MAAC OUTDOOR SITES RULES TEMPLATE Club/Site/Event/PFS Name

Submitter – you are completing this rules template for MAAC Approval – please be accurate and complete to the best of your ability. Incomplete or inaccurate forms will receive delayed processing. Submit this to your Zone Director when complete. They may ask for follow up clarifications or additional information.

Italicised blue text is meant to be instructional and should be removed or replaced with the site material before submission to the SAG for approval.

This rules template format must be followed. Do not make format or sequence changes. Additional site requirements can be added to each header, and suggested wording changed to suit the site. If you have questions, ask the SAG directly <u>after</u> you have taken the time to do your best to figure it out independently.

Wherever there is a difference between normal site operations and those required for an EVENT – make the difference very clear with a lable such as – FOR EVENTS ONLY....

There is a separate section at the end listing Event rules – these are the general rules and process the Club must follow for an event to be approved.

Equally, any MAAC approved "add-ons" (such as SFOC allowances for higher, heavier etc) are added to the end of the document after "normal rules".

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

This section is for administrative type details/rules/procedures needed to use/access the site – do not put Club/site/event by-laws or governance items in this document. If in doubt, refer to the SAG for assistance.

- Provide the site Name, location (general or coordinates), or civic address. If the site is on an aerodrome, list the full civil name and address here, as well as the ICAO four letter identifier.
- List any required contact persons, such as PFS owner, Club president, Event Contact, or landowner (or non-MAAC person controlling access to the site).
- List any terms or conditions for site usage or event participation related to membership, fees/dues example:

Club: CLUB NAME (#xx, Zone x)

Location: FIELD NAME CIVIC ADDRESS

Enter the pilot station coordinates in aviation format

Pilot Station Coordinates: xx yy' zzN, xx yy' zzW

Contacts: Name, MAAC #, Position Email, phone

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

- 1. be MAAC members in good standing.
- 2. be members of XXXX, or an invited guest of XXXX 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 breifing occurs for each modeller using the site.

- 1. List any provisions for guests and spectators.
- 2. List any other site administrative/housekeeping issues the site/event deems appropriate (Parking, pets, garbage, visitors, washrooms etc.).
- **3.** Provide a statement indicating how these rules will be provided/briefed to any visiting pilots (repeated in the Event section).
- 4. Provide a statement indicating how these rules will be updated and reviewed and by whom.

Site/event emergency response requirements

This is part of the CAR requirements and should be self-explanatory.

1. Start with a statement providing the contact number (911 or phone #) for emergency services, including the civic address or location to provide.

In the event of an emergency, call 9-1-1 - the address to be provided to first responders is XXXX.

- 2. List any on site emergency response items location of fire extinguishers, first aid kits or similar.
- **3.** List any equipment or other requirements the club/event has specified must be present in order to operate models. Some examples presence of Gase Turbine safe fire suppression, ABC fire extinguishers, fire "carts", first aid kits etc.
- 4. For Events, there may be additional requirements specify those here but make it clear FOR EVENTS the following are required...

MAAC Approved Modelling Categories

List the MAAC approved Modelling categories – modify the chart to suit the site – mark any category that is not allowed as "not approved".

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	Rules
mRPAS	Less than 250 grams	400'agl	Site Rules
RPAS	25kg or less	400'agl	Site rules
Tethered (Control-	Ex - 3kg/.25ci	2 flying circles	Site rules
Line)			
Free flight	Ex - <2kgs	400'agl	Site rules
Space Models	Ex - <3kg/F engines	1700'agl	Site rules
Surface Vehicles	Ex - 25kg/50cc	Site race track	Site rules

MAAC Approved Site Add-ons

This section gives advance notice of other options at the site. If none has been approved – enter NONE or Not Approved and leave the rest blank.

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. The rules are explained in each sub-section of this document.

Approved Add-on	Weight/Power Limits	Altitude/operating limits	Rules
RPAS Weight	If 25kg to 35kg	400'agl	SFOC + Site rules
RPAS Altitude	Less than 25kg	1700'agl	SFOC + Site rules
RPAS Altitude and	25kg or more	400'agl or more	SFOC + Site rules
Weight			
Permanent Event	Less than 25kg	1700'agl	SFOC + Site rules
Approval			
RPIC	List any that apply	1700'agl	Site Rules

RPAS/Model technical specifications or requirements or restriction

This is mostly for site/club restrictions, but there could be CAR restrictions in the future. Notably some club sites have noise limits etc that would be reflected here. Ask the SAG for help if not clear.

- 1. mRPAS requirements list whatever requirements MAAC provided or the club requires for mRPAS. Normal operating rules are outlined later in the normal rules section.
- 2. RPAS CAR requirements *The SAG will advise on any CAR restrictions based on the site location.* There are no CAR restrictions on RPAS models *or* All RPAS must conform to the MAAC Manufacturer Declaration/Safety Assurance provisions.

- 3. Club/Site/Event requirements (size, performance, weight, noise etc.) This site is in a noise sensitive area and all IC powered models must be muffled and checked for excessive loudness. No model louder than 95db measured at 3ft, is permitted or similar.
- 4. MAAC Add-on requirments make a reference to see that section here OR if no add-ons approved simply state no add ons approved. RPAS pilots operating over 400'agl or operating RPAS weighing more than 25kg 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

All RPAS sites are either "BASIC" or "Advanced" RPAS operator's certification required. If this template is being used for a non-RPAS or a mRPAS only site, clearly list "No CAR pilot certification required". The second bullet is for whatever the site wants – Wings, check outs etc.

