

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 obey 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.

## 2. CLUB RULES:

2.1. **NO** flying by club members or Guest-Pilots without a valid Transport Canada Pilot Certificate and a signed, valid MAAC membership.

2.2. **ALL** Pilots **MUST** be able to produce, on demand, their signed MAAC membership to any member of the club executive, the Chief Flight Instructor, a Flight Instructor, or the Safety Officer.

2.3. **ALL** Pilots **MUST** be able to produce, on demand, their Transport Canada Pilot Certificate to the proper regulating body when requested. Spot checks may be expected from these regulating bodies.

2.4. **ALL** flying **MUST** be done in accordance with the relevant requirements of Part IX of the Canada Aviation Regulations (SOR/96-433); the relevant requirements of the MAAC Safety, Policy, and Procedure documents; the guidelines as set out in the Riverside Flyers "Standard Safety & Operation Procedures" (SSOP's) document.

2.5. Each RPAS over 250 grams, **MUST** have at least one external label clearly identifying the Transport Canada Certificate of Registration Number for that aircraft.

2.6. **NO** flying above 400'/122m and the Visual Line-Of-Sight (VLOS) rules must be always maintained.

2.7. **NO MORE** than **ONE** guest per club member on the Flight-Line or in the Pitt Area.

2.8. **ALL OTHER GUESTS** must maintain a minimum of 30m/100' distance from the Main Flight Line.

2.9. **NO** flying before 09:30hrs

2.10. **NO** flying alone

2.11. **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 the above
- 3.7. **CFI** = Riverside Flyers Chief Flight Instructor.
- 3.8. **Member** = a Riverside Flyers Club Member in good standing.
- 3.9. **Spotter/Trained Spotter** = Any person who possess a valid Transport Canada Pilot Certificate and a valid MAAC membership.
- 3.10. **Guest-Pilot** = must possess a Transport Canada Pilot Certificate and a current MAAC membership and who has been invited to fly by a Riverside Flyers Club Member who is in good standing.
- 3.11. **Guest-non-Pilot**: a member of the General Public, a family member or a friend of a Riverside Flyers Club member who is in good standing.
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. **Frequency Pin Procedures**:
- 5.1. 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.
- 5.2. If you do not have a Personal Frequency Pin or have lost your pin, contact the Club VP for a new or replacement pin.
- 5.3. 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.
- 5.4. All pilots who are using 2.4GHz are not required to use the Frequency Board due to the robust characteristics of 2.4GHz frequency.
6. **New Aircraft or maiden flight aircraft** will not be flown at the Riverside Flyers flying field without first having a pre-flight inspection of the aircraft by the Chief Flight Instructor. This may require check-out flight by the Chief Flight Instructor, or a person assigned by the Chief Flight Instructor.
7. **Range Checks**: Prior to flying, you must conduct a range check on each aircraft you plan to fly that day. This is in accordance with the radio equipment maker's instructions, Canada Aviation Regulations, MAAC rules and Club SSOP's. These checks are for the purpose of checking 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.

### 7.1. Airplanes

- (i) Conduct your range checks (for all aircraft) on the ground in the pits only and nowhere else.
- (ii) Prior to flying, you must 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).

### 7.2. 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. The 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 the above area.

## 8. 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.

9. **Use of Trained Spotters:** The Club Executive strongly recommends always using a trained spotter while flying. All pilots flying FPV are required to have a trained spotter. For FPV, there will be one spotter for each FPV aircraft in flight. The Spotter must be able to maintain Visual Line of Sight, of the aircraft always. Such a spotter must be a holder of a current Transport Canada Pilot Certificate and a current MAAC membership.

## 10. Pitts Protocol:

10.1. **Returning to the Pits:** In the case of airplanes, 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 Main Flight Line to the pits unless you have an alternate method of transportation.

10.2. **Fueling and Battery Charging:** All fueling and refueling of aircraft is to be conducted in the pits. For electric aircraft, all battery charging will be conducted in the pit area or at the SOLAR charging station beside the Fire Station.

