



RCACF Recommended Practices

Revised - 9/14/2020

Revised – 2/12/2024 Renamed document from "RCACF General Flight Rules & Recommended Practices" to "RCACF Recommended Practices". Membership voted for the change in 2/10/2024 club meeting.

RCACF – Flight Rules

All RCACF Members **MUST** be aware of ALL Flight Rules and agree to abide by these rules to the best of their abilities.

RCACF is a large Radio Controlled Aircraft club with over 200 active members. All of these members want to be able to come out to Tangerine Field and fly their personal radio controlled aircraft as a form of relaxation and personal enjoyment. Unlike clubs that have only a small membership where everyone knows everyone else and knows what they are likely to do at any given time, RCACF has both a large population of long standing members but also a continuously changing group of new members. With this in mind, RCACF must maintain a standard set of rules published for all to abide by to the best of their abilities.

In this document, when you see the word "<u>MUST</u>" (bold and underlined), the rule that contains that word <u>MUST</u> be observed at all times. Other rules (without "<u>MUST</u>" or not bold and underlined) should be considered as Guidelines and Preferred Method of Operation but are, typically not enforceable unless not following the guideline leads to a "Safety Infraction" or "Accident."

This document is broken into a number of sub-documents to cover generalized as well as flight rules specific to individual types of aircraft or method of flying. Individual members should read and observe the rules specific to his/her own aircraft and method of flying. These sections include:

- Who Can Fly at Tangerine Field rules to identify individuals who are allowed to fly at Tangerine Field. See <u>Who Can Fly at Tangerine Field</u> for details.
- General Flight Rules rules pertaining to general conduct of pilots while preparing for flight, takeoff, in-flight, landing and post-flight activities, regardless of type of aircraft or method of flying. See <u>General Flight Rules</u> for details.
- 3. RCACF Tangerine Field Layout and definition of Flight Zones. See <u>RCACF Tangerine Field</u> for details.
- Fixed Wing Flight Rules rules specific to flying fixed wing aircraft. See <u>Fixed Wing Flight Rules</u> for details.
- Multi-rotor Drone & Helicopter Flight Rules rules specific to flying multi-rotor drones or helicopters. See <u>Multi-rotor Drone & Helicopter Flight Rules</u> for details.
- 6. Gas Turbine Powered Aircraft Flight Rules rules, above and beyond those for fixed wing aircraft, specific to flying turbine powered aircraft. See <u>Gas Turbine Powered Aircraft Flight Rules</u> for details.
- First Person View (FPV) Flight Rules rules specific to flying any type of aircraft using FPV technology. See <u>First Person View (FPV) Flight Rules</u> for details.
- Role of a "Spotter" suggestions for pilots making use of other idle members as a spotter while flying. See <u>Role of a "Spotter"</u> for details.

RCACF Disclaimer

RCACF is not responsible for personal or property damage caused by RCACF Member's or Guest Flyer's aircraft colliding with other aircraft, people or property.

Who Can Fly at Tangerine Field

The following rules **MUST** be applied when allowing people to fly at Tangerine Field.

- RCACF Members in good standing all RCACF Members who maintain their RCACF & AMA memberships in a "current status" are welcome to fly at Tangerine Field at any time. All RCACF Members MUST wear their club identification badges at all times while flying at Tangerine Field.
- 2. AMA Members sponsored by RCACF Instructors all RCACF Instructors can sponsor "potential new members" (AMA Members who are interested in joining RCACF) or RCACF New Members who have not yet received their RCACF Club Credentials, as a "Guest Flyer"¹ at Tangerine Field.
- 3. AMA Members sponsored by an RCACF Member all RCACF Members, as defined above, are welcome to sponsor other AMA Members to fly as a "Guest Flyer"¹ at Tangerine Field for a limited number of times per year.
- 4. Other AMA Members flying during special events For RCACF sponsored special events involving numerous pilots from other clubs, these members can be either signed in individually, or have a Board Member sponsor an entire club or group.
- 5. RCACF Members who have had their flight privileges suspended due to their AMA Membership having expired before their RCACF Membership expires or for repeated Safety Violations are not allowed to fly at Tangerine Field until the suspension has been resolved.
- 6. Non-AMA Members are not allowed to fly at Tangerine Field.

