizontal figure-8s must be flown so that the aircraft flies away from the pit and spectator areas at the center of the maneuver.
  - b. Flying during grass cutting of the runway and pit area is prohibited.
- 11. The following are the site take-off, approach, landing and recovery procedures:
  - a. Pilots must note and follow the take-off, circuit, and landing directions. Take off and land into a head wind component as much as possible. Coordinate with other pilots in no-wind or changing wind conditions.
  - b. Pilots must announce all intentions to take-off, hand launch, land or move onto the active runway.
  - c. Pilots must fly only from pilot stations.
  - d. Use of spotters is required at all club events, when flying RPAS/mRPAS First Person View (FPV) or when flying turbine aircraft. Use of spotters at any time is encouraged. Pilots are responsible for ensuring that their spotters understand their duties.

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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.

#### **Non-RPAS Normal Modeling procedures**

#### **Tethered model operations**

- 1. Only the pilot or a student and instructor may be inside the flight circle during a flight unless multiple models are being flown simultaneously or a circle marshal is required.
- 2. Members assisting with a launch must move well outside the flight circle immediately after the launch.
- 3. The power and size limits for tethered model are:

a. Max weight: 3.5 Kg

b. Max Power:

i. Glow or gas: 15cc displacementii. Electric: 42 Volt no load voltageiii. Turbine: 10N static thrust

c. Wingspan: 2md. Length: 2m

#### **Public safety**

The Helicopter/Multirotor/Control Line flying pad is located in the southwest corner of the north/south runway. It is surrounded by the east pit area and fencing directly in front of the flying circle. There is no spectator access to this area from the north and west of the flying circle

- 1. Should any non-flying member (e.g. 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.
  - 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.
- 2. In all cases the pilot shall take all actions to prevent contact between a flying model and a person regardless of reason.

#### Member safety

Concurrent flying between RPAS and Helicopter/Multirotor/Control Line (on the south end of the north/south runway and RPAS on the east-west runway (450') is permitted owing to the large lateral separation between both flying areas. When the Helicopter/Multirotor/Control Line flying pad is in use a stowaway rope closes the gap between the end of the western RPAS fence to the flying pad to prevent RPAS pilots from enterring the active pad from the west. During special events where both flight areas are in use, a flight line supervisor is situated between the two flying areas.

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Members shall ensure any control line models are restrained in a start up area prior to tuning or other powered maintenance.

- 1. 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.
- 2. 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.

#### **Spectator safety**

Spectators are only permitted behind the pilot set up benches (>8 m). During special events an area is cordoned off providing a large safety margin.

#### **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.

- 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





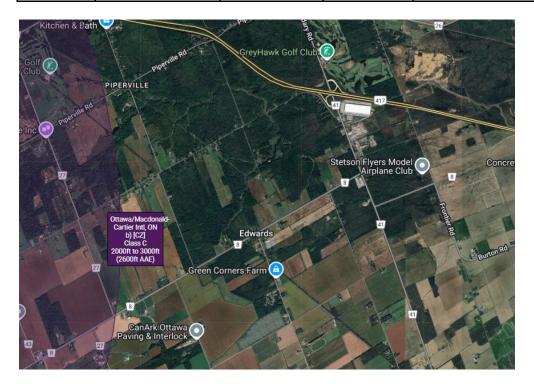
Nearest Controlled Airspace – Fly-away - Laterally				
Altitude		Distance and Direction	Altitude	Contact Info
		3.51nm (4.04sm) West		Montreal Flight Information Region (514) 633-3365
Above 400'	Same			

b. Vertically

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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 overlying or 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	CYOW Class C TCA	Overtop site	1200'AGL	Montreal Flight
	Terminal Control			Information Region
	Area			(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 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.

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#### **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.

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#### 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 Ottawa International Airport (CYOW) Class C control Zone 3.51nm west.

Controlled airspace vertically over this site is based at 1500'MSL (CYOW TCA Class C).