- 1. mRPAS requirements list whatever requirements MAAC provided or the site/event requires for mRPAS. Normal operating rules are outlined later in the normal rules section.
- 2. RPAS Pilot CAR requirements. *If none exist, state that. IF MAAC has listed any RPIC (RPAS Pilot in Command) site specific restrictions, list those here.* All RPAS pilots using this site must have *BASIC or Advanced (choose)* RPAS certification.
- **3.** Club/Site/Event requirements. This site recommends 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 requirments make a <u>reference</u> to see that section here do not provide details yet OR if no add-ons approved simply state no add ons approved.. RPAS pilots operating over 400'agl or operating RPAS weighing more than 25kg must comply with the MAAC/SFOC pilot requirements listed in the add on section.

CREW qualifications or requirements.

This section is important for RPAS sites in controlled airspace or near aerodromes or on aerodromes – list the MAAC requirements here, including the MAAC approved credentials. Normally (but not always) in uncontrolled airspace a VO is mandatory for operations on an aerodrome, however this can be any responsible person – RPAS certification not required. Inside controlled airspace, a VO is also mandatory regardless of proximity to aerodromes and RPAS certification is required. For any add-ons in controlled airspace, RPAS Advanced certification or RPIC is mandatory. Ask the SAG for help if this is not clear.

 RPAS CAR requirements - list the requirements for any positions and their qualification requirments -(VO, Air Boss). This site does not require VO's for RPAS operations below 400'agl and sub25kg operations. Or, This site requires a VO for all RPAS operations. The VO must posess at least a basic RPAS operartors certificate. Visual observers for operations in controlled airspace must be certified RPAS pilots (basic or advanced). Unless the SOC/site rules state otherwise, at most other sites any responsible person can be trained/briefed to be a VO. This includes spouses, children of appropriate maturity, or friends.

- 2. Club/Site/Event requirements (Helpers/spotters etc.) Spotters shall be used at any time there are 4 or more pilots stations in operation, anytime the RC Car track is being used while RPAS are flying, and for any events where non-club members are present. Helper and mechanic use are up to each individual member to decide.
- 3. MAAC Add-on requirments *IF the site has add-ons make a <u>reference</u> to see that section here– do not provide details yet OR if no add-ons approved simply state no add ons approved.*. RPAS pilots operating over 400'agl or operating RPAS weighing more than 25kg must comply with the MAAC/SFOC CREW requirements listed in the add on section.

Crew Rules

This section must include any site-specific <u>rules</u> for Crew – modify the below to suit the site. This list must start with any CAR or SFOC requirements (in order VO, RPIC, Air Boss etc.), and can be followed by site requirements (helpers, spotters, etc.) Event crew requirements should be listed in the Event section.

Visual Observers

- 1. Visual observers (VO) are *mandatory/optional*, and 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.
 - f. Explain any rules/procedures if the VO has been assigned, or can be assigned responsibility for monitoring ATC communication (no Air boss etc)
- The rules must state the response of any modeller/RPAS pilot upon detection or notification of an approaching full-scale aircraft in the air or on the ground, including conditions for suspension or resumption of flying activities. This will vary depending on location especially if near or on an aerodrome. Example: 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. 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
 - b. For operations in controlled airspace, if the VO or the person monitoring communications with ATC were to yell "AIRPLANE" the response by RPA pilots is expected to be the same.
 - c. MAAC models/RPA shalle 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.

- d. 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.
- e. 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.
- f. 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".
- g. Thereafter modeling activities may resume as normal.

<u> Air Boss – ATC Coordinator</u>

List any rules or procedures if an Air Boss or ATC coordinator has been approved by MAAC – the SAG will provide the rules for you. If not approved/required list the response based on your airspace scenarios/agreement:

Uncontrolled Airspace – This site is in uncontrolled airspace – an Air Boss is not required NAV CANADA Airsapce - This site has not been approved for an Air Boss. Each RPAS pilot must obtain individual airspace approval as listed below. DND Airspace – This site has not been approved for an Air Boss, however we have agreement for daily flying permisisons as listed below. Other Airspace – list the requirements

This site has been approved for an Air Boss to communicate with ATC (NAV CANADA/DND). The following procedures must be followed whenever we use the Air Boss:

- 1. The Air Boss is responsible to obtain airspace permission for the entire site, for the time period specified in the permission request.
- 2. They must supply a single contact point (cellphone, land line #, or radio contact) to ATC. The Air Boss is responsible to ensure the supplied contact point is monitored for the entire permission period. If constant contact cannot be guaranteed, the Air Boss is to STOP all RPAS operations and seek alternate permissions and contact information or arrangements.
- 3. Whatever ATC communication system is used (cellphone, land line, radio) when ATC contacts this number/person someone MUST answer/respond no delay no exceptions. Generally, ATC wants a single point of contact for <u>their</u> emergency situations we will not get second chances if we miss emergency calls/situations.
- 4. MAAC wants this person involved in the flight line area. Except for flying a model themselves and performing Event/Contest Director roles, this person is encouraged to assume other roles associated with the site/event and to be actively involved in the site operation as this helps maintain situational awareness and ward off boredom. Sitting within shouting reach of the flight line and watching the flying activities is also perfectly acceptable.
- 5. Sites and events are free to add other flying related duties to the Air Boss, provided they do not distract from maintaining communication with ATC, or otherwise violate this policy. (Flight line safety officer etc.)

6. The role can be handed-off to other members as the day progresses, or for breaks or lunch etc. So long as whomever has been assigned this critical task is fully briefed and understands the nature of this job – when ATC calls you must answer and then relay their instructions **immediately**. Also see position hand-off rules.

The importance in this document is for participants and especially RPAS pilots to understand that if an **Air Boss** gives any instructions please follow this simple aviation safety phrase - **obey now debate later.**

RPIC – RPAS Pilot in command

The SAG will provide the general framework and modify any site specific RPIC provisions. Put the SFOC specific items in the SFOC section.

NOTE - While able to provide direct supervision (only), RPIC members cannot operate an RPAS on their own, unless meeting 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 and cannot supervise one another – one of them must have a valid RPAS certificate for the airspace/scenario being conducted.

