

THIS SITE IS RESERVED FOR MODEL AIRCRAFT OPERATION ONLY NO UNAUTHORIZED DRONE

MODEL AIRCRAFT OPERATION MAY BE HAZARDOUS – PROCEED AT OWN RISK

PERMITTED

PLEASE CONTACT <u>WWW.MAAC.CA</u> FOR ADDITIONAL INFORMATION

Victoria R/C Modelers Society

This site is in controlled airspace – strict compliance with these rules is required. The following rules package must be available to all RPAS Pilots while operating mRPAS and RPAS at this site, either electronically or in print. In addition to the following club rules, the following concepts must be met by all members.

- 1. Each RPAS must be registered with Transport Canada with a Manufacturer Safety Assurance Declaration, either under the MAAC declaration (Model Aircraft, Rotary wing, or Hybrid) or with another established manufacturer (DJI etc.) and each RPAS must have the required documentation available (owners user/maintenance "manual")
- 2. All RPAS pilots must have an Advanced RPAS Certificate, or be operating under the direct supervision of an Advanced RPAS Certificate holder and
- 3. Each **individual pilot's RPAS flying session** must have permission from the controlling agency via NAV DRONE. There is no group permission ability to date.

Administrative Rules

- 1. Site Location or address:
 - a. 6700 Block of Lochside Drive, Central Saanich, BC. Coordinates are: 48° 33' 57.20" N 123° 23' 29.04" W
- 2. The site is in the NAV CANADA Victoria International airport (CYYJ) Class C control zone. Air Traffic Control services are provided by CYYJ Air Traffic Control Airport Controllers 24/7 at the Victoria Airport. The ATC frequency to monitor (optional) is "inner Tower" on 119.7. MAAC members shall not broadcast MAAC operational related matters on ATC frequencies without explicit ATC permission regardless of a member possessing a ROC or other Aviation License.
- RPAS activities are permitted from 9:00AM to 30 minutes before sunset. The time of sunset will be determined using any weather or aviation site data for Victoria or CYYJ.
- 4. Any Pilot operating a mRPAS or RPAS at Michell Airpark must:
 - i. Be a current VRCMS member in good standing.
 - ii. Be a current MAAC member in good standing.
 - iii. Have their VRCMS "A" Wings Certification.
- 5. A Full Member may sponsor a Guest to fly at Michell Airpark. If so, that Guest is flying on the Full Member's membership obligations.
 - a. It is up to the Full Member to ensure that all regulations (MAAC, VRCMS Policy, Standards, Aircraft Inspection, Flying Proficiency, etc.) are being adhered to, and the Full Member accepts full responsibility for their Guest.
- 6. A Guest, who would like to fly at the Michell Airpark, shall meet the following criteria:
 - a. MAAC membership is required, AMA is no longer acceptable.

- b. Must be approved by a member of the Safety Committee and, in the opinion of the Safety Committee member, must understand and meet all club safety and field regulations including:
 - i. MAAC Rules applicable to the type of RPAS
 - ii. Flying Proficiency (equivalent to or greater than: A Wings/Blades, Multirotor endorsement) – if uncertain, sign-off from a Training Committee Member.
 - iii. Aircraft/RPAS Inspection
 - iv. Field Rules and boundaries
 - v. Safety Procedures
- 7. Field operation with a Guest present:
 - a. A Guest will be eligible to fly up to 4 days per year (1 Jan 31 Dec). This number can, at the discretion of the Executive, be extended for an individual.
 - b. Maximum of two (2) Guests on the rotation line/board at any one time.
 - c. A Guest must be accompanied at the field by their Sponsor.
 - d. Guests must not unduly hinder or restrict flying by club members.
 - e. Guests must always use a Full Member as a spotter which can be the sponsor.
 - f. Each Full Member may only have one guest flying at any point in time.
- 8. Revocation of a Guest's flying privileges:
 - a. Any member of the Executive or Safety Committee can revoke privileges should it become apparent that the Guest's actions have: (1) violated club rules; (2) jeopardized safety; (3) risked ongoing operation of Michell Airpark.
 - b. These violations may be cause for the Safety Committee to review the Guest sponsor's flying privileges.
- 9. Event Operation, in addition to MAAC policy for Events:
 - a. The Contest Director (CD) is responsible to ensure that all non-members are properly briefed, and that Guest Pilots meet the criteria above, to fly at Michell Airpark.
 - b. A contest Guest Pilot will be afforded one day's flying both before and after the event without application of the four (4) day flying rule.

