

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



Med Hat RC'ers – Len Young Memorial Airfield

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 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. The site is located at 5260 Box Spring Road, Medicine Hat Alberta. Pilot station coordinates are 50.097N, -110.736W.
- The site is in NAV CANADA Medicine Hat airport (CYXH) class E control zone. Air navigation services are provided on site 24/7 by Medicine Hat Flight Service Station (CYXH FSS), commonly called "air radio" on frequency 122.2. There is no on-site Air Traffic Control facility, instead being provided by Edmonton Area Control Center (CZEG ACC).
- 3. All persons using this site for any modeling activities must be:
 - A MAAC member in good standing
 - A member of the Medicine Hat 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. Spectators and guests must remain behind the chain link fence.
- 6. Use the frequency board is mandatory, yes, even if you are on 2.4 GHz.
- 7. Student pilots are to train with an instructor and follow our Wings program.
- 8. Last person to leave the field please lock up the buildings and the gate.
- 9. 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.

In the event of an emergency, call 911 - the address is 5260 Box Springs road NW

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.

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:
 - o 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 over250 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.
 - o 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. This site only permits mRPAS and RPAS operation.
- 2. Advanced RPAS Pilot certification is required to operate RPAS at the 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** 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. Please direct all NAV DRONE usage questions to NAV CANADA via their feedback channels.
- 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 Medicine Hat (CYXH) weather and CYXH 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. 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.
- 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 either the starting table restraints or ground hooks to hold your aircraft when starting any engine.
- 11. Batteries shall not be connected to electric-powered models unless the model is restrained in the designated start-up area no exceptions.
- 12. Gas/glow models must be restrained and started in the start-up stands or similar, located in the start-up area. Do not conduct prolonged tuning if other members are modelling.
- 13. No taxiing of aircraft in the pit area. The assembly tables and all asphalt in front of the sun shelter adjacent to the chain link fence is considered part of the pit area.
- 14. Our no-fly zone is anything over the pits, all areas south of our field, our infield, clubhouse area

and parking lot. Our flying area is within our fenced area., including no-fly zones. NOTE – MAAC and CAR rules are NO FLYING with 30m of any non-MAAC person, property, or "thing" of value.

- 15. No flying within 30metres of the Gun Club buildings which are located to the Southwest of our main runway. We can fly over the north part of the gun club property if they are not having a shooting event.
- 16. The direction of launches, take-off landing, and vehicle traffic pattern will be determined by the pilot. If there is no wind, all take-offs etc., shall be at pilots' discretion.
- 17. Hand launching and bungee launching shall be done in agreement with any pilots flying mRPAS Site rules.
- 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. Avoid standing in line with the propeller while the engine is running.
- 21. 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.
- 22. "Formation flying," which is where two or more pilots agree to fly the same flight path in proximity, is permitted provided all pilots agree.
- 23. 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.
- 24. Night flying is allowed at this site. Members shall determine when night begins or ends using the time on the Weather network for Medicine Hat.
- 25. 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 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.
- 26. Visual observers (VO) **are mandatory** in controlled airspace and members shall ensure the following:
 - a. VO's 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.
 - b. 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.
 - c. VO's will be briefed on these site procedures for what to do upon spotting a potential conflict with full-scale aircraft.
 - d. If radio monitoring is used, the VO maintains a listening watch of the applicable aerodrome traffic frequency of 122.2. Any person transmitting on a VHF radio must hold a ROC-A.
 - e. 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'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.
- f. 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

- 27. 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:
 - a. If north, the RPAS exits controlled airspace almost immediately notifying NAV CANADA is optional but encouraged.
 - b. If south towards Medicine Hat airport (CYXH located 4.73nm south) or Medicine Hat Regional Hospital (CMH5 located 3.95nm southeast) call the NAV CANADA FSS Emergency phone number at 403-526-3040 and advise the scenario.
 - c. Follow any other procedures as listed in the NAV DRONE approval.
- 28. 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).
- 29. 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:
 - 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.
- 30. 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.

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 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.
- 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

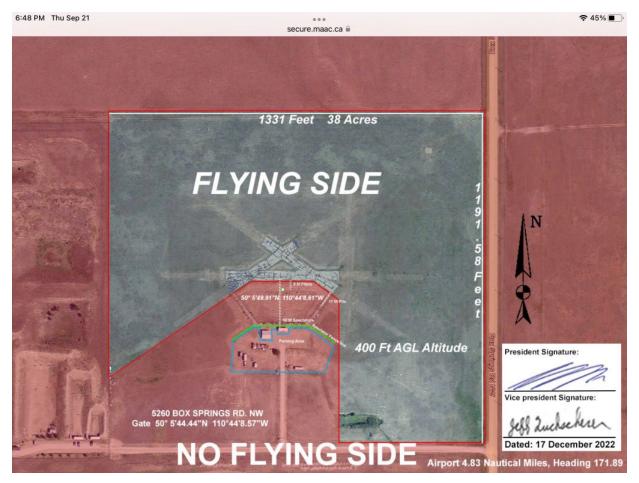
- a) RPA Make or manufacturer name,
- b) Model the specific RPA model designation including the bound/used transmitter.
- c) The RPA category (MAAC Model Aircraft, MAAC Rotary Wing, MAAC Hybrid)
- d) The RPA maintenance program that includes:
 - i. instructions related to servicing and maintaining the 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,
- 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 deregistered.

