### Rocky Barnstormers RC Club Valley Of Hope Field Rules Rules (2024)

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: *Rocky Mountain RC Club* (#11, Zone A) Field Name: *VALLEY OF HOPE FIELD* Location: 36442 Range Rd 44, Red Deer County, T4G 0N2

Pilot Station Coordinates: 52 7' 31.5"N, 114 32' 16.50"W

Contact(s): Wilhelm Vohs, MAAC 30148, Owner vhope@pentnet.net, 403-588-8026

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

- 1. be MAAC members in good standing.
- 2. be members of Rocky Mountain RC Club, or an invited guest 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. Guest pilots and members using the field for the first time will be briefed by the field owner or a club member familiar with the field.
- 2. Garbage & empty fuel containers to be packed out.
- 3. These rules will be updated and reviewed by field owner on club MAAC membership renewal cycle.

### Site/event emergency response requirements

In the event of an emergency, call 9-1-1 The site address to be provided to first responders is: 36442 Range Rd 44, Red Deer County, T4G 0N2 (52.124746, -114.538309).

1. ABC fire extinguishers required for gas turbine operation.

### **Modelling Rules**

### MAAC Approved Modelling Categories

*List the MAAC approved Modelling categories – modify the chart to suit the site – mark any category that is not allowed as "not approved".* 

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

Approved Category	Weight/Power Limits	Altitude/operating limits
mRPAS	Less than 250 grams	400'agl
RPAS	25kg or less	400'agl
Tethered (Control-Line)	<3kg	2 flying circles
Free flight	<2kgs	400'agl
Space Models	<3kg/F engines	1700'agl
Surface Vehicles	<25kg/50cc	

### MAAC Approved Site Add-ons

*This section is for administrative use only – MAAC will amend based on what has been approved at your site.* 

This site has not been approved for any MAAC add-ons. OR

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	If 25kg to 35kg	400'agl
RPAS Altitude	Less than 25kg	1700'agl
RPAS Altitude and Weight		
Permanent Event Approval	Not approved	
RPIC		

RPAS/Model technical specifications or requirements or restriction: NA

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.

- RPAS CAR requirements MAAC will specify as required There are no special CAR restrictions on RPAS models or All RPAS must conform a Manufacturer Declaration/Safety Assurance provision, either MAAC's or another manufacturers.
- 3. Club/Site/Event requirements -
- 4. MAAC Add-on requirements MAAC will specify as required.

### RPAS Pilot/operator qualifications or requirements

- mRPAS requirements mRPAS do not require an RPAS operators' certificate however are regulated under CAR900.06 and part VI of the CAR. There are no MAAC or CAR age restrictions on mRPAS flight. Compliance with MAAC safety code meets all requirements.
- 2. RPAS Pilot CAR requirements. All RPAS pilots using this site must have *either BASIC or Advanced* RPAS certification.
- 3. Club/Site/Event requirements.
- 4. MAAC Add-on requirements MAAC will specify as required.

### CREW qualifications or requirements.

This section is for crew qualifications or club requirements for crew (not pilots). What do crew members need to be considered crew.

- 1. mRPAS requirements mRPAS do not normally require crew under the CAR.
- 2. RPAS CAR requirements MAAC will specify as required.
- 3. Club/Site/Event requirements *Helper and mechanic use are up to each individual member to decide.*
- 4. MAAC Add-on requirements MAAC will specify as required.

### Crew Rules

### MAAC will specify as required.

### Visual Observers

- 1. Visual observers (VO) are *optional*. When required at this site, no member shall operate an RPAS unless:
  - a. A visual observer(s) is present who has been briefed or trained on any site/event procedures upon spotting a potential conflict with full-scale aircraft.
  - b. A minimum of one visual observer per flight line is required.
  - c. VO must not watch the models their sole role is to scan the surrounding sky for approaching full-scale aircraft.
  - d. Position the VO where they have unobstructed sight lines sitting in the shade beside a camper/structure is not acceptable. Equally they must be situated to have a reasonable communication ability with all pilots/modellers.
  - e. Use visual aids as required sunglasses, wide brim hats, sunshades, binoculars or similar. If positioned far from pilot stations, provide suitable notification means such as air horns, lights, radios etc.