In the event of an emergency, call 911 - the address is 6700 Block of Lochside Drive, Central Saanich, BC. Coordinates are: 48° 33' 57.20" N 123° 23' 29.04" W

mRPAS Specific Rules

mRPAS rules - NAV CANADA airspace

- 1. Per the CAR, mRPAS do not require an RPAS operators' certificate and cannot be registered with Transport Canada. mRPAS are however regulated under CAR900.06 and part VI of the CAR.
- 2. mRPAS operation inside controlled airspace cannot use and do not need NAV DRONE for permission.
- 3. Per MAAC policy, operating mRPAS inside controlled airspace is only permitted where MAAC has issued an SOC that determines CAR900.06 has been met. Victoria meets those requirements per the below.

NOTE – The MAAC Manufacturer Declaration policy does not permit "drone" operation in controlled airspace. A "drone" is **not** defined by propulsion system (i.e., multi-rotor) but rather whether there is any type of onboard semi-autonomous flight control systems such as "return to home". All MAAC mRPAS must be flown by the pilot – basic stability gyros or simple stability systems like SAFE are allowed. Please read MAAC policy or contact MAAC for additional information.

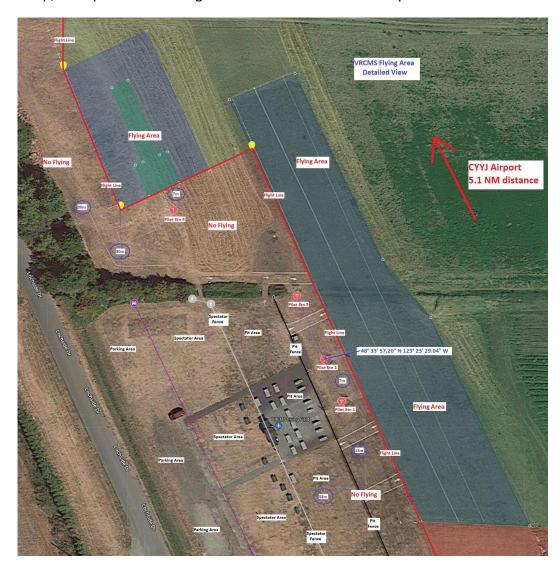
- 4. Therefore, members <u>may</u> operate mRPAS at this site without any RPAS pilot certification, registration or additional airspace permission provided the following conditions are met:
 - All mRPAS must be flown in direct control mode only. "Drones" are prohibited.
 - Members are responsible to ensure the RPA weight is below 250 grams ready to fly.
 Violations will not be tolerated.
 - There are no age restrictions on mRPAS flight.
 - mRPAS do not require a MAAC "manufacturer operations manual" or similar.
 - Visual observers as optional for mRPAS.
 - mRPAS will be operated in accordance with all site and MAAC rules such as honouring the flight line. Spotters are at member discretion.
- 5. NOTE if a member has obtained NAV DRONE permission to operate an RPAS for a given day/session, they may also fly a mRPAS at any time during or outside the NAV DRONE permission time limits without any further permission.

MAAC members conducting mRPAS activities shall give way or otherwise immediately get out of the way of all full-scale aircraft – no exceptions.

Normal operating procedures and Club safety rules - RPAS

- 1. Michell Airpark permits mRPAS and RPAS operations only.
- 2. Any Pilot responsible for the operation of an RPAS at Michell Airpark must have a current Advanced RPAS Pilot Certification.
- Conformance to MAAC RPAS Manufacturer Declaration is mandatory for all RPAS
 pilots. The MAAC RPAS Manufacturer Declaration policy items are append to this rules
 package.
- 4. Each individual RPAS flying session **must** have an appropriate NAV DRONE permission/approval.
 - a. Please refer to the MAAC tutorial on what values to enter in NAV DRONE for a MAAC SOC flying site.
 - b. There is no group ability or sharing of a NAV DRONE approval or similar every pilot must submit their own individual request for each flying session.
 - c. Please refer to the <u>NAV CANADA website</u> for more information and instruction on the use of NAV DRONE.
 - d. For clarity, unless specified in the NAV DRONE approval, MAAC declared model aircraft **do not** require a "transponder" or any other onboard ATC identification equipment to operate in CYYJ Class C transponder airspace.
 - e. Please direct all NAV DRONE usage questions to NAV CANADA via their feedback channels.
- 5. MAAC RPAS operation is **only** permitted to a maximum of 400' above ground level by both MAAC and Transport Canada. Members **shall not** make individual requests for higher altitudes those requests must be processed by MAAC under the MAAC manufacturer declaration.
- 6. A copy of a recent site survey for the site **must be always present** either in print or electronically. MAAC endorses the use of RPAS Wilco, provided a site survey is conducted at least once per flying session (once per day). A group site survey is permitted, provided the information is readily available to all RPAS pilots, including Victoria (CYYJ) weather and CYYJ NOTAM information. Members can share a single RPAS Wilco survey or brief one another throughout the day as new members arrive but a completed site survey **must be always present**.