List the RPIC scenarios specific to the site – determined by controlled/uncontrolled airspace. SFOC criteria are listed in the SFOC Add on section.

Instructors/Demo flights

List the scenarios specific to the site – determined by controlled/uncontrolled airspace. SFOC criteria are listed in the SFOC Add on section. Sites may have their own unique rules – add those here.

Spotters

List the Club scenarios specific to the site. SFOC criteria are listed in the SFOC Add on section. Sites may have their own unique rules – add those here.

Airspace requirements or permissions

This may require SAG help - Applicants can start by listing in detail the RPAS Wilco airspace results for the site. "Simple" NAV CANADA controlled airspace normally only requires "NAV DRONE" permission, however more complex NAV airspace, and DND airspace normally require a written agreement that contains process to obtain permission. If you have that, copy the process into point 2.

- 1. mRPAS requirements *if allowed, list that mRPAS do not normally require specific airspace permission and provide the MAAC requirements listed.*
- 2. RPAS CAR requirements MANDATORY for all sites regardless of category Describe the site airspace type, classification and controlling agency if applicable. Also list the nearest lateral and vertical controlled airspace if known. This site is in uncontrolled Class G airspace. The nearest controlled airspace vertically starts at XXX'agl, and laterally is XXnm northwest (CYQR Class D CZ)
- **3.** Club/Site/Event requirements *List ALL additional procedures for obtaining airspace use permission if required. This may link back to Air Boss requirements.*

 MAAC Add-on requirments - IF the site has add-ons – make a <u>reference</u> to see that section here – do not provide details yet. RPAS Operations above 400'agl, or above 25kg do/do not require additional permissions.

Adjacent Aerodrome Procedures (within 3nm)

This section may list a simple statement if there are no published (CFS/CWAS) aerodromes located within 3nm.

There are no aerodromes within 3nm of this site, therefore MAAC see and avoid procedures are deemed adequate for aviation safety.

Otherwise, there are two different responses, one for a site with aerodrome(s) within 3nm and another for sites **on** an aerodrome. Sites **on** an aerodrome may also have other aerodromes within 3nm, which are added here. DELETE any rules which don't apply. MODIFY those that do using the RPAS Wilco site survey data. This is a CAR requirement.

This site operates within 3nm of an aerodrome as listed in the CFS or CWAS and is required to provide all members with the following information. *Note, if there are multiple aerodromes, you can merge the requirements by aerodrome, or make a chart or similar, provided the same info is provided for each aerodrome*:

- 1. The aerodrome's name is (*plain name and ICAO four letter identifier*) and it is located XX nautical miles XXXX (*direction*) of the modelling site.
- 2. The aerodrome has (brief description of runways, general operation). Describe if any part of the normal traffic patterns might affect the site this requires researching the CFS entry and looking at circuit patterns, arrival, and departure routes. The concept is to provide awareness of where full-scale flight paths might be relative to the modelling site including IFR approaches. If you see a potential safety issue list that here with suggestions "modellers should pay particular attention to full-scale aircraft departing XXXX runway 31 northbound as they may pass over our site at lower-than-normal altitudes" or similar. IF you are unsure, get help from the SAG.
- 3. Except for (*list any published CFS RPAS procedures here*) there are/ no CFS RPA procedures and no other CFS PRO comments that affect our modelling site.
- 4. In the event of a "fly-away" towards XXXX, you may call the aerodrome operator at 204-555-5555 and advise them of the issue. OPTIONALLY Our site is in uncontrolled airspace so there is no need to notify ATC.
- 5. XXXXX club members should check for XXXX related NOTAM either using the <u>NAV CANADA NOTAM</u> portal or using RPAS Wilco app or similar. If you are the first pilot of the day and have printed a RPAS Wilco site survey, please leave it at the site for fellow modelers to reference.
- 6. The club executive has contacted the operator (OPR) of XXXX, and they have expressed no issues with our RPAS site.

If the site in **on an aerodrome**, the rules are decidedly more intense – there are also 5 other MAAC documents to complete before MAAC will approve a site on an aerodrome – contact the SAG for assistance. Modify the following to suit the aerodrome – you will need to do some research and get help from the SAG. THESE RULES need to be incorporated into the NORMAL operating rules – with the following preamble listed first.

MAAC Safety rules for operations on an Aerodrome

If not on an aerodrome, delete this section and proceed to "normal operating procedures'.

MAAC members conducting modeling activities on an aerodrome shall give way or otherwise immediately get out of the way of all full-scale aircraft and any support equipment or persons – no exceptions.

No member shall:

- 1. Operate any category of model at "night" on this aerodrome.
- 2. Add, alter, tamper or interfere in the operation or presence of any aerodrome equipment, including markings on maneuvering area surfaces, lights or markers, signage, windsocks or any other aerodrome infrastructure.
- 3. Operate on or park any type of motor vehicle within 30m of an aircraft maneuvering area.
- 4. Erect any permanent or semi-permanent obstruction, device or piece of modeling support gear/equipment or apparatus within 30m of any maneuvering surface, unless the object can be immediately removed by the RPAS pilot as he vacates the area.
- 5. Leave behind any debris, parts or other objects on or within 30m of a maneuvering area, that could cause potential damage to an aircraft in operation, including but not limited to broken model propeller blades, crash damage or anything else that could damage an aircraft wheel, float or ski, or could otherwise be blown about by slipstream and create projectile damage possibilities.
- 6. Fail to immediately report to the aerodrome operator (204-555-5555) any damage to any aerodrome infrastructure or property caused by the modeling activity.

If using an aviation radio capable of transmitting, no member shall:

- 1. Operate such radio except in compliance with ROC-A and aviation phraseology,
- 2. Make any transmission other than for information purposes.
- 3. Make any transmission indicating permission or guidance in the operation of a full-scale aircraft.
- 4. Activate or deactivate any aerodrome lighting system such as ARCAL.
- 5. IF your site rules contain additional VHF radio procedures, you may list them here.