- f. MAAC will specify as required Explain any rules/procedures if the VO has been assigned, or can be assigned responsibility for monitoring ATC communication (no Air boss etc). The VO may be assigned VHF radio monitoring duties as well as ATC communication responsibilities. The VO or other responsible person may monitor ALL cell phone numbers provided in the individual NAV DRONE approvals. Under no circumstances shall pilots flying monitor their cell phones for ATC coordination.
- 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 (ATC or otherwise) 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. Thereafter modeling activities may resume as normal.

### <u>Air Boss – ATC Coordinator</u>

### MAAC will specify as required.

### **RPIC – RPAS Pilot in command**

MAAC will specify as required and provide the general framework and modify any site specific RPIC provisions. Put the SFOC specific items in the SFOC section.

### Instructors/Demo flights

### **Spotters**

### Airspace requirements or permissions

This site is wholly in uncontrolled airspace – no airspace permission is required.

### 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, at least one member shall check the Aviation NOTAM for *CYQF or CYRM* using either the NAV CANADA website or RPAS Wilco. They may share the results with other site users either verbally, electronically or in print. Every member is still responsible to ensure they have the latest NOTAM information in some fashion.
- 2. Determined by MAAC if the site does not have a weather reporting station, use this language The MAAC mandated minimum weather conditions to commence or continue MAAC RPAS operations are:
  - a. no cloud ceiling (BKN or OVC) estimated at 1000'agl if the site approved altitude is less than 400', or less than 1000' above any higher site approved altitude, and
  - b. the RPA will be able to remain 500' vertically and 1 sm (statute mile) horizontally clear of any cloud, and an estimated horizontal visibility 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.

NOTE – there is no aviation weather available for *Valley of Hope Field* so 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. 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 each visually confirm no changes to site obstructions, local obstacles and that weather conditions stipulated in any MAAC requirements are met.
- 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 weather channel time to determine legal night.
- 5. Pilots may fly in formation provided they agree to do so.
- 6. <u>Link to a map/diagram</u> of normal 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 are as follows:

*The MAAC minimums shall be respected* – 7*m flight line to pilot stations, 10m to pits, 30m to spectator and parking.* 

**7.** Provide a text description of any pre-flight assembly and daily testing requirements. For any site or operation relying on the MAAC manufacture declaration (controlled airspace, SFOC), this section must include direction to confirm RPA fail-safe settings are active.

- 8. All models, including electric powered models, will be restrained before being armed or started in the designated startup areas.
  - a. Range test **shall** be conducted before first flight of the day for each RPAS (even for same Tx)
  - b. *Failsafe functionality shall be verified for ADVANCED operations (each RPA).*
  - c. Failsafe functionality **should** be verified for BASIC operations.
- 9. <u>Link to map of the Flying area</u>, 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. No flying when field maintenance is in progress.
- 10. The following are the site take-off, approach, landing and recovery procedures:
  - a. Pilots, or their spotter, shall call out all model movements.
  - b. Hand launching and bungee launching shall be done in agreement with any pilots flying normally off to one side of the pilot stations/dock.
  - c. Pilots shall take off into the prevailing winds, or otherwise in agreement with all pilots flying.
  - d. All pilots to fly the same active runway circuit. First pilot up selects circuit direction.
  - e. No person shall proceed past abeam the pilot stations without permission of other pilots flying.
  - f. The recovery of downed models in the flying area shall not be done without the agreement of all pilots flying. Thereafter no new models may take-off until the downed model is recovered. No flying directly over the recovery crew.

### **Emergency procedures**

### Fly-away or lost link.

This site is wholly in uncontrolled airspace – there are no fly-away provisions required.