7. Please refer to that attached map for a depiction of normal site operating procedures depicting site set-up areas such as parking, spectator areas, pit, or assembly areas, and start-up/run-up areas including confirmation of the MAAC required buffer distances.



8. Members are directed to use the following checklist as the minimum pre-flight inspection/assembly process (per MAAC manufacture declaration).

a.	SCHEDULE II
b.	PRE-FLIGHT/PRE-START/PRE-ARM
C.	Airframe/control linkage inspection
d.	RX or Battery voltage check (make sure properly charged)
e.	Assembly check - CofG, Connections, etc
f.	ALL RPAS – restrained before powering up
g.	TX on
h.	Verify voltage.
i.	VERIFY RPAS VISUALLY
j.	Timer set if required.
k.	Telemetry check if required
I.	RX ON
m.	Control direction check
n.	dual rate/travel check
0.	Range Check
p.	FAIL SAFE CHECK

- 9. The following are our start up, take-off, landing approach, and recovery procedures.
 - a. All models will be restrained before being armed or started in the designated startup areas.
 - b. Hand launching and bungee launching shall be done in agreement with any pilots flying normally off to one side of the pilot stations.
 - c. Pilots shall take off into the prevailing winds, or otherwise in agreement with all pilots flying.
 - d. No Flying Whatsoever:
 - i. Within 50 meters of field workers or active equipment
 - ii. Behind the flight line, over pits, or beyond the designated flight boundaries of Michell Airpark
 - iii. Within any Special, Seasonal or Temporary "no fly" areas designated from time to time by VRCMS.
 - iv. Over any person or persons at any time
 - v. Outside of Hours of Operations

- 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.
- 10. The following map depicts our 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.

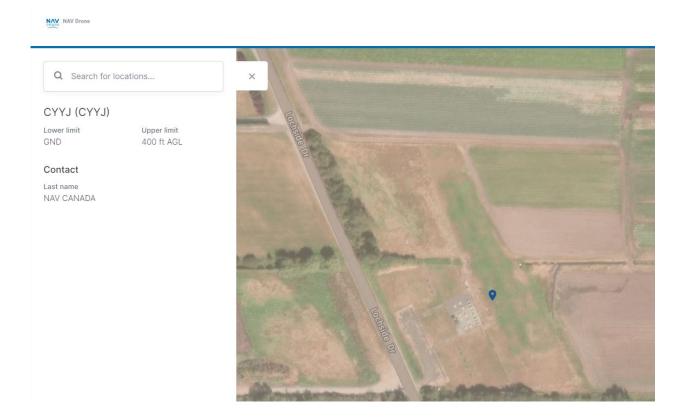


- 11. Formation flying (e.g. drone following camera work) is permitted, requiring a second observer dedicated to ensuring that the aircraft remain within the approved flight area and within visual observation distance.
- 12. The MAAC mandated minimum weather conditions for RPAS are:
 - a. no cloud is present below 1000' above the model flying area, and
 - a horizontal visibility requirement of 3sm (5km) or more around the flying area,
 and
 - c. no other obscuring conditions (fog, smoke, haze etc.) which could make spotting full-scale aircraft difficult.
- 13. The following are our emergency procedures, including loss of control or orientation, any "fly-away" procedures such as notifying ATC or an adjacent aerodrome operator, and any other emergency procedures such as phone numbers for emergency services.
 - a. In case of uncontrolled and sustained RPAS movement (fly-away or uncontrolled flight) outside our flying area, immediately contact the Victoria Intl Airport Control Tower via their emergency line at 250-655-2866. If unreachable, contact the Victoria Airport Authority at 250-953-7536 Ext 4. Be prepared to relay the following information:
 - Michell Airpark Coordinates 48° 33' 57.20" N 123° 23' 29.04" W
 - c. Description of RPAS
 - d. Direction of Flight
 - e. Elevation of RPAS
 - f. Estimated Flight Time
 - g. Estimated Flight Speed
 - h. Your personal contact information
 - i. Any other information warranted.
 - NOTE this process is not required for crashes or minor deviations immediately outside the flying area – see reporting requirements or CAR901.49.
- 14. Visual observers are mandatory in controlled airspace and members must conform to the following information:
 - a. Radio monitoring is **not required** at this site.
 - b. The visual observer is responsible for ensuring "communication capability" is maintained with Air Traffic Control per the approval notice.
 - c. Visual observers for operations in controlled airspace <u>should</u> be certified RPAS pilots (basic or advanced). A minimum of one visual observer per flight line is



