ONTARIO FPV NRPA Field Rules 2024

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

Administrative Rules

Club: Ontario FPV (#927, Zone E)

Field Name: NRPA Field

Location: 1706 Merrittville Hwy. Thorold, ON, L3B 5N5 Pilot Station Coordinates: 43° 3' 18.34" N79° 14' 52.63" W

Contact(s): Greg Terreberry, 99321, President,

terreberrygd@gmail.com, 905-892-2462,

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

- 1. Be MAAC members in good standing.
- 2. Be members of Ontario FPV, or an invited guest of Ontario FPV and
- 3. Agree to follow the MAAC Safety code and all other site rules.

Any MAAC member attending an Event at this site must agree to attend any modeller briefing, or otherwise read and follow all site/Event rules. The Club or site operator is responsible to take reasonable steps to ensure a modeller briefing occurs for each modeller using the site.

- 1. Always stand behind the pit area until race director indicates the field is clear.
- 2. Park on the pavement, garbage bins will be provided on site. There is no washroom on site, however there is Tim Hortons down the street.
- 3. All rules will be vocalized to all pilots and spectators at pre-flight meeting, and repeated to anyone who may not have attended meeting by one of the administrative crew members.
- 4. Rules will be updated and reviewed as deemed necessary by the administrative club members.

Site/event emergency response requirements

In the event of an emergency, call 9-1-1 - the address to be provided to first responders is 1706 Merrittville Hwy. Thorold, ON, L3B 5N5.k

1. First Aid kit and fire extinguisher, which can be found at the race director's tent.

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.

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| Approved Category | Weight/Power Limits | Altitude/operating limits |
|-------------------------|---------------------|---------------------------|
| mRPAS | Less than 250 grams | 400'agl |
| RPAS | 25kg or less | 400'agl |
| Tethered (Control-Line) | Not Approved | |
| Free flight | | |
| Space Models | | |
| Surface Vehicles | | |

MAAC Approved Site Add-ons

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

| Approved Add-on | Weight/Power Limits | Altitude/operating limits |
|--------------------------|---------------------|---------------------------|
| RPAS Weight | | |
| RPAS Altitude | Not Approved | |
| RPAS Altitude and Weight | | |
| Permanent Event Approval | | |
| RPIC | | |

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.
- 2. RPAS CAR requirements There are no special CAR restrictions on RPAS models
- 3. Club/Site/Event requirements This site is FPV multirotor only. Failsafe safety procedure MUST be set to drop.

RPAS Pilot/operator qualifications or requirements

- mRPAS requirements mRPAS do not require an RPAS operators' certificate however are regulated under CAR900.06 and part VI of the CAR. There are no MAAC or CAR age restrictions on mRPAS flight. Compliance with MAAC safety code meets all requirements.
- 2. RPAS Pilot CAR requirements. All RPAS pilots using this site must have BASIC RPAS certification.
- 3. Club/Site/Event requirements. This site recommends all mRPAS/RPAS Pilots have MAAC Wings, however its use is not mandatory.

CREW qualifications or requirements.

- 1. mRPAS requirements mRPAS do not require crew under the CAR.
- 2. RPAS CAR requirements Any responsible person can be trained/briefed to be a Visual Observer. This includes spouses, children of appropriate maturity, or friends.
- 3. Club/Site/Event requirements Spotters shall be used at any time there are pilots in operation. Spotters are required for FPV operation.