¹ The sponsoring RCACF Member is responsible for signing in the Guest Flyer and assigning a temporary Guest Flyer badge to be worn at all times while flying at Tangerine Field and ensuring that it is returned before the Guest Flyer leaves.

General Flight Rules

This section covers general rules of conduct by member pilots while preparing for flight, taking off, flying, landing and post-flight activities. These rules cover the categories of:

- 1. Flight Safety
- 2. Hangar and Flight Line Safety
- 3. Common Sense
- 4. Follow AMA Guidelines
- 5. Enjoying the RC Aircraft Hobby

1. Flight Safety

At all times, flight safety **MUST** be the highest priority in what to do or not do at a specific time. The obvious priorities here are:

- Personal safety Regardless of type of aircraft or method of flying, all pilots <u>MUST</u> consider personal safety above all else when flying at Tangerine Field. This includes the safety of the pilot himself/herself, other pilots on the flight line, other members and visitors in the hangar area, visitors around the clubhouse or on the driveway, drivers on the nearby roads or workers nearby.
- Property safety After personal safety comes property safety. Every attempt to avoid accidents involving club property (hangars, clubhouse, information center, food booth or other equipment), other member's aircraft or field equipment, personal automobiles, anything else that a member or visitor brings to the field or those automobiles and other vehicles on the nearby roads, <u>MUST</u> be the priority immediately following personal safety.

ALL RCACF Members are responsible for the safety of people and property at Tangerine Field. As such, members seeing unsafe practices should:

- 1. Speak to the person involved and indicate the nature of the "safety violation". If the pilot in question accepts the comment, nothing further should be required.
- 2. If that person continues to see the same pilot doing the same or similar unsafe activity, then they should be reported immediately to a Safety Officer or Board Member (if one is immediately available) or report the incident(s) to the club's primary "Safety Officer" or a Board Member as soon as possible including information about the incident(s), pilot name, description of safety violation and any other witnesses that were around at the time.

Important Note: Your aircraft has less value than a human life so if you see your aircraft approaching a collision with a person, you **MUST** do everything in your power to divert that aircraft, even if it means crashing your aircraft.

2. Hangar and Flight Line Safety

The hangar and pilot's flight line areas pose a major concern for the safety of all pilots or escorted visitors as well as to the aircraft themselves. The following safety rules apply to all members in this area.

- 1. **Visitors** All visitors beyond the main fence **MUST** be escorted at all times by an active RCACF Member. Young children should never be left alone in this area.
- 2. **Pilot Flight Positions** All fixed wing pilots <u>MUST</u> position himself/herself at one of the designated pilot positions (paving stone) behind the safety netting for the duration of the flight.
- Hangar Benches Electric Motors, Nitro Engines or Gas Engines <u>MUST NEVER</u> be started while an airplane is being worked on at one of the Hangar Benches. Before Arming Electric Motors or starting Nitro or Gas Engines, the airplane must be moved to one of the Engine Start Tables near the pilot's flight line or to the Taxi ramps.
- 4. Engine Start Benches These benches, immediately behind the pilot's flight line, are the only location where Electric Motors, Nitro or Gas Engines can be tested and adjusted. Also, as a courtesy to pilots currently flying aircraft from the flight line, pilots wishing to test a motor or engine, should try to select a bench other than those immediately behind an active pilot. The sudden noise of an engine starting right behind their back could cause a pilot to lose control of his/her aircraft.
- 5. **Taxiways** Each Taxiway is painted with a yellow ("caution") and red ("stop") line.
 - a. Electric motors **MUST NOT** be armed until the aircraft is on the Taxiway beyond the red and yellow lines or on one of the Engine Start Benches.
 - b. Small gas and glow engines can be started on an Engine Start Bench and carried to the Taxiway carefully without endangering other pilots or visitors and placed beyond the red and yellow lines or started on the Taxiways beyond the red and yellow lines.
 - c. Large gas and turbine engines <u>MUST</u> be started on the Taxiway beyond the red and yellow lines.
 - d. All aircraft returning to the hangar area, regardless of motor type, <u>MUST</u> be stopped and shut down before crossing the red line.