All the above is followed by this generic set of **on aerodrome** site rules. These need to be modified to suit each aerodrome operation and merged into the following "normal operating rules".

- 1. A text description of the aerodrome name, location and assessment of normally expected aerodrome traffic types, volume and "established" or expected airborne traffic pattern and movements on the aerodrome surface, or in the immediate vicinity.
 - a. This must include assessments of any blind spots or locations in the air or on the surface where aircraft movements are difficult to see/hear.

- b. This assessment must include a probability assessment for aircraft conducting straight in approaches, including the common reasons why, and any assessment of NORDO aircraft potential.
- c. This assessment must include any listed RPA procedures in the "CFS PRO" section and should highlight any relevant "CFS CAUTION" sections related to aircraft traffic pattern procedures, in accordance with the Transport Canada guidance in TP14371 TC-AIM RPA section 3.2.35 for basic and 3.4.5 for advanced.
- d. Pay particular attention to any other CFS PRO such as circuit direction prohibition, noise "abatement" restrictions or anything else that might affect how close aircraft might enter or leave the aerodrome traffic pattern.
- 2. A text description of the general modelling site location and model operation area on the aerodrome. (this should reference an attached site map and flying area dimensions superimposed on a satellite "photo/map" of the aerodrome).
 - a. This should include any text description or photos or diagrams as need be, of all model operation locations contained in the agreement with the aerodrome operator, or otherwise deemed necessary to ensure aviation safety.
 - b. This must include any conditions associated with or how modelers will approach, operate on and vacate any maneuvering surface, or if within 30m of same including specific modeling site set up, describing (and showing on a site diagram) all areas and procedures or prohibitions including any pre-flight conditions or others such as start-up/run up areas, take-off, launch, approach, and recovery procedures as they relate to the aerodrome
- 3. The response of any modeler/RPAS pilot upon detection or notification of an approaching full-scale aircraft in the air or on the ground, including conditions for suspension or resumption of flying activities.
 - a. In some instances, there may be a need to describe a response to aerodrome vehicle movements.
 - b. This section is slightly different than the process in normal operating procedures Visual observers. This section should include a statemen about the need to intentionally land/crash off site if you cannot clear the runway/aerodrome environment in time for a full-scale aircraft. We suggest "By flying RPAS at this site, members agree they may need to intentionally land/crash their model away from full-scale aircraft movements in order to assure their safety. The area to the (direction/description) has been assessed as a safer option.
- 4. The requirement and process to report any damage to aerodrome property or infrastructure.
 - a. If any member damages or sees damage to any aerodrome property or infrastructure, they must report it immediately to NAME/NUMBER.
 - b. If there is damage to a full-scale airplane, this must be reported to MAAC National Office and the involved member(s) must complete a Transport Canada occurrence reporting form.

Normal mRPAS/RPAS/model operating procedures

This is a CAR requirement. Start with mRPAS specific rules if you site was issues mRPAS only rules. For sites in controlled airspace, the SAG supplied normal mRPAS rules are quite different – otherwise most of uncontrolled airspace details can go here. All RPAS rules should be stated second, and non-RPAS appended to the end.

The following is not exhaustive but is generally the minimum required CAR compliant topics. Each section needs to be amended to suit the specific site. IF the site is on an aerodrome, this section needs to be modified for the aerodrome rules already found in this template. Otherwise, these rules apply to pretty much every scenario – with a few tweaks.

- 1. Describe the process to check aviation NOTAM for the site, either via the nearest aerodrome or by general area. Example:
 - a. Prior to daily operations, at least one member shall check the Aviation NOTAM for XXXX 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. Unless stated otherwise this is the default weather for all MAAC flying operations The MAAC mandated minimum weather conditions to commence or continue MAAC RPAS operations are:
 - a. no cloud ceiling (BKN or OVC) present less than 1000' above the 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. a horizontal visibility of 3sm (5km) or more around the flying area exists, and
 - d. no other local obscuring conditions (fog, smoke, haze etc.) exist which could make spotting fullscale aircraft difficult.
- 3. Describe the site survey protocols to be used for the site. Unless otherwise required by (a controlling agency agreement) or in the SOC, 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. Sites operating in controlled airspace must have a copy of the recent site survey with them (electronic or in print)
 - d. 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.
 - e. Members must each visually confirm no changes to site obstructions, local obstacles and that weather conditions stipulated in any MAAC requirements are met.
- 4. Describe the process to determine "night" along with any restrictions or requirements to operate RPA at night. This can be a weather channel provided time, Aviation charts visual determination just list what the club uses. For sites on aerodromes or in controlled airspace be very specific and use higher quality sources. 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 XXXX weather channel time to determine legal night.
 - a. NOTE: the rules must state SFOC above 400'AGL and 25kg+ operations are not permitted at "night" if those operations have been approved.
- 5. Provide a text description of any required site procedures for multiple RPAS pilots or for "formation flying," which is where two or more pilots agree to fly the same flight path in proximity. List any limits on # of airborne RPAS here. 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.

