



THIS SITE IS RESERVED FOR MODEL
AIRCRAFT OPERATION ONLY

**NO UNAUTHORIZED DRONE
PERMITTED**

MODEL AIRCRAFT OPERATION MAY BE
HAZARDOUS - PROCEED AT OWN RISK

PLEASE CONTACT WWW.MAAC.CA FOR
ADDITIONAL INFORMATION

Cold lake RC Flyers

This site is in DND controlled airspace – strict compliance with these rules is required. The following rules package must be available to all RPAS Pilots while operating mRPAS (micro RPAS-sub 250grms) 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 a Manufacturer Safety Assurance Declaration, either under the MAAC declaration (Model Aircraft, Rotary wing, or Hybrid) or an existing manufacturer declaration **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.

Administrative Rules

1. The site is located at 62513 Range Road 414. Access road coordinates are 54.402509, -110.10601.
2. The site is in DND Canadian Forces Base (CFB) Cold Lake (CYOD) class D control zone-controlled airspace. Air navigation services are provided by 4 wing Cold Lake Air Traffic control tower, located on site at CYOD, 24/7.
3. All persons using this site for any modeling activities must be:
 - A MAAC member in good standing.
 - A member of the Coldlake Flyers RC'ers or an invited guest and
 - Agree to follow the MAAC Safety Code, and all other Club rules.
4. Club members shall ensure ALL visiting RPAS pilots must be briefed on the rules package for this site.
5. Non-MAAC guests may receive a **one-time demonstration flight** provided they are using a club member “traditional model aircraft” (as defined by MAAC), and the aircraft is operated using a “buddy-box” type system where the Advanced RPA pilot has direct supervision and immediate control ability.
6. All pilots shall display their MAAC membership and current year club sticker on their person or transmitter.
7. Vehicles shall be parked in established parking areas.
8. Well behaved pets are permitted on a leash. Clean up after the pet.
9. Spectators and guests must remain behind the chain link fence.
10. Starting times for internal combustion engines are 8:00am on weekdays and 10:00am on weekends. These start times may be waived to one hour earlier for scheduled events.
11. All aircraft meet the AMA test for no more than 96db. This is for community relations and each modeller is expected to enforce noise limits.
12. Last person to leave the field please lock up the buildings and the 2 gates.
13. Clean up after you leave – do not leave any garbage or crashed airplane parts behind. Please keep pets on a leash and pick up any deposits left by pets.

In the event of an emergency, call 911 address: Address: 62513 Range Road 414

mRPAS Specific Rules

mRPAS rules - DND airspace

1. Per the CARs, 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 the CYOD controlled airspace do not need special or separate permission from the DND but **must** honour the time restrictions.
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.

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 may 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.
 - All mRPAS must have a label affixed to them stating the weight in grams.
 - This must be the ready to fly weight including fuel and batteries.
 - Any Member caught using any aircraft over 250 grams without the proper CAR requirements may be banned from use of the field.
 - **Anyone flying mRPAS must have “basic” RC piloting competency.**
 - 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 sites, and MAAC rules such as honouring the flight line. Spotters are at member discretion.
5. NOTE – if following all other RPAS site access rules, member may fly a mRPAS at any time at this site without obtaining any further specific 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

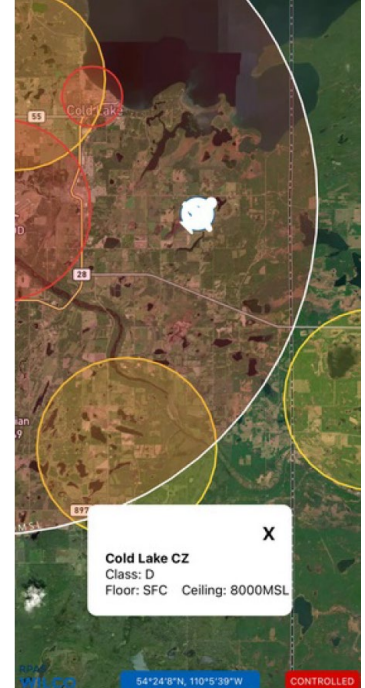
1. This site only permits mRPAS and RPAS operation.
2. **Advanced RPAS Pilot certification is required** to operate RPAS at the Cold Lake Flyers site.
3. **Conformance to MAAC RPAS Manufacturer Declaration is mandatory for all RPAS owners/pilots.** The MAAC RPAS Manufacturer Declaration policy items are appended to this rules package.
4. Each individual RPAS flying session **must** be conducted in accordance with the 4 Wing Cold Lake Unmanned Aircraft permission requirements:
 - a) Operations limited daily from 08:00am to 11:00pm local time.
 - b) Operations limited to **remain below 400' above ground level** (AGL)
 - c) Size limit of 3meter wingspan, **less than 20kg take off weight.**
 - d) Construction materials limited to traditional model materials such as balsa/foam or composite (no metal airframes).
 - e) **No optical sensors permitted** (cameras, or FPV etc.)
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 year in accordance with MAAC policy (see NOTAM 2023-04). A group site survey is permitted, provided the information is readily available to all RPAS pilots. 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. Refer to the attached map for 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 the MAAC required buffer distances.
8. All pre-flight inspections or model assembly shall be done in the designated area away from the active modelling area.
 - a) It is the responsibility of every pilot to ensure their aircraft is airworthy.
 - b) New or repaired aircraft must be looked over by a senior member prior to being flown.
 - c) A class ABC fire extinguisher is required in proximity of the pits or flightline.
9. Prior to flying any RPAS, at least once per day members must confirm fail-safe settings are active where required (per MAAC manufacturer declaration).
10. Use the frequency board is mandatory, including if you are on 2.4 GHz.