<u>3. Common Sense</u>

All of the rules relating to flying at Tangerine Field are based on Common Sense. This is broken out into the following:

- 1. Situational Awareness
- 2. Courtesy to Others
- 3. Helping Others
- 4. Announce your Intentions

1. Situational Awareness

Situational Awareness is the ability to know not only what you are doing but what is happening around you at all times. This term is critical to fighter pilots in order to know what they are going to do, what their wingman should be doing, and what the enemy is doing. RC pilots <u>MUST</u> also attempt to be aware of what is going on around them at all times while controlling their aircraft.

From the point that a pilot powers up his radio for a flight to the point that he shuts down the radio, the pilot must attempt to keep track of what other pilots and their aircraft are doing and how this may affect his/her own flight.

RCACF supports all types or radio controlled aircraft from traditional fixed wing including gliders to turbine powered fixed wing as well as helicopters. The recent increase in the availability and use of multi-rotor drones has led to a major increase in the use of these aircraft at RCACF and are a fast growing portion of RCACF's flying activities. When aircraft capable of flying racetrack patterns or suddenly stopping to hover are intermixed with fast moving fixed wing aircraft which take much longer to change direction, all of the pilots involved must be aware of what the other pilot is doing.

If flying First Person View (FPV) it is much more difficult to retain effective situational awareness when flying with other aircraft. It is strongly recommended that you should have a spotter to aid you in identifying the activity of other aircraft around you.

2. Courtesy to Others

With over 200 members in RCACF, all with the same desire to enjoy the RC Aircraft Hobby, all members should do everything in their power to work well with other members, to help them out when they need help and to ask for help when you need it.

For example, when working in the hangar area, if you have your equipment spread out across a table and someone comes looking for some space to put their plane and field equipment, move your equipment around or put some of it under the table. Do anything that you can to make room for them. Remember that they're members or guests too!

Hopefully when you're courteous to others, they will return the favor.

3. Helping Others

Club Membership is a sharing of resources. These resources include our individual knowledge and our physical abilities. A number of our members are physically handicapped in one way or another and it is always

nice to see a member go over to help another member who is struggling with turning an airplane over, attaching a wing, or any number of other things that are more difficult for some than others.

Also, RCACF is the home of a very large number of extremely knowledgeable RC Aircraft Pilots. In addition, we have a growing number of new members who don't have the knowledge base to do some of the things that our "senior" members have been doing for years. We have a number of volunteer Instructors who work specifically with new members but often a few "words of wisdom" from one of our world class pilots can go a long way toward helping that new member resolve issues, improve their aircraft balance, or any number of other things that new members struggle with.

I sometimes see a member who's been sitting in the hangar area, get up and walk out with a pilot about to take off and act as a "spotter" for the pilot. Another pilot's eyes can often see something that the pilot, who is concentrating on his own aircraft, does not and can lead to a successful flight instead of a disaster involving more than one aircraft. If you're just sitting around, why not help out?