10.3. **Assembly Bench:**

- (i) Assembly benches running North-South are reserved only for electric powered aircraft. Assembly Benches running East-West are reserved only Gas/Glow powered aircraft.
- (ii) Once your airplane is assembled, place it on the ground using appropriate restraints. Helicopters may be left on a bench.
- (iii) Aircraft prop/rotor blast must be directed away from fellow flyers. If this is impossible or impractical, move the aircraft to the taxi entrance to the runway before starting.
- (iv) Placing your airplane on the ground is important so as not to impact fellow flyers and to protect the aircraft from being blown off by wind gusts.
- (v) 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.
- (vi) Where no benches are available, ask a member who is using a bench if you can share that bench.
- (vii) 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 start, if possible, and use restraints.

#### 10.4. Special Circumstances:

- (i) 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.
- (ii) If you have difficulty kneeling to start your aircraft, you may apply for an exemption, provided that a helper is always used when starting the aircraft.
- (iii) Exemptions are granted by the Executive Committee on a case-by-case basis.

#### 10.5. 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 Pit Area."**

##### (i) Gas & Glow Aircraft:

- (i) After fueling 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 people standing near you have moved to a point of safety.
  - (vii) For Aircraft, as small-size engines require a run-up and the airplane must 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.
- (ii) 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 pit is not allowed. "Being transported" means being carried or being walked through the pits with someone holding on to the aircraft.**
- (i) Electric Airplanes:**
- (i)1. Ensure the airplane is restrained and, as an extra measure of safety, have a helper hold the tail of the plane.
  - (i)2. Using the appropriate tools, check that the prop nut/spinner is securely attached.
  - (i)3. Install a charged battery.
  - (i)4. 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.
  - (i)5. Carry your airplane to the Main Flight Line. Where necessary, conduct a further run-up test. This test is to be performed on the taxiway, no closer to the Main 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.**
- (iii) Electric Helicopters and Multi-rotor:**
- (i) Do not energize the motor system of your helicopter until you are at the most Southerly flight station on the Main 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 onto 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. Flight Station Protocol:

- 11.1. The Main Flight Line consists of four (4) Flight Stations. At the Main Flight Line, no more than four aircraft can be flown at the same time.

- 11.2. 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.
- 11.3. 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.
- 11.4. The Club Executive strongly recommends always using a trained spotter while flying. All pilots flying FPV are required to have a trained spotter. For FPV, there will be one spotter for each FPV aircraft in flight. The Spotter must be able to maintain Visual Line of Sight, of the aircraft always. Such a spotter must be a holder of a current Transport Canada Pilot Certificate and a current, signed MAAC membership.
- 11.5. Once the aircraft has taken off and is flying safely, the pilot is to move to one of the four Flight Stations.
- 11.6. If you have difficulty standing, for any period, you may apply for an exemption to use a chair while flying your aircraft. Exemptions are granted by the Executive Committee case by case.
- 11.7. At no time will a chair be used **ON** the runway.
- 11.8. No person shall stand at any edge of the runway during flight operations.

## 12. Flight Line Protocol:

- 12.1. **Mixing of Fixed Wing, Rotary Wing and Multi-rotor aircraft while Flying:**
- (i) All Rotary Winged aircraft in a 500mm class or above will only be flown off the Main Flight Line.
  - (ii) All Rotary Winged aircraft under the 500mm, i.e. 450mm class and all multi-rotor aircraft (quads) will be flown off the Secondary Flight Line
  - (iii) No Rotary-Winged aircraft are allowed to fly from the Main Flight Line while fixed-winged aircraft are flying.
  - (iv) Conversely, no fixed-wing aircraft are allowed to fly from the Main Flight Line while rotary-wing aircraft are flying.
  - (v) **EXCEPTION:** If it is understood that all fixed-wing aircraft have **air space priority** during all flights and if there is an **agreement** with all flying pilots and there is a **continuing dialogue** between all flying pilots, **then**.
    - (i) Helicopters under 500mm and all multi-rotor (quads) may fly off the main runway at the same time.
    - (ii) For FPV fixed-wing aircraft, no more than one FPV fixed-wing aircraft and one LOS (line of sight) Fixed-Wing aircraft will be flown at the same time off the Main Runway.
    - (iii) When a FPV fixed-wing aircraft is being flown with another aircraft, a spotter must be used. A spotter is also recommended for all other FPV fixed-wing flights.
    - (iv) In the event a LOS Fixed-Wing aircraft is landing or has an emergency landing event, all helicopters and quads are to vacate the main runway immediately and must immediately find a safe haven or set a bearing for the Secondary Runway, whichever is the safest and the fastest.
- 12.2. **Main Flight Line and Secondary Flight Line:**
- (i) There are four (4) Flight Stations on the Main Flight Line.
  - (ii) The Main Flight Line runs North to South and is the Main Flight Line that all Fixed Wing and 500mm class and over Helicopters.

