

## Big Sky Flyers McLairen Airfield 2025Rules

## MAAC Approved September 16, 2025

The following rules package must be available to all RPAS Pilots while operating RPAS at this site, either electronically or in print. Nothing in these rules relieves the RPAS pilot of their individual CAR compliance requirements.

## **Administrative Rules**

Club: Big Sky Flyers (# 461, Zone D)

Field Name: McLairen Airfield

Location: 2 Km W of PTH 75 S & or Corner of Cartier Rd & Andrechuk Rd, St Adolphe, MB

Field Owners: Weins Brothers box 32 Glen lea M.B. ROG OSO

Bernie-204 701 5200 Jerry- 204 299 9950

Pilot Station Coordinates: 49° 40′ 39"N 97°09′ 42"W

(49.4039, -97.0942)

Contact(s): Kevin Allard , 70401, President

Bigshow6522@gmail.com, (431) 205 3675

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

- 1. be MAAC members in good standing.
- 2. be members of Big Sky, or an invited guest of Big Sky 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 site operator is responsible to take reasonable steps to ensure a modeller briefing occurs for each modeller using the site.

## **Site Administrative rules**

- Club's guest qualified MAAC members in good standing pilots are welcome to use the field as guest a
  maximum of (3) times in the calendar year. Guest flights are only allowed under the direct supervision
  of a qualified pilot member.
- 2. Upon arrival at the site, visiting pilots shall familiarize themselves with the site rules, which can be found in the porta potty located on W west side of the parking area. Attending members shall confirm with the visiting pilot before engaging in any flying activities.

MAAC SFOC # 930433 Page 1 of 24

- 3. Parking is only allowed is the area shown on the site layout map. Parking along the grass beside the road is strictly always prohibited.
- 4. Members, club's guests and spectators should avoid driving on the access road leading to the field if there is any sign of excess water or mud. This is especially true during the spring season.
- 5. No member or club's guest shall operate any category of model while under the influence of alcohol / recreational drugs or other judgment impairing drugs.
- 6. All pets must be leashed, under control and remain in the parking / spectator area.
- 7. Everyone must remove their own garbage from the field at the end of their flying day. It is everyone's responsibility to keep their area clean and safe for all. A few garbage cans were strategically placed for your use.
- 8. A porta potty is available on site during active months for all members, guests and spectators.
- 9. Spectators are to always remain behind the main fence line. Absolutely no spectators are allowed in the Pit, Start-up, shutdown and pilot station areas.
- 10. The club executive shall review the club rules at least once a year prior to the Club AGM.

## Site/event emergency response requirements

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

## 2 Km W of PTH 75 S & or Corner of Cartier Rd & Andrechuk rd, St Adolphe, MB 49.4039N, -97.0942W

- 1. A fire extinguisher and sand bucket must be readily available for all powered and electric model operation. Those items are easily accessible in the impound building located mid field behind the main fence line.
- 2. First aid kits are also available on site. One is in the porta potty.
- 3. Members operating turbine models shall have a personal ABC fire extinguisher beside them when starting their models in the start-up area.

## **Modelling Rules**

#### **MAAC Approved Modelling Categories**

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

| Approved Category       | Weight/Power Limits | Altitude/operating limits      |
|-------------------------|---------------------|--------------------------------|
| mRPAS                   | Less than 250 grams | 400'agl                        |
| RPAS                    | 25kg or less        | 400'agl/ <mark>600</mark> 'agl |
| Tethered (Control-Line) | 3kg/.25ci           | 1 flying circles               |
| Free flight             | <2kgs               | 400'agl                        |
| Space Models            | <1.5kg/F engines    | 600'agl                        |
| Surface Vehicles        | Not approved        |                                |

MAAC SFOC # 930433 Page 2 of 24

## **MAAC Approved Site Add-ons**

The following "add-ons" have been approved at this site, provided all relevant MAAC rules, policy and SFOC conditions are adhered to by the site and its users.

| Approved Add-on                | Weight/Power Limits Altitude/operating limits |  |  |
|--------------------------------|---|--|--|
| RPAS Weight (25-35kg)          | Not approved                                  |  |  |
| RPAS Altitude                  | Less than 25kg 600'agl                        |  |  |
| RPAS Altitude and Weight >25kg | Not approved                                  |  |  |
| RPIC                           | See section below 600'agl                     |  |  |

## RPAS/Model technical specifications or requirements or restriction

- 1. mRPAS requirements mRPAS cannot be registered with Transport Canada. mRPAS are however regulated under CAR900.06 and part VI of the CAR. Compliance with MAAC safety code meets those requirements. mRPAS at advertised events must comply with the MAAC Event SFOC.
- 2. RPAS CAR requirements All RPAS operated over 400'agl MUST conform to the MAAC Manufacturer Declaration/Safety Assurance provision.
- 3. Club/Site/Event requirements Mufflers are required on all engines over 0.156 cu. in displacement.
- 4. MAAC Add-on requirements RPAS operated over 400'agl must comply with the MAAC/SFOC RPAS requirements listed in the add on section. All event visitors must be briefed to ensure compliance with these requirements.

## RPAS Pilot/operator qualifications or requirements

- 1. mRPAS requirements mRPAS do not require an RPAS operators' certificate however are regulated under CAR900.06 and part VI of the CAR. Except for Advertised Events, there are no MAAC or CAR age restrictions on mRPAS flight.
- 2. RPAS Pilot CAR requirements. All RPAS pilots using this site must have Basic RPAS certification. In the event a pilot choses higher than 400agl operations then the advanced certificate & higher regs apply
- 3. Club/Site/Event requirements. This site recommends that all mRPAS/RPAS Pilots have MAAC Wings, however its use is not mandatory. There are no other qualification requirements for other modelling categories.
- 4. MAAC Add-on requirements RPAS operated over 400'agl must comply with the MAAC/SFOC RPAS requirements listed in the add on section. All event visitors must be briefed to ensure compliance with these requirements.