4. Announce your Intentions

Regardless of aircraft type or method of flying, you must call out your intention to perform the following functions:

- 1. "Coming Out" immediately before you are going to move a fixed wing aircraft onto the runway or carry a multi-rotor or helicopter to the runway for takeoff.
- 2. "Taking Off" immediately before beginning your takeoff roll with a fixed wing aircraft or liftoff your multi-rotor drone or helicopter from one of the pads or runway.
- 3. "Crossing Over" immediately before you begin to fly a multi-rotor drone or helicopter over the runway or runway approach on the way to the main flight area to enter the main racetrack pattern area or to return over the runway or approach to land in the dedicated Drone & Helicopter Zone.
- 4. "Landing" immediately before beginning your approach to the runway for landing with a fixed wing aircraft or to the landing pads for multi-rotor drones or helicopters.
- 5. "Touch and Go" immediately before attempting your approach to the runway for a "Touch and Go" maneuver with a fixed wing aircraft.
- 6. "Dead Stick" immediately upon loss of power by the aircraft. Other pilots, upon hearing this announcement should yield landing rights immediately to the pilot with the unpowered aircraft.
- 7. "Taxiing" immediately before attempting to taxi more than a few feet down the runway before taking off or after landing.
- 8. "On the Runway" immediately before attempting to walk onto or across the Runway to retrieve an aircraft or for any other reason.
- 9. "Clear" immediately after walking off or clearing the Runway.

Not only is it important that you announce your own intentions but it is also critical that you listen for the announcement of others who are planning to do something that may interfere with what you are planning to do. Upon hearing one of these announcements, all pilots who currently have aircraft in the air or are in the immediate process of getting ready to take off must ensure that their current activity will not conflict with the previously announced activity.

Important Note: The call of "Dead Stick" is an emergency declaration by a pilot. His/her aircraft no longer has the power to continue flying therefore it must be allowed to immediately attempt to land. As such, other pilots on or near the runway should immediately clear the approaches and runway so that aircraft can attempt a safe landing.

4. Follow AMA Guidelines

RCACF is an AMA registered club. As such, all members must adhere to AMA published guidelines whenever possible.

Several documents on the AMA Web site that should be reviewed and understood by members are:

- Academy of Model Aeronautics National Model Aircraft Safety Code (available in .pdf format online at http://www.modelaircraft.org/files/105.pdf or through navigating the AMA web site). (required for ALL RCACF Members)
- Academy of Model Aeronautics "See and Avoid" Guidance (available in .pdf format online at <u>http://www.modelaircraft.org/files/540-D.pdf</u> or through navigating the AMA web site). (strongly suggested for ALL RCACF Members)
- Academy of Model Aeronautics Unmanned Aircraft Operation Utilizing First-Person View (available in .pdf format online at <u>http://www.modelaircraft.org/files/550.pdf</u> or through navigating the AMA web site). (required for RCACF Members wishing to fly FPV)
- 4. Academy of Model Aeronautics Safety Regulations for Model Aircraft Powered by Gas Turbines (available in .pdf format online at <u>http://www.modelaircraft.org/files/510-a.pdf</u> or through navigating the AMA web site). (required for RCACF Members wishing to fly Gas Turbine Powered Aircraft)
- 5. Academy of Model Aeronautics Unmanned Aircraft Operation Utilizing First-Person View (available in .pdf format online at <u>https://www.modelaircraft.org/system/files/documents/550.pdf</u> or through navigating the AMA web site). (required for RCACF Members wishing to fly using First-Person View)
- There are numerous other AMA documents available on their web site - <u>http://www.modelaircraft.org/documents.aspx</u>. This page should be known to all AMA & RCACF Members to ensure that they can find any of these or other AMA documents to answer questions or resolve issues.

