



Riverside Flyers
Standard Safety & Operation Procedures (SSOP's)

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1. **INTRODUCTION:** This document is intended to both guide the new pilot to our field and to act as a refresher for our existing pilots. While we have attempted to cover all procedures related to safe flying at our field, if you believe we have missed something of importance, please let the Safety Officer or a member of the Executive know. All pilots using Riverside Flyers flying sites will observe the Club Safety Officer's requests. The Safety Officer has the authority of the Executive Board of the Club to submit a complaint or ground airplanes or pilots that represent potential safety hazards. Disputes over safety rule interpretations will be discussed and resolved at the next Board meeting. The Model Aeronautics Association of Canada Safety Code will be observed at all times.

2. **CLUB RULES:**

- 2.1. **NO** flying by club members or visiting fliers without a valid MAAC. Visiting fliers must present a valid MAAC membership card.
- 2.2. **ALL** Pilots **MUST** carry their MAAC membership card with them while flying. Spot checks may be expected from regulating bodies ie: Transport Canada and/or the RCMP.
- 2.3. **ALL** flying **MUST** be done in accordance with the relevant regulations from Transport Canada, the relevant MAAC Safety Code and MAAC Policies and Procedure documents. More details can be seen at the following website: "www.maac.ca/en/documents.php"
- 2.4. **ALL** flying **MUST** be done in accordance with the guidelines set out in the Riverside Flyers "Standard Safety & Operation Procedures" document.
- 2.5. Each aircraft **MUST** have at least one external label clearly identifying the MAAC website, "www.maac.com", the owners MAAC Number, the owners name and their telephone number.
- 2.6. **NO** flying above 400'/122m
- 2.7. **NO** flying before 09:30hrs
- 2.8. **NO** flying alone
- 2.9. **NO** pets allowed when the site is active

3. DEFINITIONS:

- 3.1. Airplane = Fixed Wing Aircraft
- 3.2. Helicopter = Rotary Wing Aircraft
- 3.3. Quad = Multi-Rotor Aircraft
- 3.4. Aircraft = Airplanes, helicopters & quads
- 3.5. UAV = Unmanned Aircraft Vehicle
- 3.6. RPAS = All of the above

4. Radio Equipment:

Your radio equipment must be Industry Canada and/or F.C.C. certified to be used at the flying field or any other site that we may use. Non-certified equipment is prohibited from use at all flying sites.

5. Aircraft Benches:

- 5.1. Once your airplane is assembled, place it on the ground using appropriate restraints. Helicopters may be left on a bench.
- 5.2. While benches are used for assembling aircraft, no aircraft is to be started while on a full-sized/large bench. The only exception to this is an aircraft started on the low "Wood's Bench" made by Ralph Woods and then only when aircraft restraints are used on the bench to restrain the aircraft.
- 5.3. If you have difficulty kneeling to start your aircraft, you may apply for an exemption from 4.2, provided that a helper is always used when starting the aircraft. Exemptions are granted by the Executive Committee on a case by case, basis.
- 5.4. Where no benches are available, ask a member who is using a bench if you can share that bench, then proceed as in 5.1 above.

6. Placement of Aircraft:

- 6.1. Placing your airplane on the ground is important so as to not impact fellow flyers and to protect the aircraft from being blown off by wind gusts. Therefore, those using the West-side benches will aim prop wash away from the bench. For those using the North and South benches are to aim their prop wash to the benches.

- 6.2. Aircraft shall not be started in any areas other than those designated for engine or motor start-up. It is recommended that a helper should always hold the aircraft during engine starting, if possible and use restraints.
- 6.3. No airplane is to be started on a full-size work bench.
- 6.4. Where, for medical reasons, a pilot is unable to kneel to start the aircraft, the use of the 'Ralph Woods' bench is allowed, with a helper, and provided that the airplane is securely restrained while being started. The aircraft's prop/rotor blast must be directed away from fellow flyers.