## **CREW** qualifications or requirements.

- 1. mRPAS requirements mRPAS do not normally require crew under the CAR. Members wishing to fly a mRPAS model in First Person View (FPV) shall use a spotter.
- 2. RPAS CAR requirements The VO may be any responsible person who has been briefed on the site procedures.
- 3. Club/Site/Event requirements Spotters shall be used at any time there are 4 or more pilots stations in operation, and at any sanctioned MAAC event.

MAAC SFOC # 930433 Page 3 of 24

4. MAAC Add-on requirements - RPAS Pilots operating over 400'agl must comply with the MAAC/SFOC pilot requirements listed in the add on section of this document.

## **Crew Rules**

### **Visual Observers**

- 1. Visual observers (VO) are mandatory for RPAS operations in controlled airspace, above 400'agl, RPAS events open to the public or where specified by MAAC. However, the use of visual observers to alert pilots to the presence of of full sized air traffic is strongly encouraged. When required at this site, no member shall operate an RPAS unless:
  - a. A visual observer(s) is present who has been briefed or trained on any site/event procedures upon spotting a potential conflict with full-scale aircraft. The VO shall be briefed to pay close attention to aircraft reporting over ST AGATHE or IKEA inbound or outbound from Winnipeg or Lyncrest, or for aircraft indicating they are following Highway 75
    - i. That aircraft reporting over or towards those points may conflict with RPA operations
    - ii. When hearing these reports, to ensure additional visual scans are conducted, and
    - iii. To otherwise be vigilant to visually scan for traffic approaching the RPAS site from the vicinity of these points.
  - 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. While operating RPA above 400', the VO or other responsible adult **shall monitor** aircraft communications on VHF frequencies 126.7, or Winnipeg ATC tower 118.3, for situational awareness.
- 2. Per CAR (901.23(vii)) each site must have rules to ensure a clear full-scale detection and avoidance command/response protocol is in place there is no time for debates or confusion. MAAC has adopted the following minimum:
  - a. MAAC models/RPA shall give way/get out of the way of full-scale aircraft in all circumstances no exceptions. There is never any onus on full-scale pilots to yield to models ever.
  - b. Upon spotting/hearing or being advised of any airplane that might pose a hazard with modeling activities, the VO shall yell in a loud clear voice "AIRPLANE". If in doubt, issue the warning.
  - c. Upon hearing this command, all pilots shall descend to as low as altitude as safely possible, and if required land. The goal is to vacate the airspace vertically and then determine if RPA can continue to operate safely.
  - d. Lateral deconfliction maneuvers are prohibited above 60'AGL. Descending to 60'agl (tree top level) is the accepted Transport Canada initial response. Members operating near/off aerodromes have different specific response requirements.
  - e. Upon determining the full-scale aircraft is no longer a threat, the VO or other persons shall yell in a loud clear voice "ALL CLEAR".

MAAC SFOC # 930433 Page 4 of 24

- f. IF ATC, a Transport Canada official, the Program Director or their delegate, has given a stop flying order, guidance or similar, all model flying **shall** stop immediately and shall not resume until permission to do so is obtained from person or body that issued the stop flying order.
- g. Thereafter modeling activities may resume as normal.

## Program Director, Air Boss, ATC Coordinator

This site is in uncontrolled airspace – a Program Director is optional and an Air Boss is not required

### **RPIC – RPAS Pilot in command**

These are the options for any MAAC member to provide RPAS Pilot in Command (RPIC) direct supervision to another person at this site. **THESE RULES ARE SPECIFIC TO THIS SITE**.

- 1. **Basic RPAS Certificate Holder Direct Supervision options** any MAAC member with a current and valid Basic RPAS certificate may perform RPIC duties as follows:
  - a. supervise a single non-certificate holder at a Basic site
  - b. Shall not supervise a group of other people regardless of any certificates.
  - c. Shall not supervise any other member in any "advanced scenario" (above 400').
- 2. Advanced RPAS Certificate Holder Direct Supervision options any MAAC member with a current and valid Advanced RPAS Certificate may perform RPIC duties as follows:
  - a. supervise a single non-certificate holder at any site or Basic scenario,
  - b. supervise up to 5 "Basic" Certificate holders in **uncontrolled airspace** advanced scenarios (above 400'), as outlined in site rules.
- 3. **PPL+ with no RPAS Certificate Direct Supervision options** any MAAC member with a current or expired PPL, may perform RPIC duties as follows:
  - a. supervise a single non-certificate holder at any Basic site,
  - b. supervise up to 5 Basic Certificate holders in **uncontrolled airspace** advanced scenario (above 400'), as outlined in site rules.

#### Notes:

- c. PPL+ only holders may not independently operate an RPAS in basic or advanced scenarios unless supervised by an appropriately rated RPAS Certificate holder. A PPL+ only holder cannot supervise another PPL+ only holder while in controlled airspace at least one person must have at least a valid basic RPAS operators certificate. If the PPL+ has a valid and current RPAS operators certificate, then the higher of either provision applies.
- 4. **RPAS Flight Reviewer Direct Supervision options** any MAAC member with a current and valid Flight reviewer Certification may perform all the duties of an Advanced RPAS Certificate holder. RPIC does not affect the Transport Canada flight reviewer program or CAR regulations associated with it.
  - **NOTE** While able to provide direct supervision (only), RPIC members cannot operate an RPAS on their own, unless they meet the CAR RPAS Pilot certification level (Basic or Advanced). Meaning a member with a PPL **only** cannot legally fly an RPAS in Canada, unless supervised by a Basic or Advanced RPAS Certificate holder. Equally, two PPL holders do not equal one RPAS Certificate holder

MAAC SFOC # 930433 Page 5 of 24

and cannot supervise one another – one of them must have a valid RPAS certificate for the airspace/scenario being conducted.