- 1. To determine the maximum permissible RPAS altitude above ground level, subtract site elevation (75m (246')) from the base of overlying controlled airspace (1500'MSL) = 1254'AGL rounded down to 1200'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. MAAC will not authorize reductions below Class C airspace, therefore the highest altitude MAAC can approve is 700' 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. Assessment of the normally expected traffic patterns yields the following:

1. Members may monitor VHF 126.7 for enroute aircraft communications. This is 100% optional

#### 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.
- 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 within 2nm laterally or 500' vertically of adjacent controlled airspace, the VO cannot assume any other roles.
- 5. 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 #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.

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#### 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.
- 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	

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#### 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:

- 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 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.

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- 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.

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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 (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).

#### 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.
- 4. Club specific event rules:
  - a. Maximum of 5 airplanes in the air at the same time.

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- b. Pilots must follow a standard circuit pattern, unless coordinated with flight line supervisors and announced. For example, 3D, helicopters.
- c. One flight supervisor to monitor flying operations between RPAS and Helicopter/Multirotor/Control Line flight areas.
- d. One spotter required for each pilot.
- e. <u>Flight supervisors</u>: Their role is crucial to the safe and smooth conduct of flying. They enforce flying discipline (field calls, circuit flying), respond to incidents and coordinate the retrieval of downed models in accordance with your event rules. Two supervisors on duty per shift.
- f. <u>Crashes and recovery</u>: If you crash past the runway (e.g. north) wait to get the go-ahead before you get your plane. Unless the plane is on fire, you will have to wait until the planes that are flying have landed. When you return, wait for the signal from a flight line supervisor before crossing the runway.)
  - If you crash on the runway, let the flight line supervisor take charge of the situation. He will coordinate landings and retrieval. Some airplanes may need to land, etc., so don't just assume that you can go on the runway right away.

#### **Diagrams/maps**



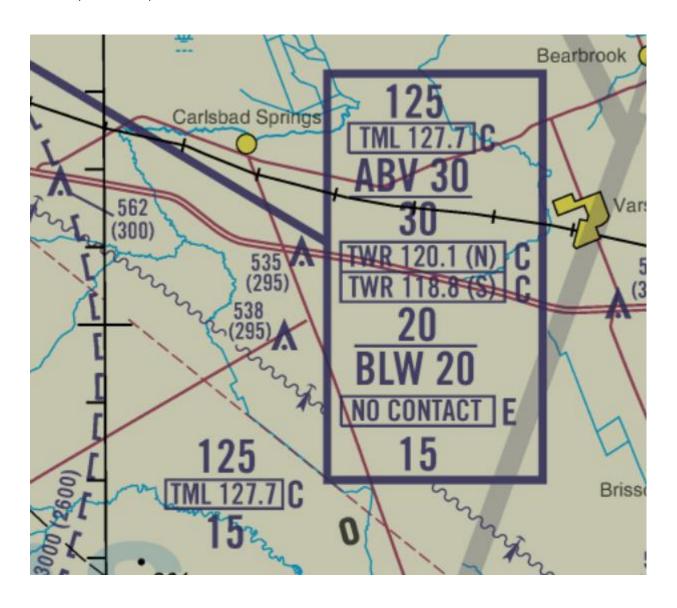
Figure 1 Overhead View of Airfield

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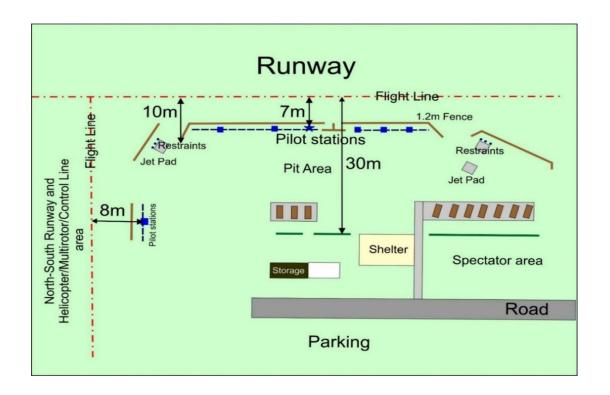




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### WARNING!



### AEROMODELING MAY CAUSE SERIOUS INJURY!

### PROCEED AT YOUR OWN RISK!

### **AVERTISSEMENT!**

## L'AÉROMODÉLISME PEUT CAUSER DES BLESSURES GRAVES!

MAAC PROCÉDEZ À VOS PROPRES Page 23 of 23 RISQUES!