- a. *NOTE: RPAS weighing more than 25kg have special "formation" procedures listed in the SFOC addon section. You may reference that here.* Models weighing more than 25kg have additional formation flight procedures in the add-on section.
- 6. Provide a text description or reference to a map/diagram of 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.
 - a. The MAAC minimums should normally be respected 7m flight line to pilot stations, 10m to pits, 30m to spectator and parking.
 - **b.** This section may include reference to other activities such as tethered circles, free flight, rocket areas or surface vehicle spots.
 - c. List any event set up requirements, if different, in the Event rules section.
- 7. Provide a text description of any pre-flight assembly and daily testing requirements.
 - **a.** For any site or operation relying on the MAAC manufacture declaration (controlled airspace, SFOC), this section **must i**nclude direction to confirm RPA fail-safe settings are active.
- 8. *Provide a text description of start-up or arming restrictions.* All models, including electric powered models, will be restrained before being armed or started in the designated startup areas.
 - a. This section may include reference to other activities such as tethered circles, free flight, rocket areas or surface vehicle spots.
 - **b.** *RPAS weighing above 25kg must be retrained and pointed away from spectators/bystanders in case the restraint fails.*
- **9.** Provide a text description **or reference to a map** of the 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.
 - **a.** This section may include reference to other activities such as tethered circles, free flight, rocket areas or surface vehicle spots.
 - **b.** List any site/event restrictions on modeling activities such as grass cutting, field maintenance or similar.
- 10. Provide a text description of any take-off, approach, landing and recovery procedures. Expand as required modify for float or other unique operations. The following are the site take-off, approach, landing and recovery procedures:
 - a. Pilots, or their spotter, shall call out all model movements.
 - b. 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.

Non-RPAS Normal Modeling procedures

Add site specific rules/procedures for any other site approved category of modeling here. In practice, these are not overly complicated and follow a standard pattern – how to ensure aviation safety, public safety, member safety, spectator safety and finally minimize insurance risks. Expand or delete as required.

Tethered model operations

Aviation safety

If the site is on an aerodrome, there may be a need to specify how these activities take place. For example, a control line circle on an active taxiway will need rules on how they vacate the area when airplanes approach. Many clubs have conducted control-line sites/events on aerodrome properties so be mindful of who is asking for what and where.

Public safety

Many control-line only sites are in public spaces (parks, school yards) where by-standers can inadvertently "walk into" the flying circle. Where there is a risk of by-standers, we have established procedures for this at control line only sites. An example follows:

- 1. The flying area/circle edge nearest the park access must be clearly marked with surveyors tape, yellow cones or similar. If no tape is available, 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

The primary concern is mixing of tethered flying circles near the RPAS pilot stations or other activities, and then taking reasonable steps to ensure modellers don't "walk into" the tethered flying circle. Most sites establish some type of field marking system and have a field sharing arrangements, with priority stipulations.

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.
- 4. Members may use the control line circle while the RC car track is active (or similar).

Spectator safety

The rules are similar to RPAS – specify how far away spectators must be – normally 10m. The MAAC Safety code allows a much closer proximity to spectators so care must be taken, especially for children. Control line models are not toys and are capable of inflicting severe injuries.

Minimize insurance risks.

As with RPAS "fly-aways", there is always a risk of a tethered "line break" and "fly-away" for a short distance. If the tethered circle edge is at least 15m from insured items (parking lots) that should be sufficient.

Free Flight model operations

Aviation safety

Free-flight operations near aviation assets should be limited to lightweight rubber band powered models only. Glow or electric powered FF aircraft operations near aerodromes must have very strict rules to minimize risks.

- 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. The aerodrome's name is XXXX and is located XXXX of our modeling site. The aerodrome traffic pattern does not normally come over our flying site, however we may see the occasional transient aircraft.
 - b. 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.
- 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

This is very site specific depending on the size, power source and flight termination method used on the FF model. The larger, more powerful and "less controllable" the FF model, the more stringent the site safety rules need to be. If in doubt, contact the SAG.

- 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.

Member safety

The same principles as Tethered apply - ensure there are rules to avoid FF models and RPAS from interacting with one another, but especially that no RPAS pilot is hit/distracted by a FF model in flight.

Spectator safety

The MAAC safety code requires FF aircraft to be launched 40m downwind from any spectators. No further restrictions are required unless the site requires it.

Minimize insurance risks.

Zone Directors are expected to exercise good judgement and assess the size, weight, and potential distance any FF aircraft may travel – and then assess the risk of an insurance claim as a result of model contact/damage. If a site is only flying sub-250 rubber band powered FF models, then the insurance risks are minimal to nil. However, if the site allows 12lb .60 size FF monsters – we **MUST** ensure the flying area buffer is large enough to protect MAAC's insurance policy. Placing restrictions on the FF model size may be the only viable solution.

Space model operations

Aviation safety

Rocketry on an aerodrome will not be approved unless an extremely detailed risk and hazard analysis has been performed and there are very strict logical rules in place.

Rocketry within 3nm of an aerodrome requires very careful consideration to flight paths and appropriate safety mitigations in the rules – in addition to MAAC Safety code. The minimum rules should state something like this:

- 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 fullscale 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.

Public safety

This is very site specific depending on the size, power source and recovery method used on the rockets. The larger, more powerful the space model, the more stringent the site safety rules need to be. If in doubt, contact the SAG.

- 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.

Member safety

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.

Minimize insurance risks.

Members/Zone Directors are expected to exercise good judgement and assess the size, weight, and potential distance any Rocket may travel – and then assess the risk of an insurance claim as a result of model contact/damage. If a site is only flying sub-250gram D or less engine size Rocket models, then the insurance risks are minimal to nil. However, if the site allows F, G or H sized monsters – we **MUST** ensure the flying area buffer is large enough to protect MAAC's insurance policy. Placing restrictions on the rocket engine size may be the only viable solution.

Surface Vehicles (cars/boats) model operations

Aviation safety

If the site is on an aerodrome, there will be a need for rules to ensure aviation safety, and quite possible we might need ATC permission. We know of at least one club that got approval to make an RC truck/buggy race track on a little used airport taxiway – with ATC's blessing. Many clubs have conducted surface vehicles on aerodrome properties so be mindful of who is asking for what and where. NOTE – be mindful of sites that allow RC Boats near Waterdromes (sea plane aerodromes). While there are no defined "runways" we need to be mindful our rules ensure we don't get in the way – consult the SAG as required.

Public safety

Spotter rules at surface vehicle sites are based on a common sense of by-stander risks. Unlike flying models, surface vehicles can stop – adjust spotter rules as required. RC Cars and boats are not toys – some can weight more than 50lbs and reach speeds over 100mph – a lethal combination for an unprotected child/person, swimmer or small boat. Be especially mindful of RC boating operations near swimmers or boaters.