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Crew Rules

Visual Observers

- 1. Visual observers (VO) are optional during daily flying. When required at this site, no member shall operate an RPAS unless:
 - a. A visual observer(s) must be present who has been briefed or trained on any site/event procedures upon spotting a potential conflict with full-scale aircraft.
 - b. A minimum of one visual observer per flight line is required.
 - c. VO must not watch the models their sole role is to scan the surrounding sky for approaching full-scale aircraft.
 - d. Positioning the VO where they have unobstructed sight lines is important 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.
- 2. These rules ensure a clear command/response protocol is in place there is no time for debates or confusion. MAAC has adopted the following minimum:
 - a. MAAC models/RPA shall give way/get out of the way of full-scale aircraft in all circumstances no exceptions. There is never any onus on full-scale pilots to yield to models ever.
 - b. Upon spotting/hearing or being advised (ATC or otherwise) of any airplane that might pose a hazard with modeling activities, the VO shall yell in a loud clear voice "AIRPLANE". If in doubt, issue the warning
 - c. Upon hearing this command, all pilots shall descend to as low as altitude as safely possible, and if required land. The goal is to vacate the airspace vertically and then determine if RPA can continue to operate safely.
 - d. Lateral deconfliction maneuvers are prohibited above 60'AGL. Descending to 60'agl (tree top level) is the accepted Transport Canada initial response. Members operating near/off aerodromes have different specific response requirements.
 - e. Upon determining the full-scale aircraft is no longer a threat, the VO or other persons shall yell in a loud clear voice "ALL CLEAR".
 - f. Thereafter modeling activities may resume as normal.

Air Boss – ATC Coordinator

This site is in uncontrolled airspace – an Air Boss is not required

RPIC – RPAS Pilot in command

Not approved

Instructors/Demo flights

Club instructors may give demonstration flights/introductory flights to non-MAAC members provided they use a buddy-box type system where the RPAS pilot is able to assume immediate control. Physically transferring the transmitter back and forth is not permitted for these activities.

All other instruction is at member discretion, provided the instructor maintains direct supervision and oversight for the operation of the RPAS

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Spotters

Spotter use for VLOS flying is optional. Any spotter requirement will be included in the event briefing. **Spotters are required for all FPV operation.**

Airspace requirements or permissions

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

The nearest controlled airspace vertically is Class E TA at 700'agl. The nearest controlled airspace laterally is CYSN Class E control zone 3.83nm north.

Adjacent Aerodrome Procedures (within 3nm)

There are no aerodromes within 3nm.

Normal mRPAS/RPAS/model operating procedures

- 1. Prior to daily operations, at least one member shall check the Aviation NOTAM for CYSN using either the NAV CANADA website or RPAS Wilco. They may share the results with other site users either verbally, electronically or in print. Every member is still responsible to ensure they have the latest NOTAM information in some fashion.
- 2. The MAAC mandated minimum weather conditions for RPAS are:
 - a. no cloud ceiling (BKN or OVC) estimated at 1000'agl and
 - b. the RPA will be able to remain 500' vertically and 1 sm (statute mile) horizontally clear of any cloud, and an estimated horizontal visibility of 3sm (5km) or more around the flying area, and
 - c. no other obscuring conditions (fog, smoke, haze etc.) which could make spotting full-scale aircraft difficult.

NOTE – there is no aviation weather available for NRPA Field so RPAS pilots may estimate cloud ceilings and visibility, provided they do so in good faith understanding the purpose of weather limits is to ensure we can see approaching full-scale aircraft.

- 3. MAAC endorses the use of a single shared RPAS Wilco site survey provided:
 - a. A new site survey is conducted/checked at least once every 56 days (NAV CANADA schedule), and if there are changes the updated site survey is made available to all members.
 - b. All site survey information is readily available to all RPAS pilots on site (electronically or in print).
 - c. Prior to each flying session, members must check Aviation NOTAM for critical flight safety information, or changes to airspace or aerodromes. Members may share NOTAM information verbally or in print with other members at the site.
 - d. Members must each visually confirm no changes to site obstructions, local obstacles and that weather conditions stipulated in any MAAC requirements are met.
- 4. Members shall not operate an RPAS at night unless it is brightly lit, weighs less than 25kg, and remains below 400'agl. Members shall use the CYSN weather channel time to determine legal night.
- 5. There is no maximum limit on the number of airborne RPAS permitted, provided all pilots agree to any additional airborne RPAS that exceed available pilot stations, and those pilots stand near the pilots stations. Pilots may fly in formation provided they agree to do so.