5. Enjoying the RC Aircraft Hobby

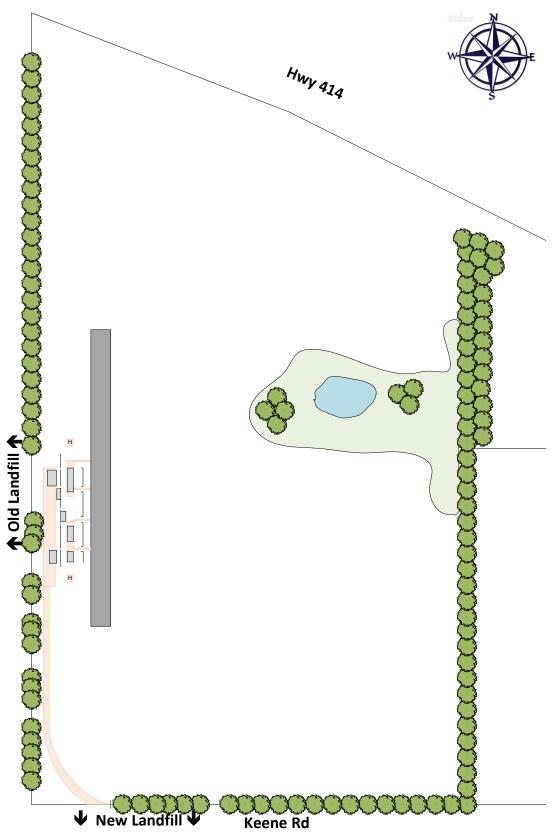
RCACF's primary purpose of being is to provide members the opportunity to enjoy the Radio Controlled Aircraft Hobby. We would all like to be able to go out to our field, setup and fly our aircraft without concern over having to follow a hundred rules and regulations. Unfortunately, with over 200 members in RCACF that ALL want to be able to have the freedom to do the same thing regardless of the type of aircraft, power source of aircraft, method of flying (line of sight or FPV), RCACF must have some rules.

Besides being able to do what you want to do with your aircraft while flying, another major part of enjoying the RC Aircraft Hobby is the ability to bring your plane home in the same condition that it was in when you took it to the field. Yes, accidents will happen even when a lone pilot is at the field flying by himself. Get 3 or more aircraft in the air simultaneously and the odds of an accident are increased exponentially. As such, RCACF must publish these rules/guidelines in order to help each member enjoy their flight experience and enjoy bringing their aircraft home safely.

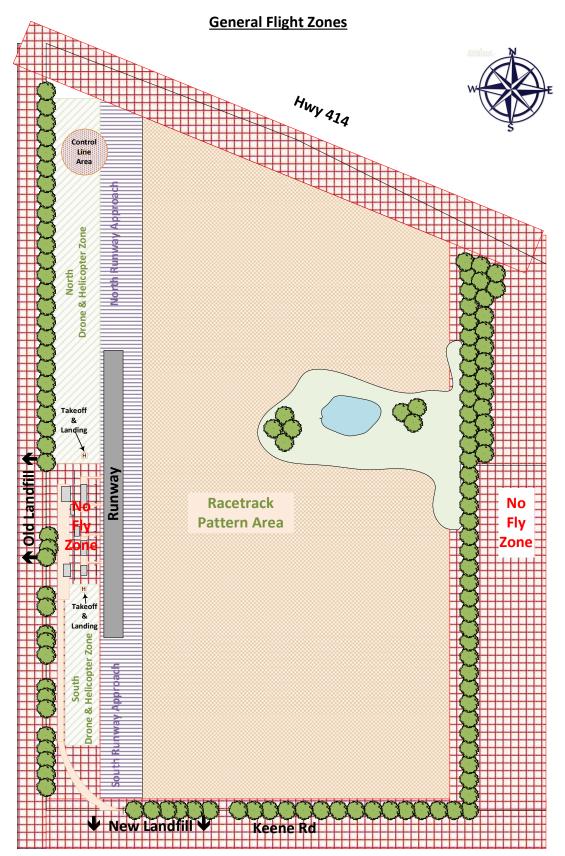
In summary, fly safely, use common sense in your flying, be courteous to those around you and bring your plane home in one piece.

RCACF Tangerine Field

The following is the general layout of Tangerine Field as seen from above.



The following is the same diagram of Tangerine Field with general Flight Zones identified.