Member safety

As with all other activities the main concern is mixing surface vehicles with RPAS – and making sure someone doesn't crash a RC Car/truck/buggy into a pilot and cause injury or worse a RPAS crash. Next is ensuring basic safety barriers for member safety – start up areas and other common-sense site set ups.

Spectator safety

The same general common-sense rules as control line are required. Spectators are allowed much closer however it remains a MAAC responsibility to ensure reasonable protections are in place. If in doubt, contact the SAG.

Minimize insurance risks.

Members/Zone Directors are expected to exercise good judgement and assess the size, weight, and potential distance any wayward surface model may travel – THEY CAN HAVE "lost-link fly-aways" just like RC models can! A 15lb RC truck traveling at 60mph can be lethal. Assess the risk of an insurance claim because of model contact/damage. MAAC **MUST** ensure the modelling area buffer OR physical restraints are large/strong enough to protect MAAC's insurance policy. Placing restrictions on the model size may be the only viable solution.

Emergency procedures

This section is a CAR requirement for all sites as we have decided this section should be universal to all MAAC model operations. You will need to amend the wording slightly based on what modeling activities are approved at the site.

Fly-away or lost link.

- 1. A text description of emergency procedures, including loss of control or orientation resulting in any *"fly-away" procedures such as notifying ATC or an adjacent aerodrome operator, as they deem appropriate.*
- 2. Recall, surface vehicles can have lost link "fly-away" issues as well.
- 3. We can include a provision to notify an adjacent town hall, fire department or police detachment is the site thinks it prudent, for fly-aways in the direction of a population center.

Include a diagram of the nearest controlled airspace if that is a concern (per CAR901.15)

Incident Accident

The MAAC Reportable occurrence policy is the mainstay of our MAAC requirements. However, many of our SFOC and the CAR themselves mandate "more".

- 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 new Transport Canada RPAS occurrence form is attached to these rules for your use as follows:
 - 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/TC 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

- A description of any process to follow any normally expected modelling "mishaps" which require maintenance activities before the resumption of flying activities. The rules may also stipulate annual or recurring maintenance requirements if deemed necessary over and above the MAAC Safety Code requirements. 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.
 - i. Any repair other than minor (replacing broken propeller etc.) shall be treated as a maiden flight/operation. Ensure RPAS logbook entries are made.
 - ii. 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

The SAG will list all rules and restrictions for members to operate an RPAS above 400.

RPAS Operations Above 25kg

The SAG will list all rules and restrictions for member to operate an RPAS weighing 25kg or more.

RPAS Operations Above 400'AGL and Above 25kg

The SAG will list all rules and restrictions for member to operate an RPAS weighing 25kg or more.

Event Approval (Permanent or individual)

If your site has different set ups or rules for club events, put those site specific event rules here – be sure to list the highlights of the SFOC if required.

If the event is at a different site – you must create a entire rules package for THAT site. There must be an SOC for that site – which means there must be a rules package for <u>that site</u>.

Whether or not you have obtained permanent event approval, the following must be met.

The following types of RPAS <u>flying/operating</u> events must comply with the MAAC SFOC requirements. Other types of non-RPAS/non-flying events may have specific MAAC SOC/Sanction and insurance requirements. If you have any doubts about your event, contact your Zone Director or the SAG directly.

Advertised event – <u>any</u> type of event that is advertised as open to non-members (the general public), regardless of advertising or invitation method, charging admission fees or whether the advertising/invitation results in actual attendance.

Special event (aviation) – means <u>any</u> type of air show or demonstration(s), any type of air racing, or any type of competition event involving RPAS.

Demonstration/Air Show – any model demonstration or aerial display by one or more model/model aircraft planned to occur or does occur before an invited assembly of people.

All Clubs and event organizers must refer to the most current MAAC policy on Events as different types of events have different requirements. As a general rule the hierarchy from least complex to most complex is as follows:

- Indoor non-modeling/no flying events many clubs need MAAC insurance for these events or venues and MAAC is happy to provide that, provided Clubs ensure some minimal rules are in place. MAAC approval is only required if insurance coverage is required. These types of events have a separate simple rules template for the club to complete.
- 2. Indoor modeling/flying events think of these like outdoor modeling/flying sites with the same basic safety and insurance rule requirements, but without the aviation regulations. MAAC still expects due consideration for public/spectator/member/contestant safety, however a different rules template is available. MAAC approval is required.
- Outdoor Non-RPAS modelling/flying Events any type of outdoor event that does not involve operating/flying RPAS, or mRPAS is required to meet MAAC safety and insurance requirements. MAAC still expects due consideration for public/spectator/member/contestant safety, using this Club rules template. MAAC approval is required.
- 4. **RPAS Events in uncontrolled airspace, more than 3nm from aerodromes NO invited public and NO "special aviation" aspect.** These are commonly called fun fly's and are limited to members only, or a few select non-members acting as crew (food or other support). MAAC expects due consideration for member/spectator safety, however compliance with regulatory requirements is

also required. If you have any doubts about what qualifies for this event status, contact your zone director. MAAC approval is required.

- 5. RPAS Events in controlled airspace, OR less than 3nm from an aerodrome OR on an aerodrome NO invited public and NO "special aviation" aspect. These events require additional consideration for aviation regulations and safety. MAAC approval is required. If you have any doubts about what qualifies for this higher event status, contact your zone director.
- RPAS advertised or Special events regardless of location, in addition to the MAAC safety code and insurance requirements, these events require strict compliance with the MAAC Events SFOC (#930433) conditions. MAAC will ensure any club or event submission meets all the requirements in the rules package.

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 logsitic 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 current MAAC members.
 - e) 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).
 - f) Ensure all follow up actions are completed after the event, most notably any Transport Canada paperwork.
- 2. 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.