- required. For greater clarity the VO's **Primary role** is to scan the sky for approaching full scale aircraft not watch the RPAS.
- d. The VO can be located anywhere behind the flight line, and within 10m of any pilot provided they are positioned in such a way that they are close enough to ensure their voice can be clearly heard and understood the VO should seek verbal Pilot confirmation of all instructions and observations. Their view of the sky must also be unobstructed and free from the sun's glare. (hat sunglasses etc).
- e. VO's shall be briefed prior to any RPAS operations on site and event procedures when spotting a potential conflict with full-scale aircraft.
 - a. When spotting a potential conflict yell "AIRPLANE" in a clear loud voice– and provide other instructions/information as necessary.
 - b. When the VO believes, or the pilots flying observe the airplane is no longer a problem, yell ALL CLEAR. Flying may resume as normal.
- f. Any other member or pilot at the field shall communicate immediately verbally to active pilots and the VO if they observe a full-size aircraft that may be entering a conflict situation, or persons or vehicles entering our flight area.
- g. If a full-size aircraft enters Michell Airpark airspace at an estimated altitude of less than 1000 feet AGL, all pilots will <u>immediately</u> descend their RPAS under 60' and if need be, land as soon as safely able.
- h. In addition, upon detection and notification of a full-size aircraft any Pilot may:
 - a. Call for the suspension of RPAS activities until determined safe to resume RPAS operations.
 - b. Call for all RPAS to land or stipulate the need to intentionally crash an RPAS.
 - c. Instruct any bystanders or observers as necessary to ensure safety and well-being.
- Members must not make any ambient noise generation during model operations, which could interfere with visual observer(s) aural notifications. This includes loud music or announcers, run-ups, engine tuning, loud generators near pilots or similar.
- 15. If there is any type of near miss or safety concern between a full-scale aircraft and our RPA, **ALL FLYING** SHALL cease immediately. The members involved should fill out a MAAC reportable occurrence report and submit that to MAAC and the Club executive and follow MAAC policy with the following exceptions:
 - 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 club executive when able and recall you must keep this form for one year (CAR901.49 (2)). Resume flying when done.

- b. If the member or Club executive deems the event serious, flying will not resume until members are given permission by the Club executive in writing.
- c. If there is actual contact between an aircraft and a MAAC RPAS all flying will cease until MAAC confirms we may resume operations.
- d. This process is for **your** protection.
- 16. 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. Ensure logbook entries are made.
 - b. Any repair that cannot be fixed at the field, shall only be repaired at the modellers/owner's shop or other repair facility. Ensure logbook entries are made.
- 17. This policy will be reviewed annually or as necessary by the VRCMS Executive to address changes in regulations or VRCMS operations. Members are encouraged to provide feedback and suggest amendments to improve safety standards and the caliber of RPAS operations.



MAAC Manufacturer Declaration requirements

Please refer to the full policy for additional information. The following are the core requirements of the policy that enable MAAC operation in controlled airspace.

To be eligible to be classified as meeting the "MAAC RPAS Manufacturer Declaration", the RPAS must meet the following technical requirements:

- a) The RPA must not weigh more than 25kg ready to fly (SFOC are not permitted),
- b) The RPA must be of a type, quality and construction or assembly method consistent with the commonly accepted definition of "model aircraft" in North America, wherein the MAAC member, using the MAAC safety code and processes, is responsible for any portion of construction or final flight ready assembly. See MAAC policy for a detailed description of the types of acceptable MAAC RPAS/model aircraft and their classifications.
- c) The control system and components must be of a type, and quality meeting Industry Canada approval and otherwise meet MAAC Safety Code and commonly accepted modeling and model industry standards for radio control installation and operation.
- d) The RPAS must not contain any type of "Human-on-the-loop" or other computer control in the control system. For clarity, deactivation, or temporary disabling of any such system is not acceptable these types of control systems must not be present in the system.
- f) RPA operating in controlled airspace up to 400'AGL, MAAC VLOS meets CAR922.04 requirements provided the RPAS pilot operates in accordance with MAAC VLOS.
- g) The RPA must have performance capability to descend from the maximum altitude approved by the controlling agency to 60'AGL at a rate of 700 feet per minute or greater.
- h) The RPA or RPAS must have an operable "flight termination" system or design criteria that can be reasonably expected to terminate the flight with minimal delay in the event of a control link failure.
- i) If intended to be flown at night, or if required by the controlling agency during the day, the RPA must have a functioning lighting system to ensure MAAC VLOS requirements are met or to provide enhanced visual detection for full-scale pilots.

Prior to RPAS operation under the "MAAC RPAS Manufacturer Declaration", the **RPAS pilot shall ensure the RPAS owner** has documentation available at the site/event for each RPA which contains the following information. This may be in electronic or printed format however MAAC highly recommends this information be included in the RPA logbook, either as a separate page entry, an addendum, or as a package of info

- a) RPA Make or manufacturer name,
- b) Model the specific RPA model designation including the bound/used transmitter.

- c) The RPA category (MAAC Model Aircraft, MAAC Rotary Wing, MAAC Hybrid)
- d) The RPA maintenance program that includes:
 - i. instructions related to servicing and maintaining the RPA and control system,
 - ii. An inspection program to maintain system readiness.
- e) Any weight limits or center of gravity concerns or related special requirements.
- f) Any RPA design features such as limitations on speed, altitude, or operational restrictions,
- g) Any foreseeable weather conditions or limitations affecting RPAS operation,
- h) Any special or unique features of the system that could result in severe injury to crew members during operation.
- i) Any special or unique design features of the system, and the operating procedures, that are intended to protect against injury any person not involved in the operation,
- j) Any warning information provided to the pilot notifying any degraded system performance,
- k) Any special or procedures for operating in normal or emergency conditions,
- I) Any special assembly, adjustment, or post flight inspection requirements, and
- m) Any available manuals or component operating instructions.
- n) The above records shall be kept by the owner, and any subsequent MAAC owner for the life of the RPAS, or until two years after the RPAS is withdrawn from service and de-registered.

To operate a RPAS under the "MAAC RPAS Manufacturer Declaration", the **RPAS pilot shall** ensure the following requirements are met:

- a) All other relevant sections of the CAR are met,
- b) The RPAS is operated in compliance with the MAAC Safety Code and any category specific rules or requirements.
- c) The RPAS meets the technical requirements of MAAC policy,
- e) The RPAS shall not be operated in any mode other than "direct manual control"
- f) The pilot shall not operate more than one RPAS at a time.
- g) The pilot shall not operate the RPA unless any equipped onboard flight termination system is operable,
- h) The RPA shall not be operated within 30 meters of any bystander or spectator, under any circumstances and **regardless of altitude**.
- i) The pilot shall not operate an RPAS unless at least one visual observer is present Note, unless required by the controlling agency or stipulated in the site SOC, mRPAS do not require a visual observer.
- j) The RPAS shall not be operated in any weather condition, near terrain or any other condition which could:
 - i. reduce or negate visual detection of approaching full scale aircraft or bystanders,
 - ii. interfere with radio control link range or clarity of reception or
 - iii. negatively affect the performance of the RPA or the control system where safety of operation could be compromised.

- k) The pilot shall only operate a RPA of a type, size or performance capability that can realistically be expected to maintain controlled flight within the lateral and vertical flying area confines specified in the SOC or by the controlling agency,
- I) The RPAS pilot shall report to MAAC without delay any defect, flaw or equipment performance issue that negatively affected meeting any of the technical or operational requirements of this policy.
 - i. The RPAS **shall not** be operated again under this declaration until both MAAC and the RPAS pilot/owner have investigated and agree the noted deficiency has been rectified. ii. Members shall use the MAAC Reportable Occurrence form and MAAC shall respond in writing. Any such record shall be kept for two years from the date of the agreement to cause and remedy.
 - iii. The above records shall be kept by the owner, and any subsequent MAAC owner for the life of the RPAS, or until two years after the RPAS is withdrawn from service and deregistered.

Diagrams/maps

BRITISH COLUMBIA

AERODROME/FACILITY DIRECTORY

VICTORIA INTL BC CYYJ