See RPIC Add-on Section below for rules, procedures and details

## Instructors/Demo flights

Flight demonstrations and instruction are provided by via coord or direct supervision.

#### **Spotters**

- 1. While spotters are not specifically required their use is mandatory during events.
- 2. Maiden of a new or rebuilt Model requires a second qualified pilot to act as a spotter. This applies when other pilots or bystanders are present. Exclusive airspace is preferred, otherwise all active pilots at the pilot stations are to be notified prior to flight.

## Airspace requirements or permissions

This site is located in Class G uncontrolled airspace

The nearest controlled airspace vertically is CYWG Class Transition Area at 700'agl. There are various Class E airways at 2200'agl.

The nearest controlled airspace is CYWG Class C control zone (SFC-3000') located 9.29NM north.

Site elevation: 230m/754'asl

## 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.

1. In the event of a "fly-away" towards YWG, you will call the aerodrome operator at 204-555-5555 and advise them of the issue.

## Normal mRPAS/RPAS/model operating procedures

- 1. Prior to daily operations, a RPAS Wilco site survey shall be consulted. MAAC endorses the use of a single shared RPAS Wilco site survey provided:
  - a. A new site survey is conducted/checked at least once every 56 days (NAV CANADA schedule), and if there are changes the updated site survey is made available to all members.
  - b. All site survey information is readily available to all RPAS pilots on site (electronically or in print).
  - c. Prior to each flying session, members must check Aviation NOTAM for critical flight safety information, or changes to airspace or aerodromes. Members may share NOTAM information verbally or in print with other members at the site.
  - d. Members must confirm there are no changes to site layout affecting distances to unsheltered bystanders
  - e. Members must each visually confirm no changes to site obstructions, local obstacles and that weather conditions stipulated in any MAAC requirements are met.

MAAC SFOC # 930433 Page 6 of 24

NAV CANADA 56-Day Publication schedule - ensure you complete a new RPAS Wilco Site Survey on these dates:

| 2025      | 2026      | 2027      | 2028      |
|-----------|-----------|-----------|-----------|
| 20-Feb-25 | 22-Jan-26 | 18-Feb-27 | 20-Jan-28 |
| 17-Apr-25 | 19-Mar-26 | 15-Apr-27 | 16-Mar-28 |
| 12-Jun-25 | 14-May-26 | 10-Jun-27 | 11-May-28 |
| 07-Aug-25 | 09-Jul-26 | 05-Aug-27 | 06-Jul-28 |
| 02-Oct-25 | 03-Sep-26 | 30-Sep-27 | 31-Aug-28 |
| 27-Nov-25 | 29-Oct-26 | 25-Nov-27 | 26-Oct-28 |
|           | 24-Dec-26 |           | 21-Dec-28 |

- 2. The MAAC mandated minimum weather conditions to commence or continue MAAC RPAS operations are:
  - a. no cloud ceiling (broken or overcast sky) estimated lower than 1000'agl if the site approved altitude is less than 400', or no cloud ceiling estimated less than 1000' above any higher site approved altitude, and
  - b. the RPA will be able to remain 500' vertically and 1 sm (statute mile) horizontally clear of any cloud, and
  - c. an estimated horizontal visibility of 3sm (5km) or more around the flying area, and
  - d. no other obscuring conditions (fog, smoke, haze etc.) which could make spotting full-scale aircraft difficult.

NOTE – RPAS pilots may estimate cloud ceilings and visibility, provided they do so in good faith understanding the purpose of weather limits is to ensure we can see approaching full-scale aircraft.

- 3. Each RPAS pilot is responsible to ensure the following MAAC procedures and requirements have been met prior to commencement of any RPAS operation:
  - a. Any <u>required</u> MAAC manufacturer declaration provisions have been met, including all RPAS technical specifications verified, pilot and crew requirements, and
  - b. All RPA and required equipment have been maintained and all mandatory actions completed before the flight, in accordance with the manufacturer declaration and
  - c. all paperwork such as pilot declarations, required operating manuals or similar is present, and
  - d. That any required crew members are properly qualified, have made any required declarations and are briefed on the operation.
- 4. 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 at a minimum visual determination and/or cell phone network time as displayed on personal cell phone to determine legal night.
- 5. Pilots may fly in formation provided they agree to do so.
- 6. Refer to the Field Layout Diagram in the Diagrams/maps section near the end of this document which shows the normal site set-up areas such as parking, spectator areas, pit, and start-up/run-up areas
- 7. MAAC required buffer distances are variable and at this site are:

MAAC SFOC # 930433 Page 7 of 24

- a. 15m flight line to pilot stations, 25m flight line to pits, 40m flight line to spectator and parking area.
- b. Flying tethered models (control line) or launch of Free Flight models or rockets is not permitted during RPAS operation.
- c. Operation of RPAS is not permitted when the field is being used for Tethered Models (control line), Free Flight or Rockets.
- 8. All models will be assembled in the pit or designated assembly area. Unpowered testing of controls and failsafe may occur here as well. All powered testing must occur in a start up area.
- 9. Pre-flight assembly and daily testing requirements:
  - a. All model components must be inspected to ensure they are in working order and ready for safe flying operation.
  - b. All pilots must perform a range check to verify components are working properly and that fail safe setting are active.
- 10. Pilots using 72 MHz radios must do the following:
  - a. All 72 MHz radios must be narrow band. Only RC aircraft frequencies, as approved by the D.O.C. may be used. Permitted Tx frequencies are listed in the MAAC Safety Code.
  - b. 72 MHz Frequency control procedures shall be in effect. Members are required to provide their own frequency pins indicating the frequency in use. Unpin from the frequency board when not flying. Pins are not to be left on top of the board, as this normally indicates someone that is awaiting a frequency to become available. Pins abandoned on the board are to be put in the frequency board lock box.
  - c. The maximum recommended time pins are to be left on the frequency board is 15 minutes, particularly when another member, present at the field, is sharing the same frequency.
- 11. All models, including electric powered models, will be restrained before being tested, armed or started in the designated startup areas.
  - a. Plane restraints must be used; either a tail fork, a person holding the plane, or using a start table. A wing up against a field box is not considered proper restraint.
  - b. Observe proper field etiquette by avoiding the positioning of your aircraft in such a way that the prop wash or exhaust blows onto other members' aircraft or otherwise poses a hazard or problem.
  - c. Propeller driven planes are to be started facing towards the runway/away from the spectator area.
  - d. Electric powered planes are to be armed facing towards the runway/away from the spectator area.
  - e. Jet aircraft must be started with the exhaust facing away from the spectator area.
  - f. Refrain from running engines at full throttle for extended periods in the pit area if necessary, take your plane to the engine test area at the north end of the field.
- 12. Refer to the Diagrams/Maps section near the end of this document for the Site Flying Diagram showing the flying area length and depth, a depiction of the flight line and runway.
  - a. All flying and landings are to be done while the pilot remains at a pilot station.
  - b. All flying will be done to the NW of the runway . Pilots are encouraged to fly parallel to the runway. The 'flight line' is a line extending to infinity, parallel to and on the inner edge of the

MAAC SFOC # 930433 Page 8 of 24

- runway. There will be NO FLYING west (on the pilots' side) of the flight line under ANY CIRCUMSTANCES. Do not fly near the farm building NW of the field. It should be recognized that it is a hazardous condition when any aircraft is allowed to pass between the pilot and the pit area.
- c. There will be no free taxiing behind the pilot stations and the flight line, except from the start areas directly to the flight line.
- d. Aircraft may be either carried or taxied from the start areas/tables to the flight line. The model may also be taken directly to the ends of the runway or with permission of pilots at the pilot stations, to the edge of the flight line in front of the start areas/tables.
- 13. The following are the site take-off, approach, landing and recovery procedures:
  - a. Pilots, or their spotter, shall call out all model movements.
  - b. Pilots shall take off into the prevailing winds, or otherwise in agreement with all pilots flying.
  - c. Hand launching and bungee launching shall be done in agreement with any pilots flying normally off to one side of the pilot stations.
  - d. Aircraft shall not be brought to the flight line by passing between or near the pilot stations. Every effort must be made to keep running aircraft away from the pilots at the pilot stations.
  - e. To avoid placing any transmitters between pilots and their airborne models. Pilots ready to take off should never proceed to any pilot station by walking in front of the occupied pilot stations. Only proceed to an available pilot station by walking around and approach from behind the pilot stations.
  - f. Upon landing, pilots may taxi their planes off the west side of the runway, no nearer than 15m from the end of either the north-edge or south-edge of the runway pavement, depending on the landing direction and at an angle away from the starting tables,
  - g. No person shall proceed to the flightline in front of the pilot stations without permission of other pilots at pilot stations.
  - h. The recovery of landed models in the flying area shall not be done without the agreement of all pilots occupying the pilot stations. This includes landed planes that have stopped while still on the runway and not taxied off under their own power. No other models may take-off until any downed models are recovered. No flying directly over the recovery crew.
  - i. When retrieving aircraft, the transmitter (Tx)must stay inside the flying field. The Tx shall not be taken to the aircraft (for retrieval outside field limits) and it is recommended that the Tx be left at the pilot station. Two people maximum are allowed in the farmer's crop to retrieve aircraft (to minimize crop damage).
  - j. Pilots shall not stand on the surface of the active runway at any time. It should not be necessary to or cross the active runway or flight path except when taking off, or for the retrieval of downed aircraft.
- 14. Helicopter Specific Field Rules. All helicopter pilots shall follow all rules addressed to the fixed wing aircraft and are entitled to all fixed wing privileges.
  - a. No hovering behind the flight line.
  - b. Keep hovering to a minimum when the runway is in use.
  - c. Hovering only flights or set-up flights are to be done in the hovering area, which is north of the AC assembly area.

MAAC SFOC # 930433 Page 9 of 24

## Non-RPAS Normal Modeling procedures

Tethered models (control line), Free Flight and Rockets are not permitted during RPAS operation. A temporary operating area will be established on the runway for non-RPAS operations.

## **Tethered model operations**

## **Public safety**

- 1. The flying area/circle edge must be clearly marked. A spotter may be placed near this area to monitor for by-standers. During events both may be required."
- 2. Should any non-flying person (spotter) observe a person moving towards the circle they will move towards the individual while raising their hand and yelling **STOP!** repeatedly until the person has stopped. The spotter will counsel the person as to where it is safe to stand. Understand some people using the park may not speak English.
  - a. The pilot will upon hearing STOP! will climb the model to a 30-degree high level flight altitude immediately and monitor the situation until it is resolved by the spotter.
  - b. If the person continues their approach, the spotter SHALL continue to try to establish communications/visually warn with the individual. The pilot SHALL continue high level flight at 30 degrees and evaluate the situation.
  - c. If the pilot can walk with model over to another area they should do so, or as a last resort ground the model.
- 3. In all cases the pilot shall take all actions to prevent contact between a flying model and a person regardless of reason.

#### Member safety

- 1. Members shall ensure any control line models are restrained in a start up area prior to tuning or other powered maintenance.
- 2. Prior to operating a tethered model, the operator shall ensure all other members/crew/spectators are aware of the flying area/control-line circle dimensions, either verbally or with surface markings.
- 3. Members shall not use the control line circle if any RPAS activities are occurring, without permission of the pilots present. Conversely, RPAS pilots shall not start or make flight ready any RPAS until the control line circle has finished their current flight. Any disagreements shall be referred to the most senior site member, but in any event RPAS have priority for field use.