11. Pilot qualifications for training are as follows.
 - a. Student pilots are to train with an instructor and follow our MAAC Wings program, until signed off.
 - b. Qualified club member pilots may assist and train students.
 - c. Qualified instructors can train and qualify students and new members.
12. Use either the starting table restraints or ground hooks or wing pegs to hold your aircraft when starting any Gas/glow model engine, in the start up areas. Do not conduct prolonged tuning if other members are modelling.
13. Batteries shall not be connected to electric-powered models unless the model is restrained in the designated start-up area – (no exceptions).
14. Avoid standing in line with the propeller while the engine is running.
15. No taxiing of aircraft in the pit area.
16. The direction of launches, take-off landing, and vehicle traffic pattern will be determined by the pilot.
 - a. If there is no wind, all take-offs etc., shall be at pilots' discretion.
 - b. If more than one aircraft is in the air, a clockwise traffic pattern shall be used.
17. Hand launching, and bungee launching shall be done in agreement with any pilots flying.
18. Keep the runway clear, if you must stand behind your aircraft for takeoff immediately move to the flight line once the aircraft is airborne.
19. While flying please stand behind one of our fenced flight stations.
20. Pilots must call out the following maneuvers:
 - a. Taking off
 - b. Landing
 - c. Dead stick.
21. Our no-fly zone is anything over the pits, areas East and over trees of our field and parking lot. NOTE – MAAC and CAR rules are NO FLYING with 30m of any non-MAAC person, property, or “thing” of value.
22. No flying while grass cutting is underway. Mowing has priority over flying and will normally be done on Saturday mornings.
23. The recovery of downed models in the flying area shall not be done without the agreement of all pilots flying.
 - a. Thereafter no new models may take-off until the downed model is recovered.
 - b. No flying directly over the recovery crew.
 - c. NO restarting gas or glow engines on the field.
24. “Formation flying,” – which is where two or more pilots agree to fly the same flight path in proximity, is permitted provided all pilots agree.
 - a. Maximum of four aircraft of the same category airborne at any one time
 - b. No mixing of categories (helicopters with fixed wing or with 3D etc.)
25. Use spotters when the air space gets busy. If a non-member is asked to become a spotter, it is the pilot's responsibility to ensure that person's safety and that a valid waver is signed. Select spotters who are familiar with RC aircraft and no minors. Spotters are responsible to coordinate safe model movements between models and pilots - Also see **visual observer** rules below.
26. Our stipulated minimum weather conditions, are the MAAC mandated minimum weather conditions for RPAS:
 - a. no cloud is present below 1000' above the model flying area, and
 - b. a horizontal visibility requirement of 3 statute miles (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.

27. Visual observers (VO) **are mandatory** in controlled airspace and members shall ensure the following:
- VO's or spotter for operations in controlled airspace **should** be certified RPAS pilots (basic or advanced). A minimum of one visual observer per flight line is required.
 - The visual observer (or other non-flying pilot/delegate) should be assigned responsibility for ensuring "communication capability" is maintained with Air Traffic Control per the approval notice.
 - VO's will be briefed on these site procedures for what to do upon spotting a potential, conflict with full-scale aircraft.
 - VO's must be located within shouting distance of all pilots flying, and that their view of the sky must be unobstructed and free from the sun's glare (wear a hat, sunglasses etc.).
 - When spotting a potential conflict – yell AIRPLANE in a clear loud voice.
 - All pilots flying will descend as low as possible – aiming for 60' above ground level AGL – and if need be, land as soon as safely able.
 - Lateral deconfliction maneuvers are prohibited above 60'AGL.
 - When the VO believes, or the pilots flying observe the airplane is no longer a problem yell – ALL CLEAR. Flying may resume as normal.
 - 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.