PILOT/OPERATOR DAILY BRIEFING CHECKLIST EVENT NAME/SITE HERE

Completed by _____

Date _____

Once completed, keep a copy of this checklist for one year. MAAC also encourages clubs to scan the completed form and send to their Zone Director. If an item is not pertinent, please tick the "no" box and record the reason or simply write "N/A" in comments.

Administrative			
ITEM	YES	NO	COMMENTS
Welcoming comments and introductions			
 Name of hosting Club and Event 			
• Names and in person introductions of any/all			
responsible persons.			
 Event/Contest Director 			
• Air Boss etc			
 Safety officers 			
• Others			
Please ensure all pilots understand who oversees the			
event or is in charge.			
IF the Event is operating under the MAAC Event SFOC			
• Explain the Transport Canada RPAS pilot sign in sheet.			
Provide the location of SFOC copies.			
Provide Pilot reminder - CAR compliance is up to each			
member/pilot – remind them to ensure they met their			
requirements – the following must be readily			
available:			
 Gov issued photo ID. 			
 RPA certificate of registration 			
 Pilot certificate and recency docs 			
• MAAC Safety assurance declarations for each RPA			
if required.			
Clubs and event organizers shall not request or demand			
to see proof of any TC required Pilot/owner			
documentation.			
ALL Pilots/Operators			
 Must be MAAC Members – Clubs/Event organizers 			
should use online member validation tool if need be.			
• Explain Pilot/operator event Registration process.			
 Explain Pilot/operator briefing process (latecomers 			
and if multiple day event).			
• Reminder – CAR compliance is up to each			
member/pilot – ensure they have been briefed on			
how to meet all Site requirements. If they are not sure			
– ASK for help.			
Visiting Foreign Pilots			
• ALL must be MAAC Members – join online if need be.			
Other RPAS process explained below			

Hc	usekeeping, guests, and spectators			
•	Parking			
٠	Limits for guests and spectators.			
٠	Washroom/rest facilities			
٠	First Aid provisions			
٠	Pets/children			
٠	Garbage			
•	Weather events and monitoring (wind, approaching			
	storms etc)			
•	Any other issues necessary			
Ev	ent Schedule			
٠	General schedule of the event			
•	When open flying occurs etc			
•	If multi-day, follow up or wind-up schedule.			
•	Any awards or closing ceremonies			
Ev	ent Emergency provisions			
•	On site emergency tools (first aid/fire response)			
•	Who is responsible to initiate response			
	(Fire/Ambulance/Police)			
•	Number to call in case of emergency (911 or #)			
•	Address to use for First Responders			
-	Airspace Requirements/P	ermissic	ns	
Air	space type – describe airspace including owner			
•	If Class G uncontrolled = no further action required			
	If controlled/restricted airspace			
-	\sim Who/How to obtain permission from Airspace			
	Authority.			
	• ATC suspension/shut down protocols.			
	• FD/CD or Air Boss?			
	 Visual Observer call out – if they say stop 			
	flying, we stop flying.			
	Permitted/prohibited Model	ling Cate	gories	
Lis	t the model categories allowed at the event.			
•	mRPAS and/or RPAS			
•	Tethered/Control Line			
•	Free Flight			
•	Snace			
•	Surface (cars/trucks/boats)			
lf a	n RPAS event, which of the following RPAS "ADD-ONS"			
are	approved for this event IF not approved clearly state			
th	limits and above/exceeding is not approved			
•	RPAS Altitude (>400')			
	RPAS W/eight (>25KG <25KG)			
	RDAS Weight and Altitude (NAOO' and (NOEKC 22EKC)			
–				
-	PDIC (PDAS Dilot in Command see SOC)			
•	RPIC (RPAS Pilot in Command – see SOC)			

 – or where to find them for the event 			
RPAS/Model Technical Specificat	tions/Re	striction	ıs
Describe any CAR/MAAC/Club specs or restrictions on the			
type of RPAS/Model to be operated at this event?			
Size weight propulsion limits/restrictions			
Manufacturer declaration as required			
(controlled/restricted airspace)			
RPAS Pilot/Operator Qua	alificatio	ns	
All modellers MUST be MAAC Members			
This site requires RPAS Basic/Advanced/RPIC rules (explain			
as required)			
Describe any Club/Event/SOC specific pilot qualifications			
(wings, club check-outs etc.)			
Explain Direct supervision/instruction of students for site			
Explain Guests/non-MAAC hands on demonstration flights			
(buddy-box etc.)			
Foreign pilots			
MAAC membership			
• Transport Canada Basic RPAS is the minimum (RPIC is			
site specific in the SOC) – TRUST is not recognized by			
TC/MAAC			
Registration marking requirements – cover any AMA			
markings – replace with MAAC # and 930433			
Clubs and event organizers shall not request or demand			
to see proof of any TC required Pilot/owner			
documentation.			
Crew Qualifications and F	Procedu	res	
Visual Observer rules for the site/event			
Qualifications			
Iraining/briefing			
Position and any aids.			
Responsibilities			
Authority and PILOT MANDATORY responses			
AIR BOSS rules for the site/event			
Introductions as required.			
Responsibilities			
Authority and pilot MANDATORY responses			
Spotters/helpers/mechanics			
When to use			
Pilots' responsibility to provide training/briefing.			
Responsibilities			
Go no-go zones	()		
Adjacent Aerodrome Procedures (Within 3NM)			
List and describe procedures for all Aerodromes within			
SINIVI OT THE EVENT?			
Describe any additional event rules concerning these	1		