#### Spectator safety

Spectators must remain behind the RPAS flight and at least 10m from the edge of the circle

## Free Flight model operations

#### **Aviation safety**

- 1. No member shall launch a free flight model aircraft if a full-scale human carrying aircraft is in the immediate vicinity of the launch site.
  - a. Prior to launching/releasing any model, the modeler or their spotter shall scan the sky in a full 360 degrees for any approaching full-scale aircraft. The flight shall not occur until all involved are satisfied there is a safe launch window.

MAAC SFOC # 930433 Page 10 of 24

- 2. No free flying model aircraft operations will occur below the site mandated weather minimum. Members may determine the weather themselves with direct observation or use any other source: a. If cloud is present below 1000' above the model flying area (above max free flight expected altitude)
  - b. a horizontal visibility requirement of less than 3sm around the modeling area, and
  - c. if there are other obscuring conditions (fog, smoke, haze etc.) which could make spotting fullscale aircraft or bystanders difficult.

## **Public safety**

- 1. All members shall ensure that the launching area is clear of all obstructions and persons except for mechanics and/or officials.
- 2. MAAC "spotters" are optional at this site 7 mandatory for public events. The following are site procedures for ensuring by-stander safety:
  - a. When any member or other person spots a by-stander approaching the launch or recovery area that might present a safety concern, they are to yell out "BY-STANDER" in a loud voice.
  - b. ALL members must immediately stop any launch preparations and disarm the power/launch system.
  - c. If a model has already been launched, the spotter or modeler should endeavor to warn the bystander to remain clear of the launch/recovery area and outside the safety buffer distance. Yelling in a firm loud voice "STOP stay back," and waving your arm(s) is suggested.

#### Member safety

Operation of Free Flight is not permitted during RPAS operations.

## Spectator safety

FF aircraft must be launched 40m downwind from any spectators

## Space model operations (Rocketry)

#### **Aviation safety**

- 1. No space model launches will occur below the site mandated weather minimum. Members may determine the weather themselves with direct observation or use any other source:
  - a. If cloud is present below 1000' above the model flying area (above max rocket expected altitude)
  - b. a horizontal visibility requirement of less than 3sm around the modeling area, and
  - c. if there are other obscuring conditions (fog, smoke, haze etc.) which could make spotting full scale aircraft **or bystanders** difficult.
- 2. No member may launch a rocket unless 10 seconds before launch and again immediately before ignition they conduct a 360-degree scan of the sky for any full-scale aircraft which may enter the rocket flight envelope during ascent or descent.
  - a. If prior to launch, any member spots an approaching full-scale airplane they are to yell our "AIRPLANE" in a loud clear voice.
  - b. Upon hearing this, any persons controlling the launch shall immediately render the launch system inoperative (remove launch key, remove power etc.) and stop all launch activities.
  - c. The involved members shall then monitor the full-scale aircraft and not resume launch activities until they are assured there is no safety risk.

MAAC SFOC # 930433 Page 11 of 24

## **Public safety**

- 1. All members shall ensure that the launching area is clear of all obstructions and persons except for mechanics and/or officials.
- 2. MAAC "spotters" are mandatory at this site. The following are site procedures for ensuring bystander safety:
  - a. When any member or other person spots a by-stander approaching the launch or recovery area that might present a safety concern, they are to yell out "BY-STANDER" in a loud voice.
  - b. ALL members must immediately stop any launch preparations and disarm the power/launch system.
  - c. If a model has already been launched, the spotter or modeler should endeavor to warn the bystander to remain clear of the launch/recovery area and outside the safety buffer distance. Yelling in a firm loud voice "STOP stay back" and waving your arm(s) is suggested.

### **Spectator Safety**

Launch sites must be roped off with hi visibility tape and/or marker pylons and rope to restrict access into the launch area and keep guests and spectators a safe distance back from the launch site. The spectator line is 25m from the flight line and approximately 34m from the flying circles.

## **Emergency procedures**

## Fly-away or lost link.

RPAS pilots are required to know who to notify in the event of a RPAS fly-away outside our MAAC approved flying areas **which could reasonably enter** the nearest controlled airspace volume. Note this process is not required for temporary flight immediately outside the MAAC approved flying area, or for known crashes/off site "landing" outside the MAAC approved flying area.

- 1. If you experience a RPA fly-away, and in your judgement as the RPA pilot in command (including RPIC scenarios) the RPA has sufficient energy or capability to fly to and enter the identified controlled airspace volume (either laterally or vertically, or both), you are legally required to attempt contact with listed agencies below and advise them of the fly-away situation.
- 2. MAAC has assessed this site and determined the following:

This site is wholly in uncontrolled airspace. The nearest controlled airspace volume is

a. Laterally

| Nearest Controlled Airspace – Fly-away - Laterally |                              |                        |          |                                       |
|--|------------------------------|------------------------|----------|---------------------------------------|
| Altitude   |                              | Distance and Direction | Altitude | Contact Info                          |
|  | CYWG Class C<br>Control Zone | _                      |          | Winnipeg Flight Information<br>Region |
| Above 400'   | Same                         |                        |          | (204) 983-8338                        |

b. Vertically

MAAC SFOC # 930433 Page 12 of 24

If you experience a fly away while operating at higher altitudes (above 400'), or if the model is climbing uncontrollably and in the pilot in command's judgement may enter overlying or adjacent controlled airspace, contact the listed agency as soon as possible.

| Nearest Controlled Airspace – Fly-away - Vertically |   |                      |       |   |
|---|---|----------------------|-------|---|
| Location  | Name, Class Type                                | Based at             | Other | Contact Info  |
| Over site   | CYWG Class E<br>Transition Area<br>(TA) class E | 700'agl and<br>above |       | Winnipeg Flight<br>Information Region<br>(204) 983-8338 |

#### **Incident Accident**

- If there is any type of near miss or safety concern between a fullscale 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.
  - 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.
  - If there is physical contact between a full-scale aircraft, a bystander, 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.