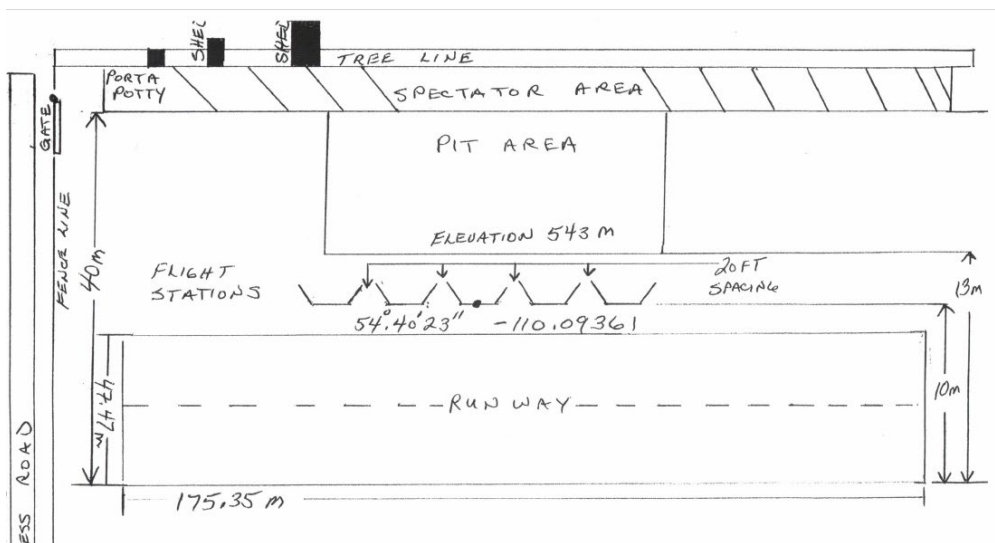
Emergency Procedures

28. Fly-away, loss or orientation or any other type of event where control of the RPAS is lost and the flight path heads out of the flying area:
- In any direction, as soon as possible notify CYOD base ops at 780-840-8000 and advise them of the last known position, direction and expected flight duration.
 - If Northwest toward Cold Lake Health Center (CMH5 located 3.95nm northwest), and you realistically think the RPA can pose a hazard, call the Alberta Health Services number 780-639-3322 and advise the scenario.
 - There is no need to notify CYOD ATC for temporary or minor infractions or crashes immediately outside the flying area. There is no need to notify civilian ATC such as NAV CANADA.
29. The following process and procedures shall be followed in the event of any observed incident or accident, including involving full-scale aviation or injuries to persons requiring medical attention (as listed in CAR 901.49).
30. 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 the MAAC and the Club executive and follow MAAC policy with the following exceptions:
- 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.
31. 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.

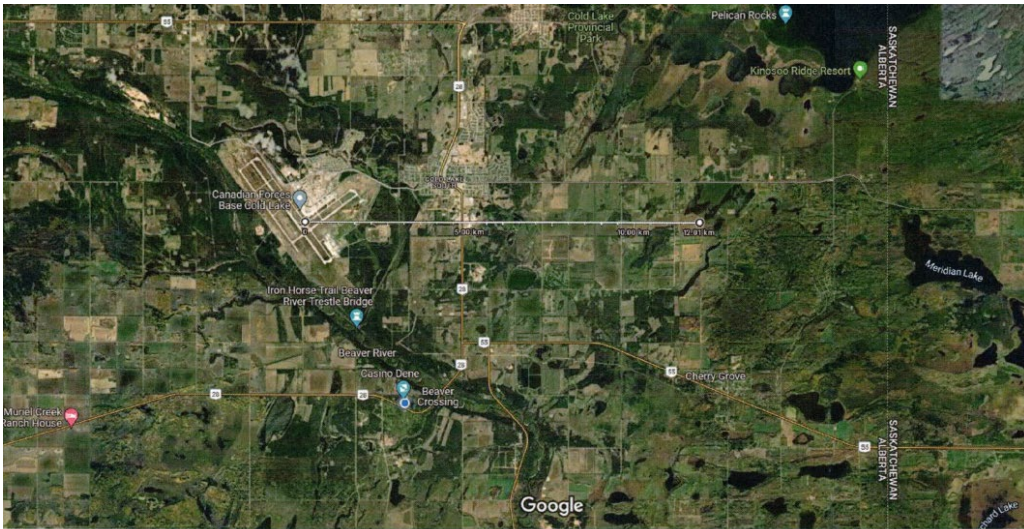
These rules will be updated and reviewed annually by the Club executive. Any changes must be sent to MAAC for approval.



No FLY!