7. Frequency Pin Procedures:

- 7.1. All pilots who are using 72MHz, must obtain and display a frequency pin prior to powering up their transmitter for any purpose. Take your personal pin, issued by the club, and place it on the Frequency Board in place of the Frequency Pin for the 72MHz channel you will be using. If there is no Frequency Pin matching your transmitter's frequency, do not turn on your transmitter or receiver until that frequency becomes available.
- 7.2. If you do not have a Personal Frequency Pin or have lost your pin, contact the Club VP for a new or replacement pin.
- 7.3. Once you have finished flying, return the Frequency Pin to the appropriate slot on the Frequency Board and retrieve your Personal Pin, placing it back on your transmitter.
- 7.4. All pilots who are using 2.4GHz, due to the robust characteristics for 2.4, are not required to use the Frequency Board.

8. Range Checks

8.1. Airplanes

- (i) Conduct your range checks (for all aircraft) on the ground in the pits only and nowhere else.
- (ii) Prior to flying, you have to conduct a range check on each aircraft you plan on flying that day. This is in accordance with the radio equipment maker's instructions, MAAC rules and Club rules. These checks are for the purpose of checking that control surfaces move in the correct direction. The range check is to be conducted prior to starting the aircraft's engine or motor. Where your radio equipment instructions suggest a range check with the engine running, this is to be conducted on the taxiway, with the aid of a helper.
- (iii) Always use a helper when conducting your range checks. This way the helper can advise you of the deflection direction of the control surfaces.
- (iv) During the range check, ensure your aircraft is secured, especially in the case of electric aircraft in the event of a throttle turn-on (Technically, there is no need for a throttle turn-on test during a range check).

8.2. Helicopters and Multi-Rotor

- (i) Given that helicopters/multi-rotor can move in any direction when energized, there is no easy way to restrain them. Conduct helicopter range checks well away from all persons on the field. Preferred location is the area just South of the most Southerly flight station on the flight line.
- (ii) Do not energize the motor power system until you are in one of the above areas.
- (iii) Prior to flying, you have to conduct a range check on each aircraft you plan on flying that day. This is in accordance with the radio equipment maker's instructions, MAAC rules and Club rules. These checks are for the purpose of checking that control surfaces move in the correct direction. The range check is to be conducted prior to starting the aircraft's engine or motor. Where your radio equipment instructions suggest a range check with the engine running, this is to be conducted in the designated areas listed above.

9. Approved Sound Levels

Be aware at all times of the Club's maximum sound levels (posted on the Club House) and ensure that your aircraft is at or below those levels. If you are unsure of the sound level generated by your engine or motor, please request a sound check. If there is concern that your engine or motor is exceeding the maximum allowed sound levels, the Safety Officer or a member of the Executive will conduct a sound check. You can also request a sound level check at any time.

10. Engine and Motor Starting Procedures

The correct starting of your aircraft's engine or motor is important and, when done properly and safely will enhance your flying experience. The following steps are conducted with your aircraft on the ground (unless you have an exemption to 6.4 above.)

"NOTE: There will be no taxiing in the Pits Area"

10.1. Gas & Glow Aircraft:

- (i) After fuelling the aircraft, reconnect all hoses.
- (ii) Ensure the aircraft is restrained and, as an extra measure of safety, have a helper hold the tail of the plane.
- (iii) Using the appropriate tools, check that the prop nut/spinner is securely attached.
- (iv) Follow the start-up instructions which came with your engine, including connecting the glow driver (glow engines only).

- (v) For Airplanes, once the airplane engine is started, immediately move behind the propeller (to remove the glow driver and) to perform any adjustments. When an engine backfires, especially 4-stroke engines, the propeller and all its restraining devices can be shot off the engine and cause injury to anyone standing in front of or at the side of the airplane.
- (vi) For Helicopters, once the engine is started, follow the helicopter manufactures instructions to remove the glow driver and to perform any adjustments. Ensure all persons standing near you have moved to a point of safety.
- (vii) For Aircraft, as small-size engines require a run-up and the airplane has to be held up to confirm proper fuel draw, have an experienced helper operate the transmitter and, before picking up the airplane, warn all people around you of what you are about to do. N.B. Some airplanes, e.g. 1.20 size and up are too heavy to safely accommodate the “hold up” run-up.
- (viii) After the engine run-up check, ensure that your aircraft is under your control while it is being transported through the pits: Use the “Throttle Lock” on your transmitter, if one is fitted.