## **Transportation Safety Board (TSB) Protocols**

- 1. In addition to MAAC reporting requirements, according to TSB Regulations and policies, RPAS occurrences shall be reported to the TSB to 819-994-3741 or 1-800-387-3557 as soon as possible.
  - to the TSB to 819-994-3741 or 1-800-387-3557 as soon as possible after the occurrence:
  - a. if an RPA with a <u>MTOW (maximum take-off weight)</u> greater than 25 kg is involved in an accident as defined in 2(1)(a) of the TSB Regulation;
  - b. if a person is killed or sustains a serious injury as a result of coming into direct contact with any part of an RPA, including parts that have become detached from the RPA; and
  - c. if a collision occurs between any RPA and a traditional aircraft.

A full report shall be forwarded to the TSB within 30 days of the occurrence: https://www.tsb.gc.ca/eng/incidents-occurrence/aviation/index.html



MAAC SFOC # 930433 Page 13 of 24

## Model damage/repair protocol

- 1. In the event of any normally expected modelling mishap which requires any degree of repair, the model may only be "field repaired" if all normal modelling supplies and tools are present and used in accordance with established modeling practices or manufacturer instructions.
  - a. Any repair other than minor (replacing broken propeller etc.) shall be treated as a maiden flight/operation. Ensure RPAS logbook entries are made.
  - b. Any repair that cannot be fixed at the field, shall only be repaired at the modellers/owners shop or other repair facility. Ensure RPAS logbook entries are made.

#### **Service Difficulties**

A service difficulty is defined as any condition that affects or that if not corrected, is likely to affect the safety of aircraft or any other person. As MAAC has made a safety assurance declaration to Transport Canada that is used in many of our RPAS flying privileges, it is critical and a regulatory requirement MAAC is informed of any issues related to our safety assurance declaration. Bear in mind MAAC has fully adopted a Just Culture and will not penalize or discipline members for reporting safety concerns, not matter how large or small, when done in good faith.

- 1. If a mRPAS or an RPAS is being operated under any manufacturer declaration (MAAC or other), the RPAS pilot shall ensure, without delay, a report is filed with the manufacturer if they encounter any of the following:
  - a Any inability to meet the position determination standards (Standard 622) associated with the manufacturer declaration, related to equipment or the performance of equipment.
  - b Any failure of a critical command and control component not attributable to normal wear and tear or obvious misuse (example dead/low battery), and
  - c Any other aspect of RPAS operation where the safety assurance declaration was not met.

MAAC SFOC # 930433 Page 14 of 24

#### **MAAC Add-ons**

#### **RPAS Operations Above 400'AGL**

MAAC has conducted an airspace and site review per the SFOC SORA (specific operations risk assessment) and determined the following requirements for members to operate an RPAS above 400' at this site.

#### **Airspace Assessment**

There are no controlled airspace volumes (based at the SFC or starting higher) within 2nm laterally of this site. The nearest controlled airspace laterally is Winnipeg International Class C control Zone airspace 9.29nm North. Controlled airspace vertically over this site is based at 700'AGL.

1. RPA are required to remain 500' below the base of any overlying controlled airspace, and 2nm laterally clear of any controlled airspace volume. However, MAAC may authorize reductions of 100' below class E airspace therefore the highest altitude MAAC can approve is 600' AGL (above ground level).

## **Sufficient Communication requirements**

There are no aerodromes within 3nm of this site. There are no protected airspace volumes, depicted air routes, or commonly used tracks near this site that require communication capabilities. VFR aircraft routinely use highway 75 to transit to/from Winnipeg or Lyncrest aerodromes, with reporting points established at ST AGATH and IKEA. Assessment of the normally expected traffic patterns yields the following:

- 1. While operating RPA above 400', the VO or other responsible adult **shall monitor** aircraft communications on VHF frequencies 126.7, or Winnipeg ATC tower 118.3, for situational awareness.
- 2. The VO shall be briefed to pay close attention to aircraft reporting over ST AGATHE or IKEA inbound or outbound from Winnipeg or Lyncrest, or for aircraft indicating they are following Highway 75.

#### Visual Observer (VO) assessment

The location of the pilot stations, general assessment of the topography and direction of the flight line and flying area generate the following requirements for the VO:

- 1. At least one VO shall be positioned near the flight line, within earshot at normal conversational voice levels
- 2. The VO or other nearby responsible adult shall be equipped with a VHF radio, or other VHF monitoring devices.
- 3. The VO shall be equipped with any support equipment determined by the club to be relative to the duration of duties, such as water, a chair, or shade from the sun provided it does not interfere with VO duties.
- 4. As the MAAC approved altitude flying area is within 2nm laterally or 500' vertically of adjacent controlled airspace, the VO cannot assume any other roles.

## The Club/site/event shall:

- 1. Ensure a copy of the MAAC SFOC #930433 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.