### Incident Accident

- If there is any type of near miss or safety concern between a full-scale aircraft, bystander and our RPA/models, ALL FLYING/MODELLING SHALL cease immediately. The members involved should fill out a MAAC reportable occurrence report and submit that to MAAC and the Site/Event organizer and follow MAAC policy.
  - a. If the member(s) involved believe the risk was very minimal, they may complete their own self declaration or risk assessment using the MAAC form. Submit a copy of the form to the Site/Event organizers when able and recall if this involved RPAS you must keep this form for one year (CAR901.49 (2)). Resume flying/modelling when done.
  - b. If the member or Site/Event operators deems the event serious, flying/modeling will not resume until members are given permission by the Site/Event organizers in writing.
  - c. If there is physical contact between a full-scale aircraft, a by-stander, a spectator and a MAAC RPAS/model all flying/modelling will cease until MAAC confirms you may resume operations.
  - d. This process is for **your** protection.

### 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.

### MAAC Add-ons

## The following is for SAG Administrative use only and is not to be considered Club required information or permission to operate above 400'agl. This document is a TEMPLATE – not approval.

### **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**

*SITE specific results* -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 XXnm XXXX (name). Controlled airspace vertically over top this site starts at EXPLAIN.

- 1. To determine the maximum permissible RPAS altitude above ground level, EXPLAIN.
- 2. MAAC RPA are required to remain 500' below the base of any overlying controlled airspace, therefore the highest altitude MAAC can approve is XXXX' AGL (above ground level).

### **Sufficient Communication requirements**

*SITE specific results* - 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 EXPLAIN whatever exists and why it needs what*. Assessment of the normally expected traffic patterns yields the following:

- 1. Prior to commencing RPAS operations above 400'agl, list any conditions.
- 2. While operating RPA above 400', the VO **shall** list any communication conditions.

### Visual Observer (VO) assessment

*SITE specific results* -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 position 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. Non-essential ambient noise shall be kept to an absolute minimum (generators, music, etc)

### The Club/site/event shall:

- 1. Ensure a copy of the MAAC SFOC #930344 and SFOC application form 26-0835 are present and available to all RPAS pilots when operations are occurring.
- 2. Ensure a copy of these rules, in their entirety are available to all RPAS pilots at the site.
- 3. Communicate to all Club members and mark this site as closed for RPA operations above 400'AGL, **if there are any substantial changes to the site survey criteria** (CAR901.27 a through h), unless or until MAAC has been advised, has conducted a new SORA, and issued new permission.

### The RPA pilot shall:

- 1. Comply with MAAC 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 supervisions 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 responsible persons of any issue that prevents them from meeting their obligations.

### The RPA shall be equipped with

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

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

### **RPAS Operations Above 25kg**

The following is for SAG Administrative use only and is not to be considered Club required information or permission to operate above 400'agl. This document is a TEMPLATE – not approval.

### RPAS Operations Above 400'AGL and Above 25kg

The following is for SAG Administrative use only and is not to be considered Club required information or permission to operate above 400'agl. This document is a TEMPLATE – not approval.

### **Event Approval (Permanent or individual)**

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

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

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

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

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

### Foreign RPAS Pilots (US or other)

MAAC has already obtained Transport Canada approval for foreign RPAS pilots to operate RPAS at our MAAC sites and events (MPPD14 approved July 2023). Foreign pilots simply join MAAC and follow the provisions of MPPD14 (on the website). Also see the RPAS Wilco NOTAM (2024-02).

### Over 400'agl and above 25kg

MAAC is aware of which clubs/sites qualify for above 400'agl and will soon begin to issue approvals site by site, with conditions specified in the rule's packages. Where there are events requesting over 400' or over 25kg, the Event SFOC rules listed above also apply, as well as the "higher and heavier" SFOC requirements.

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).
  - g) Ensure all follow up actions are completed after the event, most notably any Transport Canada paperwork.
- 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.
- 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

Site set-up diagram. Site Flying area diagram. Airspace MAP – including NAV DRONE Viewer Grid altitudes or lack thereof. Adjacent Aerodrome map as required. CFS entries as required. Any other diagrams as required. TC traffic pattern map as required.





## AEROMODELING MAY CAUSE SERIOUS INJURY!

## PROCEED AT YOUR OWN RISK!

### **AVERTISSEMENT !**

# L'AÉROMODÉLISME PEUT CAUSER DES BLESSURES GRAVES!

# PROCÉDEZ À VOS PROPRES RISQUES!