

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. The SCRCMC site is in uncontrolled airspace below 1430'AGL, however all RPAS operations above 400'agl **must meet the technical specifications of the MAAC Manufacturer Declaration (no other declaration is applicable)**. The RPA can be registered with Transport Canada as meeting the MAAC manufacturer declaration, or not – members are free to choose. However, to operate in controlled airspace perhaps at another site, the RPA must be registered as a declared model.

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 modelling 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.
- e. 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.
- f. 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.
- g. The RPA or RPAS must have an operable “flight termination” system or design criteria that can be reasonably expected to terminate the flight with minimal delay in the event of a control link failure.
- h. 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:
 - a.i. instructions related to servicing and maintaining the RPA and control system,
 - a.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,
- l. Any special assembly, adjustment, or post flight inspection requirements, and
- m. Any available manuals or component operating instructions.
- n. The above records shall be kept by the owner, and any subsequent MAAC owner for the life of the RPAS, or until two years after the RPAS is withdrawn from service and de-registered.

To operate a RPAS under the “MAAC RPAS Manufacturer Declaration”, the **RPAS pilot shall** ensure the following requirements are met:

- a. All other relevant sections of the CAR are met,
- b. The RPAS is operated in compliance with the MAAC Safety Code and any category specific rules or requirements.
- c. The RPAS meets the technical requirements of MAAC policy,
- d. The RPAS shall not be operated in any mode other than “direct manual control”
- e. The pilot shall not operate more than one RPAS at a time.
- f. The pilot shall not operate the RPA unless any equipped onboard flight termination system is operable,
- g. The RPA shall not be operated within 30 meters of any bystander or spectator, under any circumstances and **regardless of altitude**.
- h. 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.
- i. The RPAS shall not be operated in any weather condition, near terrain or any other condition which could:
 - i.i. reduce or negate visual detection of approaching full scale aircraft or bystanders,
 - i.ii. interfere with radio control link range or clarity of reception or
 - i.iii. negatively affect the performance of the RPA or the control system where safety of operation could be compromised.
- j. 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,
- k. 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.
 - k.i. The RPAS shall 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.
 - k.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.
 - k.iii. The above records shall be kept by the owner, and any subsequent MAAC owner for the life of the RPAS, or until two years after the RPAS is withdrawn from service and de-registered.

MAAC RPAS Manufacturers Declaration – Owners Declaration

Owner Name and MAAC # _____

Date of initial declaration _____

RPA Make or manufacturer name _____

RPA Model _____ Transmitter _____

RPA category ☐ MAAC Model Aircraft (Fixed wing) ☐ MAAC Rotorcraft ☐ MAAC Hybrid

List any instructions related to servicing and maintaining the RPA and control system.

List any inspection program to maintain system readiness.

List any weight limits or center of gravity concerns or related special requirements.

List RPA design features such as limitations on speed, altitude, or operational restrictions

Specify Weather conditions or limitations affecting RPAS operation,

List Special or unique features of the system that could result in severe injury to crew members during operation.

List 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,

Specify Warning information notifying any degraded system performance,

List Special or procedures for operating in normal or emergency conditions,

List Special assembly, adjustment, or post flight inspection requirements.

Describe availability of manuals or component operating instructions.

Owner Name _____

Signature

Date _____