MAAC SFOC # 930433 Page 15 of 24

## The RPA pilot shall:

- 1. **Only** operate an RPAS registered, declared and meeting the MAAC Manufacturer Declaration requirements. Other manufacturer's declarations are **not** transferable to this policy.
- 2. Not operate an RPAS above 400'agl unless in possession of a valid and current Advanced RPAS operators' certificate, or under the direct supervision of an RPIC in accordance with MAAC policy.
- 3. Ensure all RPAS pilot CAR and SFOC paperwork requirements have been met and are available,
  - a. Certificates of registration, pilot RPAS certification and recency proof,
  - b. Govt issued photo identification,
  - c. Manufacturer owner's declaration for each RPA,
  - d. An altitude determination declaration as appropriate (pilot or each RPA) and
  - e. RPAS Pilot has completed Crew training and fitness requirements and signed declaration.
- 4. Ensure a recent site survey and NOTAM check have been completed,
- 5. Ensure any crew declare themselves as properly trained in accordance MAAC policy. Verbal confirmation is sufficient.
- Ensure the RPA meets the MAAC technical requirements, including the MAAC Manufacturer declaration, before flight commences, and terminate any flight if technical requirements are no longer met.
- 7. Ensure the RPA is operated VLOS only (no FPV permitted including with a spotter) and that it remains within the site approved flying area at all times.
- 8. Ensure the RPA does not carry "cargo" or any other items onboard that are not required for flight. On board cameras and associate gear are permitted provided all components are securely affixed to the airframe or housed in a compartment that cannot be easily opened in flight.

## Any RPAS Crew shall:

- 1. Ensure all SFOC paperwork requirements have been met and are available (crew training declaration)
- 2. Comply with the instructions of the pilot in command
- 3. Perform their duties diligently and in accordance with MAAC policy and
- 4. Inform any person responsible of any issue that prevents them from meeting their obligations.

## The RPA shall be equipped with

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

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

MAAC SFOC # 930433 Page 16 of 24

### RPAS Operations Above 25kg - Not approved

## RPAS Operations Above 400'AGL and Above 25kg - Not approved

#### **RPAS Pilot In Command**

## General site rules – More than one-to-one Direct Supervision

This site is in **uncontrolled airspace.** MAAC allows more than one-on-one direct supervision provided the terms of this program are met. RPIC in this regard is not to be considered RPA instruction or how to fly – its intended to be supervised flying of **competent students** who do not possess the correct ratings or paperwork. The following constitutes the MAAC program under the MAAC Manufacturer declaration instruction provisions:

- 1. The primary role of the RPIC is to provide airspace regulatory compliance, safety and situational awareness. In one to five scenarios, the RPIC is not expected to provide hands-on "instruction" to each student, which is why each student must possess at least a Basic RPAS operator certificate and competent RPA piloting experience.
- 2. In all cases, the RPIC is the "control station" and while RPIC is being provided their decisions, directions, and commands on the flight line are final and definitive as follows:
  - a. No other person, including Club or event officials, shall attempt to override or countermand a RPIC command related to the provision of the RPIC program.
  - b. The RPIC, however, shall obey all cease flying orders based on decisions or directions of Site, Club or event officials.
  - c. The RPIC shall obey any flight safety directions issued by other members, such as detect and avoid call outs "Airplane" and shall direct an appropriate response to all students without reservations or delay.
- 3. All students shall be briefed and agree the RPIC is in charge and all his decisions, commands and instructions are final and shall be complied with immediately, including up to potential destruction of the RPA (intentional crashing in a safe location/manner).
  - a. Students shall not start or arm or otherwise make an RPA ready for flight unless directed by the RPIC.
  - b. No student shall move an RPA from any designated start up area until directed to by the RPIC. The intent being an orderly "launching" of all models under the RPIC control.
  - c. No student shall take off or launch an RPIC unless permitted by the RPIC. Such permissions may be issued to all students/pilots or given individually.
  - d. Thereafter, once their RPA is airborne, the students shall operate their RPA independently, but under the general direction of the RPIC.
    - i. RPA to RPA traffic patterns, collision avoidance and similar remain the domain of the students, unless spotters or other parties intercede.
    - ii. Any commands an RPIC issue to an individual RPA shall be acknowledged by the individual pilot (student).
    - iii. Any group RPIC commands shall be acknowledged by all students.
  - e. Students, upon hearing any flight safety directions such as "airplane" are free to comply with stipulated site responses without waiting for the RPIC to issue the command. They shall, however, confirm any such action with the RPIC as soon as possible thereafter.
  - f. Any student experiencing a dead stick or urgent landing situation is permitted to take whatever actions they deem appropriate to ensure the safety of their model, and the site occupants.

MAAC SFOC # 930433 Page 17 of 24

- g. In the event of a disagreement between RPIC and students, other site officials or members, the student shall follow the RPIC directions or commands.
- 4. The maximum number of students to one RPIC ratio is five,
  - a. all students shall possess a "Basic" RPAS operators certificate and be able to independently operate their RPA.
  - b. The RPIC shall have a valid advanced/flight reviewer RPAS certificate or PPL+
  - c. The type of "instructional control" system is irrelevant (buddy-box or voice command)
- 5. The RPIC shall be positioned and remain within earshot, at a normal conversational level, of all students while any RPA is airborne.
  - a. Conversely, regardless of physical pilot stations arrangements, RPIC shall not occur unless all students are within earshot of the RPIC.
  - b. Where this is not possible, additional RPIC shall be utilized or limitations placed on the number of students to remain within earshot.
- 6. The site shall ban or otherwise prohibit all extraneous noise to ensure a solid verbal communication ability between RPIC and students.
- 7. The site rules shall contain provisions mandating the operating condition for all other categories of models.

## Rules for other attendees/pilots at a site where multiple students are receiving RPIC

- 8. IF forming part of an RPA flight line (at the pilot stations) that includes one of the maximum allotted "student" spaces (up to 5), and where there is more than one-on-one RPIC supervision be provided,
  - a. Other RPA pilots agree they **shall** follow all RPIC commands related to RPA operation as if they were a student receiving direct supervision. If they do not agree, either suspend RPIC operations or do not permit individuals to operate other RPA during the time RPIC is active this is a site responsibility.
  - b. The RPIC direction will most commonly be associated with commands to descend, land or otherwise cease RPA operations because of aviation safety concerns.
    - i. This rule is intended to ensure there is ultimately no confusion about who is doing what. All other active modellers must comply, so the RPIC knows the scenario is safely under control.
    - ii. Other pilots may still exercise independent control authority for landings etc., provided they inform the RPIC of their intentions.
- 9. NO other RPA pilot may join an already active multi-student RPIC session without the permission of the RPIC.
  - a. Thereafter they agree to follow the same RPIC rules as if they were there at the start of the session.