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- 6. See site diagram below for normal site set-up areas such as parking, spectator areas, pit, or assembly areas, and start-up/run-up areas including confirmation of the MAAC required buffer distances.
- 7. A preflight meeting will occur, and all aircraft will be tested to show that failsafe is set to "drop".
- 8. All models must be armed or started in the designated start-up areas.
- 9. See diagram below for flying area, including any no-fly zones, a description or depiction of the flight line, safety line, runways, taxiways, and any other pertinent flying area demarcation.
- 10. The following are the site take-off, approach, landing and recovery procedures:
 - a. Pilots, or their spotter, shall call out all model movements.
 - Hand launching and bungee launching shall be done in agreement with any pilots flying normally off to one side of the pilot stations/dock.
 - c. Pilots shall take off into the prevailing winds, or otherwise in agreement with all pilots flying.
 - d. No person shall proceed past abeam the pilot stations without permission of other pilots flying.
 - e. The recovery of downed models in the flying area shall not be done without the agreement of all pilots flying. Thereafter no new models may take-off until the downed model is recovered. No flying directly over the recovery crew.

Emergency procedures

Fly-away or lost link.

1. This site is in uncontrolled airspace. No ATC notification is necessary.

Incident Accident

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

Model damage/repair protocol

- 1. In the event of any normally expected modelling mishap which requires any degree of repair, the model may only be "field repaired" if all normal modelling supplies and tools are present and used in accordance with established modeling practices or manufacturer instructions.
 - a) Any repair other than minor (replacing broken propeller etc.) shall be treated as a maiden flight/operation. Ensure RPAS logbook entries are made.

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b) Any repair that cannot be fixed at the field, shall only be repaired at the modellers/owners shop or other repair facility. Ensure RPAS logbook entries are made.

MAAC Add-ons

RPAS Operations Above 400'AGL - not approved

RPAS Operations Above 25kg - not approved

RPAS Operations Above 400'AGL and Above 25kg - not approved

Event Approval (Permanent or individual)

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

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

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

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

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

Foreign RPAS Pilots (US or other)

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

Over 400'agl and above 25kg

Not approved

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.

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- b) Ensure the site meets all MAAC event organizational and logistic requirements such as signage, parking control, spectator safety barriers, washroom and food provisions, and fire/medical safety requirements commensurate with the expected attendance.
- c) Ensure the event complies with MAAC event policy and any CAR or SFOC requirements.
- d) Ensure the MAAC events warning sign is posted for the event.
- e) Ensure all attending modellers/RPAS pilot are <u>current MAAC members</u>.
- f) Take reasonable steps to ensure all attending modellers/RPAS pilots <u>receive a briefing</u> on site or event rules using the MAAC minimum checklist (attached).
- g) Ensure all follow up actions are completed after the event, most notably any Transport Canada paperwork.
- 2. In addition to all the above and the club rules, at any event where the public is in attendance under the MAAC SFOC, the event organizers are responsible to ensure:
 - a) MAAC warning signs are posted at all public entry points.
 - b) A copy of the MAAC SFOC and application are on site and available to all RPAS pilots.
 - c) All RPAS pilots sign the Transport Canada sign in sheet.
 - d) All RPAS pilots receive a briefing on site rules and
 - e) A visual observer is always present RPAS are flying.
- 3. Any member attending an event shall
 - a) Comply with all CAR, SFOC, MAAC and club/event rules as required.
 - b) Not operate a model or RPAS unless they attend or obtain a pilot briefing.

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Diagrams/maps

Site set-up diagram.



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Site Flying area diagram.



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WARNING!



AEROMODELING MAY CAUSE SERIOUS INJURY!

PROCEED AT YOUR OWN RISK!

AVERTISSEMENT!

L'AÉROMODÉLISME PEUT CAUSER DES BLESSURES GRAVES!

PROCÉDEZ À VOS PROPRES RISQUES!

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