### 12.3. Secondary Flight Line

- (i) The Secondary Flight Line runs at a 45° angle from the west side the Main Flight Line and begins approximately 20m south of the 4<sup>th</sup> Flight Station, running from the NE to the SW. It is a stubby runway and is not intended to be used for Fixed Winged Aircraft. It is to be only used by multi-rotor (quad) aircraft and all helicopters below the 500mm class.
- (ii) There is one assembly table that is used as a flight station. Up to 3 multi-rotor pilots can use this station at the same time.
- (iii) There is a walkway leading from the Flight Station to the landing pad to be used for Helicopters. There may be a smaller pad nearer the flight station that can be used for Quad's.

### 12.4. Declaring Intentions:

- (i) When others are flying, and you are at the runway and ready to move your aircraft onto the runway, ask for permission to proceed on to the runway.
- (ii) When entering or leaving the Runway, announce your intentions by loudly and clearly saying **“ON THE RUNWAY”** or **“OFF THE RUNWAY”**, whichever applies.
- (iii) When taking off or landing your aircraft, loudly and clearly announce your intentions that you are **“TAKING OFF”** or that you are **“LANDING”**.
- (iv) 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.
- (v) **Drone Pilots:** Be courteous to all Fixed Wing Pilots, they have priority on the runway
  - (i) Declare your intentions to all pilots on the flight line when you are flying off the 2<sup>nd</sup> runway. Some may find the noise from the drone unnerving.
  - (ii) If there are no fixed winged aircraft flying and you intend to fly over the Main Runway and to the east of the Main Runway, declare your intentions to all fixed wing pilots, once you have agreement, you may fly over both the Main and Secondary Runways.

### 12.5. Placing Aircraft on the Runway

- (i) If an aircraft must be carried onto the runway for 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.
- (ii) 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.
- (iii) 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.

### 12.6. Dead-Stick Landings:

- (i) Dead-stick landings take precedence over all flight operations. If you have a dead-stick event, loudly and clearly announce your mayday situation, and proceed to land your aircraft.

(ii) When a pilot declares a dead-stick event, clear the runway and the airspace approaching the runway from either direction.

**12.7. Low Pass and Touch-and-Go's:** When performing a low-pass or a touch-and-go, clearly, and loudly announce your intentions to the other flying pilots. This allows other flying pilots to clear the airspace around the direction from which you are approaching.

**13. Smartphones, tablets, and computers:**

13.1. 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. (i.e.: the smartphone could be used as a monitor but not as the controller).

13.2. 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.

**14. Pilot Protocol:**

**14.1.** All members are encouraged to pass the MAAC Wings and/or Blades program, level B.

**14.2.** New pilots and new members are to have their skills assessed by the club's CFI.

(i) **No pilot will fly solo before being cleared by the CFI.**

**14.3. Guest-Pilot**

(i) During busy periods, Members take priority over Guests.

(ii) Members are responsible for the safety and actions of their guests at all times.

(iii) A maximum of **one Guest-Pilot is allowed** to accompany each member during any flying session, up to a maximum of **3 times per year for that guest**, subject to the approval and discretion of the Club Executive.

Guest-Pilots' privileges can be cancelled at the discretion of either a Club Executive member, the Chief Flight Instructor, or the Safety Officer.

(iv) Guest-Pilots are not allowed to train other pilots at the Riverside Flyers Club site.

(v) A Guest-Pilot who wishes to fly at a Riverside Flyers site must understand and obey all posted safety rules. Not knowing the rules is not an excuse for not obeying the field rules.

(vi) Guest-Pilots' must undergo a “check-out” flight by the Chief Flying Instructor, or, in the absence of the Chief Flight Instructor the President, Safety Officer, a Club Flight Instructor, or an approved member (as described in the Chief Flight Instructor Duties).

**14.4. Guest-non-Pilot:**

(i) Only one Guest-Non-Pilot per member will be allowed to accompany that member on the Main Flight Line at a time.

Commented [1]:

(ii) The member of a Guest-Non-Pilot will ensure they understand and obey all posted safety rules. Not knowing the rules is not an excuse for not obeying the field rules.