#### **Event Approval**

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

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

MAAC SFOC # 930433 Page 18 of 24

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, must meet the MAAC SFOC requirements. All advertising/notice, including internal to MAAC must include the following phrase:

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

### Foreign RPAS Pilots (US or other)

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

## Events with RPAS operations above 400'agl and/or weighing more than 25kg

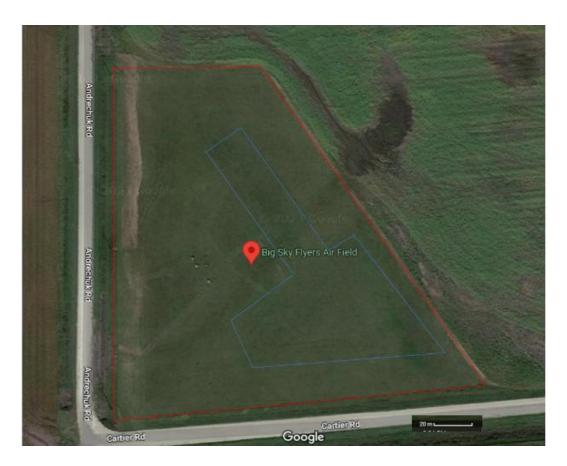
MAAC is aware of which clubs/sites qualify for above 400'agl and will soon begin to issue approvals site by site, with conditions specified in the rule's packages. Where there are events requesting over 400' or over 25kg, the Event SFOC rules listed above also apply, as well as the "higher and heavier" 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 all attending modellers/RPAS pilot are <u>current MAAC members</u>.
  - e. Take reasonable steps to ensure all attending modellers pilots <u>receive a briefing</u> on site or event rules.
  - f. All/ any aerobatics **WILL** be done west of the centre line of the runway
- 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 using the MAAC minimum checklist (attached).
  - e. A visual observer is always present when RPAS are flying.
  - f. Ensure all follow up actions are completed after the event, most notably any Transport Canada paperwork.
- 3. Any member attending an event shall
  - a. Comply with all CAR, SFOC, MAAC and club/event rules as required.
  - b. Not operate a model or RPAS unless they attend or obtain a pilot briefing.

MAAC SFOC # 930433 Page 19 of 24

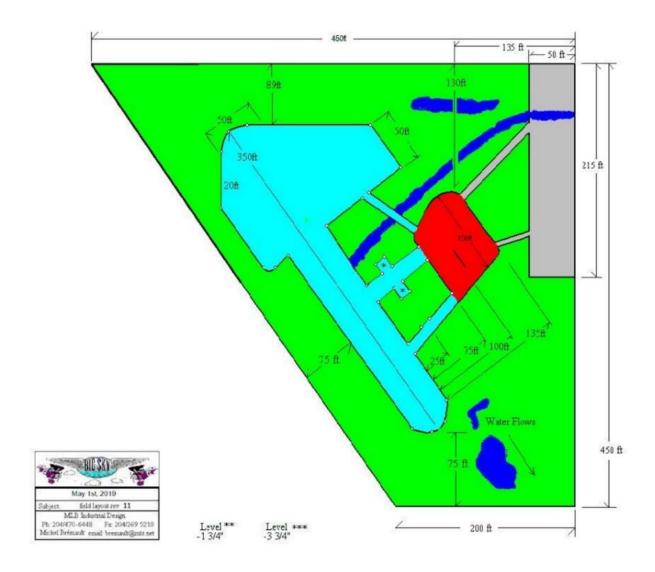
## Diagrams/maps



Red outline of field Blue outline of flying area



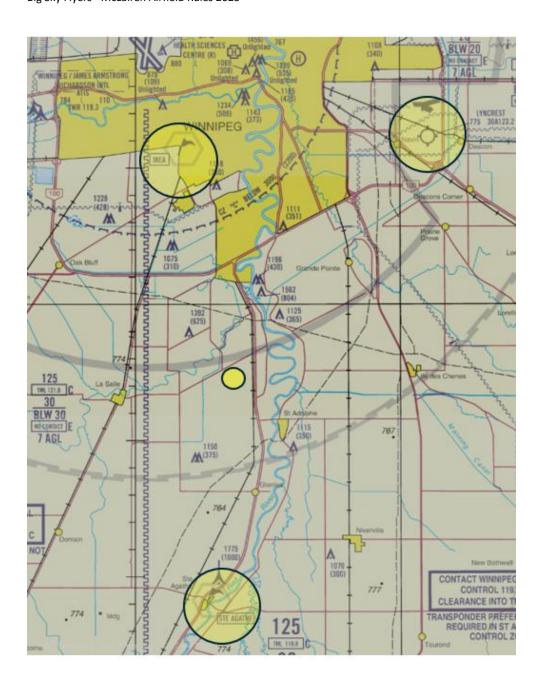
MAAC SFOC # 930433 Page 20 of 24



MAAC SFOC # 930433 Page 21 of 24



MAAC SFOC # 930433 Page 22 of 24



MAAC SFOC # 930433 Page 23 of 24

## WARNING!



## AEROMODELING MAY CAUSE SERIOUS INJURY!

## PROCEED AT YOUR OWN RISK!

## **AVERTISSEMENT!**

# L'AÉROMODÉLISME PEUT CAUSER DES BLESSURES GRAVES!

# PROCÉDEZ À VOS PROPRES RISQUES!

MAAC SFOC # 930433 Page 24 of 24