aerodromes.			
Provide any local full scale flight path information not			
included in the site survey or readily apparent.			
If this event is on an aerodrome:			
• Describe any additional event rules concerning this			
aerodrome. (anything not in club rules)			
Normal RPAS/Model Operati	ng Proce	edures	
RPAS WILCO Site Survey location/provision			
 Event NOTAM briefing – daily and by who. 			
• Weather minima determination and briefing for event.			
 Local obstructions/restrictions briefing for event 			
If night flying is allowed during the event:			
• How/where "night" is defined.			
• Are there additional procedures for night flying?			
Formation fluing:			
Formation hyprig.			
List any additional procedures for formation flying.			
List any limits on number of airborne models Fail Safe activities on Transmitters			
Fail-Sale settings of frails interest aircrace fail cafe must be			
 If in controlled/restricted all space fails safe must be functional – romind pilots of sottings 			
Panga chacks and other shocks reminder			
Range checks and other checks reminder			
Pits, set up and start up areas.			
Describe all rules for set up, the pits and start up areas			
concerns			
 Describe the flight line /flying area set up 			
 Clearly discuss any po-fly zones 			
Model operation rules - Describe the club/event rules			
• taxi out take off hand launching hungees			
 taxi out, taxe on, nand ladicining, bungees, sircuite flight priority mixed types of models call 			
• circuits, hight phonty, mixed types of models, can			
 recovery of downed models, taxi in and shutdown and 			
any other flying rules			
Emergency RPAS/Model Opera	ting Pro	cedures	
Procedures for lost link or fly away models			
• Who is responsible for reporting to Airspace			
Operator?			
• Any phone numbers to call			
Incident and Accident prevention			
 NO test flying at events 			
 If model is "questionable" – do not fly! 			
 If airborne and control is in doubt (any reason) 			
intentionally nut model down away from neonle			
Procedures to follow in case of a reportable			
incident/accident			
What you need to report to whom			

Serious accidents –			
 First response – fire and first aid 			
• Who calls emergency services?			
 Flying cessation 			
 Witness statement collection/ photos/ prohibition 			
on statements.			
COMPLETE Transport Canada or Transportation Safety			
Board Occurrence Reports as required			
Damage/field repairs.			
 Reminder – if RPAS are operating under the MAAC 			
Safety Assurance Declaration (controlled airspace.			
above 400'. 25kg+) field repairs require special			
procedures.			
 Otherwise use good judgement – no maiden flights at 			
advertised events			
Non-RPAS Normal operating	g proced	lures	
Are there any procedures for Non-RPAS models and			
explain as need be?			
Tethered/Control Line			
Free Flight			
• Snace			
• Surface			
Diagrams/Man	s		
Explain where the following are located as required.			
 Site Set up diagram. 			
Site Flying Area			
Airspace Man			
Adjacent aerodrome man			
CES entries as required			
Any other diagrams/mans			
Any other diagrams/maps To traffic nattorn man			
Event Organizers			
Event Organizers Encure any TC SEOC forms or requirements are			
clisure any it spot ions of requirements are			
Submitted property and off time.			
• Seek any reedback from participants.			
 Forward any relevant feedback to MAAC. 	1	1	

Diagrams/maps

Site set-up diagram.

Site Flying area diagram.

Airspace MAP – including NAV DRONE Viewer Grid altitudes or lack thereof.

Adjacent Aerodrome map as required.

CFS entries as required.

Any other diagrams as required.

TC traffic pattern map as required.

<u>RPAS Event sign in sheet:</u> This is only required for events operating under the MAAC Event SFOC.

PARTICIPANT'S STATEMENT/DÉCLARATION DU PARTICIPANT ATS-23-24-00050858V2

DATE of Event / Date de l'événement: ______

LOCATION of Event / Lieu de l'événement:

This is to certify that I have read and thoroughly understand and will comply with all the Conditions of Authorization contained in the SFOC-RPAS - Special Aviation Event issued for : / La présente atteste que j'ai lu, que je comprends bien et que je m'engage à respecter toutes les conditions d'autorisation contenues dans le COAS-SATP - manifestation aéronautique spéciale émis pour :

NAME of Event / Nom de l'événement: ______

Pilot Name and TC PC Number/ Nom du pilote et Numéro du PC de TC	MAAC No.	Pilot Signature and date/ Signature du pilote et date
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
8.		
10.		
11.		
12.		
13.		
14.		
15.		
Local Special Aviation Event SFOC-RPAS Holder Titulaire du COAS-SATP de la Manifestation aé	- – Responsible person / Event Director ronautique spéciale - Personne responsable / Dir	recteur de l'événement local
Name/Nom :	Signature :	

Use the form multiple times as needed to capture all the participants / Utilisez le formulaire plusieurs fois au besoin pour saisir tous les participants.

The Certificate holder / Responsible Person shall complete a Special Aviation Event Participant's Statement and send it to <u>TC.SATPCentredexpertise-RPASExpertisecenter.TC@tc.gc.ca</u>, within 5 business days following the Special Aviation Event. / Le titulaire du certificat / personne responsable doit remplir une Déclaration des participants à la manifestation aéronautique spéciale, et l'envoyer à l'adresse <u>TC.SATPCentredexpertise-RPASExpertisecenter.TC@tc.gc.ca</u>, dans les 5 jours ouvrables suivant la manifestation

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 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:
 - 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,
- 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. 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.
- 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.
 - 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.
 - ii. Members shall use the MAAC Reportable Occurrence form and MAAC shall respond in writing. Any such record shall be kept for two years from the date of the agreement to cause and remedy.
 - iii. The above records shall be kept by the owner, and any subsequent MAAC owner for the life of the RPAS, or until two years after the RPAS is withdrawn from service and de-registered.

MAAC RPAS Manufacturers Declaration – Owners Declaration

Owner Name and MAAC #	
Date of initial declaration	
RPA Make or manufacturer name	
RPA Model	Transmitter

RPA category D MAAC Model Aircraft (Fixed wing) DMAAC Rotorcraft D 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

Insert TC Reporting Form here as a PDF or provide LINK to MAAC Website where the form is located.