NOTE: Taxing through the pits is not allowed. “Being transported” means being carried or being walked through the pits with someone holding on to the aircraft.

- (i) At the Pits/Taxiway markers, you may place your aircraft on the ground (if being carried through the pits) and taxi safely to the runway. Where necessary, conduct a further run-up test. This test is to be performed on the taxiway, no closer to the flight line than the Starting Station.

10.2. Electric Airplanes:

- (i) Ensure the airplane is restrained and, as an extra measure of safety, have a helper hold the tail of the plane.
- (ii) Using the appropriate tools, check that the prop nut/spinner is securely attached.
- (iii) Install a charged battery.
- (iv) Check for proper motor operation and ensure that your airplane is under your control while it is being transported through the pits. Use the “Throttle Lock” on your transmitter.
- (v) Carry your airplane to the flight line. Where necessary, conduct a further run-up test. This test is to be performed on the taxiway, no closer to the flight line than the Starting Station.

NOTE: Taxiing through the pits is not allowed. “Being transported” means being carried or being walked through the pits with someone holding on to the aircraft.

10.3. Electric Helicopters and Multi-rotor:

- (i) Do not energize the motor system of your helicopter until you are in the Low Level Practice Area or at the most Southerly flight station on the flight line. Do not connect the battery in the pits area.
- (ii) All mechanical checks and pre-flight should be conducted in the pits area prior to moving your helicopter to the flying areas.
- (iii) After you are in one of the designated flying areas, connect the battery and move the helicopter out on to the runway. Before moving to the runway announce that you are about to launch a helicopter and insure there are no airplanes or airplane pilots in the immediate area.
- (iv) Announce that you are “spooling up” and about to take off.
- (v) When you are about to land announce that you are “landing” on the runway.

11. Use of Spotters

The Club Executive strongly recommends the use of a spotter at all times while flying except for pilots flying FPV. All pilots flying FPV are required to have a spotter with them to. In the case of FPV, there will be one spotter for each FPV aircraft in flight. The Spotter must be able to maintain Line of Sight of the aircraft at all times. Such a spotter is to be a current MAAC member.

12. Mixing of Fixed Wing, Rotary Wing and Multi-Rotor Flying

No helicopters or multi-rotor aircraft are allowed to fly from the flight line while airplanes are flying. Conversely, no airplanes are allowed to fly from the flight line while helicopters or multi-rotor aircraft are flying.

13. Low-Level Practice Area

Helicopters and Multi-Rotor aircraft flown in the Low-Level Practice Area are not to be flown above the height of the posts, nor outside of the Practice Area perimeter, nor are aerobatics to be practiced. The Low-Level Flight line has been relocated the North side of the practice area and all flight patterns will be flown toward the south of the Low-Level Practice Area.

14. Flight Stations:

The flight line consists of four (4) Flight Stations. At the flight line, no more than four aircraft can be flown at the same time. Only one Flight Station is located on the north side of the Helicopter Low Level Practice Area. Only one helicopter at a time can be flown in the Helicopter Low Level Practice Area.

Pilots flying aircraft must remain behind the pilot stations. Only pilots, spotters and instructors are permitted to occupy the pilot stations during aircraft operation. Only one piloted aircraft per station. No more than four aircraft will be in the air at the flight line at any one time.

If you have difficulty standing for any period of time you may apply for an exemption to use a chair while flying your aircraft. Exemptions are granted by the Executive Committee on a case by case. At no time will a chair be used on the runway.