Diagrams/maps



NAV Drone

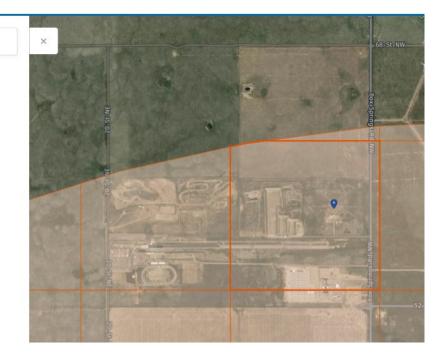
Q Search for locations...

СҮХН (СҮХН)

Lower limit GND Upper limit 400 ft AGL

Contact

Last name NAV CANADA



REF	N50 01 08 W110 43 14 2SW 13°E (2013) UTC-7(6) Elev 2351 A5005 A5006 LO2 HI3 CAP	ELEV 2351	
OPR	Muni 403-525-6115 Cert Ldg fees	3800 cemetery	
PF c	A-1,2,3,6,7 C-4,5		
FLT PLN FIC ACC WX	Edmonton 866-WXBRIEF (Toll free within Canada) or 866-541-4102 (Toll free within Canada & USA) Edmonton IFR 888-358-7526 METAR 1245-0345Z O/T METAR AUTO (see COMM) TAF H24, issue times: 00, 06, 12, 18Z. WxCam	dich @	
SERVICES FUEL OIL S PVT ADV	O/T call out chg 100LL, JA-1 1130-0400Z‡ Super T Aviation All 1,2,4,5,6 Super T Aviation 122.75, 888-541-6636 or 40	RPAS	
RWY DATA RWY CERT TWY CERT TWY APRON RCR	Rwy 03(032°)/21(212°) 5003x150 ASPH Rwy 09(095°)/27(275°) 2850x100 ASPH Rwy 03/21 AGN IIIA Rwy 09/27 AGN I Twy B AGN I Twy B Itd to 30,000 lbs; Twy A itd to 150,000 lbs. Apron I Ltd to 150,000 lbs; Apron II & III Ltd to 30,000 lbs, Apron IV tie-down area itd to 10,000 lbs Opr Win maint 15-23Z‡ Mon-Fri exc hols O/T 1 hr PN ctc 403-581-7200. CRFI, PLR/PCN. Call-out fees may be levied.		
LIGHTING	03-AO(TE ME) P2, 21-AO(TE ME) P2, 09-(TE ME), 27-(TE ME) O/R thru FSS ARCAL-122.2 type K when FSS clsd		
COMM RADIO RCO ATIS MF AWOS	Edmonton rdo 123.375 (FISE) 126.7 (bcst) 124.875 1245-0345Z rdo 122.2 1245-0345Z O/T tfc 5NM 5400 ASL (CAR 602.98)		
NAV NDB	XH 332 (L) N50 00 47 W110 47 57 Pvt Unmonitored		
PRO	Arr/dep reports & IFR clearances 0345-1245Z ctc Edmonton rdo 123.375.		
CAUTION	Non-registered A/D (Harrison Field) 4.5NM SW CYXH aprt. Frequent light/ultralight acft activity. Grass rwy, orientation 17/35. Ditches N & S edges Rwy 27 E of Rwy 03/21. Ditches N edge Twy A & along N of Rwy 21 running E aprx 525' from Twy A. Migratory bird activity in vic of aprt Oct-Mar.		

REF	N50 02 07 W110 42 07 1WSW 13°E (2016) UTC-7(6) Elev 2423' A5005 A5006	South Saskatchewan	
OPR	Alberta Health Services 403-529-8099 Cert PPR	River	
PF	A-1 B-2,3,4,7,8 C-5,6		
FLT PLN FIC ACC	Edmonton 866-WXBRIEF (Toll free within Canada) or 866-541-4102 (Toll free within Canada & USA) Edmonton IFR 888-358-7526		
HELI DATA	FATO 86' dia rooftop non-supporting TLOF 57' x 57' CONC Safety Area 115' dia 17,000 lb Max heli overall length 57.4' Opr 1-888-999-3770		
LIGHTING	RY(LO) yellow	BPAS	
COMM RADIO RCO ATIS MF AWOS	Edmonton rdo 123.375 (FISE) 126.7 (bcst) 124.875 1245-0345Z Medicine Hat rdo 122.2 1245-0345Z O/T tfc 122.2 5NM centered on Medicine Hat A/D 1.2NM SW 5400 ASL (CAR 602.98)		
PRO	Arr/dep 027° fr heli, slope 8% (H3). Arr/dep 230° fr heli, slope 16% (H2).		
CAUTION	Hosp bldg S of heli marked with obst lgt. Lgtd stacks aprox 230' NE of heli.		

х

SUSW

1

Medicine Hat CZ Class: E Floor: SFC Ceiling: 3000AGL

1

MEDICINE HAT CYXH Type: AERODROME Operator: Cert Location: 50°1'8"N, 110°43'14"W Elevation: 2351 ft CFS