FLY ZONE



Imagery ©2023 TerraMetrics, Map data ©2023 Google 2 km

Measure distance
 Total distance: 12.01 km (7.46 mi)

AERO DOME CENTRE
 TO
 CENTRE OF FIELD.
 (FLIGHT STANDS)

Google Maps



Imagery ©2023 CNES / Airbus, Maxar Technologies, Map data ©2023 100 m

ACCESS ROAD
 54.402509 - 110.10601
 54°24'9.0324 - 110°6'20.163

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 20kg 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) RPAS 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 RPAS 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 RPAS must have an “flight termination” system or design criteria that can be reasonably expected to terminate the flight with minimal delay in the event of a control failure.
- i) If intended to be flown at night, or if required by the controlling agency during the day, the RPAS 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 RPAS which contains the following information. This may be in electronic or printed format however MAAC highly recommends this information be included in the RPAS logbook, either as a separate page entry, an addendum, or as a package of info.

- a) RPAS Make or manufacturer name,
- b) Model – the specific RPAS 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 RPAS 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.
- l) 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 RPAS 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 an 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,
- l) 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 can 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 de-registered.



4 Wing Cold Lake Unmanned Aircraft Systems Prior Permission Request (PPR) Form

(3030-1)



Application for UAS operations within 4 Wing Cold Lake Military Airspace shall be submitted to the Wing UAS Officer for review no later than 5 working days prior to the planned operation. Applicants are to email the completed form including their Advanced Operations Pilot Certificate, Special Flight Operations Certificate (SFOC), if required and a satellite map showing intended area of operations to the 4 Wing COC to forward to the 4 Wing UAS Officer. UAS operators are expected to be familiar and comply with the 4 Wing Flying and Range Orders (WFRO) in addition to the 4 Wing UAS Policy. The 4 Wing 4 OSS Commanding Officer reserves the right to approve, approve with restrictions or deny any PPR for any reason.

Please complete this form and return it via E-mail. For any questions, contact the 4 Wg COC.

Phone: 1-780-840-8595

CSN: 690-8595

Fax: 1-780-840-4033

Email: 4WGCOC@forces.gc.ca

Operation Information

Organization: Radio Controlled Coldlake Flyers

Start Date of Operations: 24 Jan 2023 End Date of Operations: 24-Jan-2024

Purpose: Recreation Radio Controlled Aircraft

Launch Location (Lat/Lon): 54°24'8.44" -110°5'36.99" Recovery Location (Lat/Lon): 54°24'8.44" -110°5'36.99"

Ground Ops Location (Lat/Lon): 54°24'8.44" -110°5'36.99" Handoff Location (Lat/Lon): _____

Operating Altitude: 400 Feet and Below

Launch/recovery times: Daily 8am to 11pm ALL days of the week

Proposed Route: Landing and Take off with the wind direction.

Amplifying Information:

Contacts : RC Flyers

First Contact: Dale Reid -780-815-3308

Second Contact : Brent Reid -780-573-4156

Third Contact : Chris Lefave -780-201-3644

Give detailed explanation of any exceptions to 4 WFROs being requested:

Loction is a registered Organization as an RC Flying Club through, Model Aeronautics Association of Canada (MACC) for valid members of model aeronautics association of Canada Referred to as (MACC).

Note: Proof of MACC insurance is required to fly at the field of Coldlake Flyers.

Make and model of UAS including description of EM emissions (incl. freq & max power output):

Largest model aircraft 3m, max weight 20kg / Construction Balsa and Foam / Composite.
Power Plants Nitro / Electric / Gasoline.
Designed and Built by owners , UHF 2.4 GHZ@ 1 Watt.

EM/EO/IR sensors on board (incl. purpose and capability):

No Optical Sensors

Sensor Plan (incl. where and what the sensors on board will be viewing) *(include as an attachment to this form)*

List of Onboard Navigational equipment:

No on Board Navigational Equipment.

What Class(es) of airspace will the UAS operate in?

D

Does the UAS have sense and avoid capabilities?

No

Is the UAS certified with the Federal Aviation Administration?

No

If yes, attach certification documents

List of operators names and qualifications:

Dale Reid - Flight Instructor Qualified
Brent Reid - Flight Instructor Qualified - Senior Pilot
Chris Lefave - Pilot Qualified

Requestor Information

Rank & Name: Civilian : Dale Reid E Mail: daledi@telus.net
Email: 02-Feb-2023 Phone: 780-815-3308

4 Wing UAS OFFICER Recommendation (Office Use)

Recommended **Yes** Signature HARTZELL, SHAUN 481 Digitally signed by HARTZELL, SHAUN 481 Date: 2023.02.06 11:20:12 -0700 Date **06-Feb-2023**

Comments

4 Wing CO 4 Operational Support Squadron Approval (Office Use)

Approved **Yes** Signature  CAMPBELL, ROBERT 475 2023.02.06 16:52:58-0700 Date **EMAIL**

Comments