Flight Zones

For the purpose of this document, Tangerine Field is divided into a number of Flight Zones. These are:

- 1. No Fly Zone
- 2. North & South Drone & Helicopter Zones
- 3. North & South Runway Approach Zones
- 4. Runway
- 5. Racetrack Pattern Area

1. No Fly Zone

The entire area surrounding Tangerine Field as well as the clubhouse, hangar area, parking lot and driveway makes up the area known as the No Fly Zone.

At no time should any pilot of any aircraft type intentionally fly his/her aircraft in any part of this area. Obviously "out of control" situations may occur or situations involving attempts to avoid collision with people or property may happen leading to an aircraft entering this zone but it should be avoided if possible.

2. North & South Drone & Helicopter Zones

These areas are reserved specifically for Drone and Helicopter flying. Fixed wing aircraft are not allowed to enter or cross these zones except in emergency situations.

Multi-rotor drones (FPV or Line of Sight) or helicopters are free to use these areas without concern for conflict with fixed wing aircraft. However, before attempting to overfly the runway or runway approaches, drone or helicopter pilots must verify that there is no traffic on the runway or in the approaches before announcing his/her intention to cross over the runway or approach to enter the Racetrack Pattern Area

3. North & South Runway Approach Zones

These areas are reserved specifically for fixed wing aircraft to takeoff from the runway or approach the runway for landing.

Multi-rotor drones or helicopters may cross over these areas after the pilot checks for conflicting traffic and announces his/her intention to cross over the runway or approach. Neither multi-rotor drones nor helicopters are allowed to hover in either of these zones.

<u>4. Runway</u>

The runway is reserved primarily for fixed wing aircraft to take off and land but may be used by multi-rotor drone or helicopter pilots.

After visually verifying that no aircraft are in an approach pattern and not hearing an announcement of a pending takeoff or landing, fixed wing aircraft pilots must announce their intention to "come out" before advancing their aircraft onto the runway.

Before beginning a final approach onto the runway, all fixed wing pilots must verify that no other traffic is already on or approaching the runway before announcing that he/she is "Landing".

Fixed wing aircraft pilots should announce "Taxiing" if he/she will need to taxi his/her aircraft along the runway for a significant distance before taking off or after landing.

Care must be taken when performing "Touch and Goes" to ensure that each pass down the runway will not interfere with other aircraft taking off or landing. Upon completing the Touch and Go, the pilot must return his/her aircraft back into the Racetrack Pattern Area before either resuming normal flight or setting up another "Touch and Go".

"Go Arounds" are often necessary due to missed approaches, wind changes or other circumstances beyond the pilot's control. In the event of a go around, the pilot must reenter the racetrack pattern and redo the approach at their earliest convenience.

Multi-rotor drone or helicopter pilots may use the runway for taking off and landing as long as the pilot verifies that there is no conflicting traffic on or approaching the runway and announcing his/her intention to come out to the runway.

Important Note: All pilots, regardless of aircraft type, should attempt to minimize the amount of time that he/she is blocking the runway in order to allow other pilots to use the runway.

5. Racetrack Pattern Area

The Racetrack Pattern Area is a "shared" flight zone for all types of aircraft.

While pilots have aircraft in the Racetrack Pattern Area, they should be moving generally in a racetrack pattern with the direction based on the direction of the wind at the time of takeoff or landing. Should the wind direction change between takeoff and landing, the racetrack pattern direction will need to change and aircraft in the air will need to use extreme caution in reversing their pattern to ensure that they are not conflicting with other aircraft also in the area.

Obviously other aeronautical movements are usable in this area but when not flying in the racetrack pattern, all pilots must ensure that their planned movements are not going to result in a mid-air collision or even a "near miss" while performing these other movements.

All multi-rotor drones or helicopter pilots flying their aircraft in this zone must follow the same racetrack pattern. The only exception to this is when a drone or helicopter is flying below the runway level down in "the pit" and completely below other aircraft in the racetrack pattern. Extreme care must be used by these pilots to ensure that before they reenter the racetrack pattern that it is safe to do so without rising into the path of another aircraft.