15. At the Flight Line:

When others are flying, and when you are at the runway and are ready to move your aircraft onto the runway, ask for permission to proceed on to the runway. All flying is to be performed from one of the four Flight Stations. The only exception to this is with a new pilot e.g. trainee, or with a new aircraft where standing behind the aircraft offers the pilot a view of how the aircraft is proceeding and allows immediate inputs to correct the airplane's direction. Once the aircraft has taken off and is flying safely, the pilot is to move to one of the four Flight Stations. No person shall stand at any edge of the runway during flight operations.

16. Entering the Runway:

If an aircraft must be carried out onto the runway for a takeoff, this intention must be previously announced to any other pilots flying at the time. A pilot helper must carry the aircraft and the pilot shall remain in the pilot box. The helper must promptly clear the runway when the aircraft is released.

On a "Maiden Flight", the pilot may stand on the runway, behind the aircraft. Once the aircraft is airborne, the helper should guide the pilot back to the flight station in a safe manner and without delay. Prior to a "Maiden Flight", the air space must be cleared with no one flying their aircraft. Only when the airspace is clear, can a Maiden Flight proceed.

17. Takeoffs and Landings:

All takeoffs and landings, including touch and go's, are to be into the wind, unless, for safety reasons, this is not possible eg. dead stick landings. **NOTE: Dead-stick landings take precedence over all flight operations.**

18. Flying over the Runway:

All flying over the runway (high and low speed passes and all forms of aerobatics, etc.) at the Riverside field will be restricted to the field beyond the East edge of the runway and will be in the same direction as the current takeoff or landing pattern. There are to be no aerobatics over the runway. The only maneuvers permitted over the runway are takeoffs, touch and goes, landings, landing approaches and emergencies.

19. Landing and Touch-and-Go's

When landing and when performing touch-and-go's, announce your intentions to the other flying pilots, including the direction from which your aircraft is approaching. This allows other flying pilots to clear the airspace around the direction from which you are approaching.

20. Clearing the Runway

Once you have landed and have taxied (or removed your aircraft) off the runway, loudly announce, "Clear". This allows the other flying pilots to know that the runway is now free of obstruction without them having to take their eyes off their aircraft.

21. Returning to the Pits

In the case of airplanes, if your engine is still running, taxi your airplane back to the Pits/Taxiway boundary posts and shut the engine down. If your airplane engine has quit, or you have shut it down, carry or tow the airplane to your pits station. Helicopters and Multi-rotor aircraft are to be carried from the flight line to the pits, unless you have an alternate method of transportation.

22. Smartphones, tablets and computers:

- (i) May be used as "**part**" of a complex flight control system but "**never**" as the primary means of controlling the aircraft during flight or as the primary radio link (Wi-Fi, Bluetooth, etc), even if those capabilities exist. (ie: the smartphone could be used as a monitor but not as the controller).
- (ii) Considering the spectrum hopping capabilities of the current 2.4 GHz transmitters and the general lack of smartphone, tablet, computer interference, the normal use of smartphones will be allowed at the field.

23. Fueling and Battery Charging:

All fueling and refueling of aircraft is to be conducted in the pits. For electric aircraft, battery changing may be conducted on the benches at the flight line, but all battery charging will be conducted in the pit area.

24. Flying Skills and New Pilots:

All members are encouraged to pass the MAAC Wings and/or Blades program, level B. New pilots and new members are to have their skills checked out by the club's chief instructor.

25. Field Courtesy

At all times, be courteous to other pilots. If you want a further flight immediately after the flight you have just completed, and no one else appears to be preparing their aircraft for a flight, check with other pilots to ensure they are OK with you going for another flight. If they are not, honor their wishes.

26. LiPo Batteries Following a crash:

If a model containing a LiPo battery crashes at any Riverside site, that aircraft **MUST** be found. Fire avoidance is a priority. In case of a LiPo battery fire, use dry powder extinguisher only, or bury the battery in a bucket of sand located at the flight line and the pit areas. Leave the battery in the sand until such time as it can be safely removed. Puffed-up LiPo batteries are to be buried in a bucket of sand until such time as they can be safely removed.



Riverside Flying Field, August 2018.

Riverside Flyers Radio Control Flying Club

October, 2011

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Revision 2— November 2012

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