**15. ALL OTHER GUESTS** must maintain a minimum of 30m/100' distance from the Main Flight Line. There will be no exceptions to this rule.

**16. Field Courtesy**

**16.1.** At all times, be courteous to other pilots.

**16.2.** 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.

**17. LiPo Batteries Following a crash:**

**17.1.** If a model containing a LiPo battery crashes at any Riverside site, that aircraft **MUST** be found. Fire avoidance is a priority.

**17.2.** In case of a LiPo battery fire, use dry powder extinguisher only, or bury the battery in a bucket of sand located at the Main 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.

**18. Surface track:**

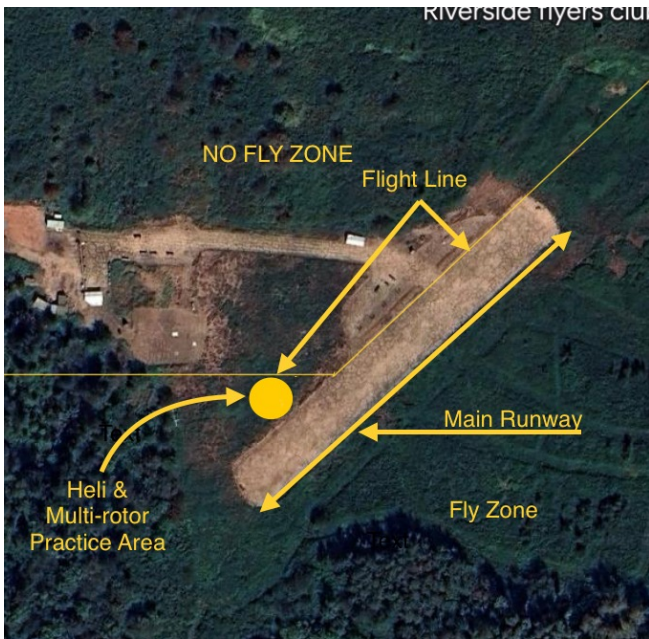
**18.1.** The surface is under development, rules and regulations will be addressed as the track is refined.

**18.2.** For now, the track is limited to a maximum of 1/10 scale RC vehicles.

**18.3.** All drivers are to exercise due care and attention while operating their vehicle on the track.

**18.4.** All drivers must always consider the safety of others using the racetrack and those who may be observers at the track.

**19. Alcoholic Beverages:** While the Province of British Columbia has allowed the consumption of alcohol beverages at certain designated Parks and recreational areas in the Province, the Riverside Flyers flying field is not one of those areas. Consuming alcoholic beverages at the Riverside Flyers flying field is not only illegal, but maybe in contravention of the Canadian Air Regulations, where CARs 901.19(2)(a), which forbids pilots who have consumed alcohol from flying for 12 hours after consumption.



Riverside Flyers Field, April 2024.

Version	Changes	Aut
Revision 1 October, 2011		
Revision 1.1 November 2012		
Revision 2 November 2012		
Revision 3 October 2018	- First re-write in 6 years	grg
Revision 4 March 11, 2021	- Combining Safety & Field Procedure documents into one Standard Safety and Procedures document.	grg
Revision 4.1 March 16, 2021	- Spelling & Grammar)	grg
Revision 4.2 Dec 13, 2021	- Frequency Pins - Smart Phones	grg
Revision 4.3 February 7, 2023	- Club Rules added, removed AMA references. - Removed Helicopter Practice Area - Amend 17.2 - vacate airspace on encroaching Aircraft. - Sentence structure. - Logo Change	grg
Revision 4.4 May 24, 2023	- Amend Guest-Pilot & Guest Non-Pilot requirements, - Remove MAAC links from Rules. - Add references to Canada Aeronautic Regulations, Part IX - Aligned certain sections under Main Flight Line, Flight station & Pitts protocol. - Conduct general review	grg
Revision 4.5 April 08, 2024	-new map showing main runway and new Heli & multi-rotor; clarification on consuming alcoholic beverages on the Riverside Flyers flying field. 13.1 Secondary Flight Line created,	grg
Revision 4.5.1 May 23, 2024	Sec 10 removed, sec. 13 now sec 12 - expanded Flight line protocol for FPV, rotary and multi rotor aircraft.	grg