6. Control Line Area

The Control Line Area is an area reserved for flying aircraft using Control Lines, a.k.a. U-Control.

Due to the possible overlap of the Control Line Area with the North Runway Approach Zone, pilots in this area must use care to minimize the overlap and avoid interfering with aircraft approaching from the North or taking off to the North. This should not normally be a problem as the Control Line Area is physically below the ground level of the Runway but pilots in both areas need to be careful not to interfere with the other aircraft.

Fixed Wing Flight Rules

All fixed wing aircraft pilots must observe the following rules:

- 1. Fixed wing pilots must understand the rules regarding flights in each of the Tangerine Field Flight Zones.
 - a. No Fly Zone No aircraft are allowed to fly in the areas surrounding Tangerine Field in all directions nor over the club house and other buildings, parking lot or driveway to the road.
 - b. North & South Drone & Helicopter Zones No fixed wing aircraft are allowed to fly in either of the Drone or Helicopter Zones.
 - c. Runway All fixed wing aircraft must use the main runway for takeoff and landing.
 - d. North & South Runway Approach Zones These areas are primarily intended for fixed wing aircraft climb out from takeoff or on final approach to the runway. Multi-rotor drone or Helicopter pilots must announce his/her intention to cross these areas after ensuring that no other aircraft are in the process of taking off or landing.
 - Racetrack Pattern Area This area is the primary flight area for all aircraft. Aircraft flying in this area should maintain a general racetrack pattern dependent on the current wind direction. Other maneuvers may be performed in this area but extreme caution must be used to ensure that these maneuvers do not interfere with other aircraft also flying in the Racetrack Pattern Area.
- First Person View (FPV) pilots must observe the separate rules pertaining to FPV flight at Tangerine Field. See "RCACF FPV Flight Rules" for details in addition to the flight rules specific to the type of aircraft.
- 3. Prior to moving a fixed wing aircraft onto the runway, the pilot must:
 - a. Verify that no other aircraft are already on the runway or on final approach to the runway.
 - b. Announce his/her intention to move the aircraft onto the runway ("Coming Out")
 - c. As quickly as safely possible, move the aircraft onto the runway and prepare for takeoff
- 4. Prior to taking off with a fixed wing aircraft, the pilot must:
 - a. Verify that no other aircraft already in the Racetrack Pattern Area may be in conflict with their aircraft during climb out.
 - b. Announce his/her intention to take off ("Taking Off")
 - c. As quickly as safely possible, fly the aircraft off of the runway and climb out into the Racetrack Pattern Area.
- 5. While flying in the Racetrack Pattern Area the fixed wing aircraft pilot must:
 - a. Be aware of other aircraft in the same area and maintain a safe separation to avoid possible collisions
 - b. Fly whatever maneuvers that you want to while maintaining situational awareness of other aircraft around yours.
 - c. Enjoy the flight
- 6. Before entering the appropriate Runway Approach Zone, the pilot must:
 - a. Verify that no other aircraft are already on final approach or on the runway itself.
 - b. Announce his/her intention to land ("Landing")
 - c. Enter the appropriate Runway Approach Zone and land on the runway.
- 7. After landing the pilot must:

- a. As quickly as safely possible taxi off the runway to the hangar area.
- b. If the pilot must taxi the aircraft a significant distance along the runway, then he/she must announce his/her intention to taxi ("Taxiing")
- 8. All pilots must abide by all FAA, AMA and RCACF club rules to the best of his/her ability.

Multi-rotor Drone & Helicopter Flight Rules

All Multi-rotor drone and helicopter pilots must observe the following rules:

- 1. Multi-rotor drone and helicopter pilots must understand the rules regarding flights in each of the Tangerine Field Flight Zones.
 - a. No Fly Zones At NO TIME will any flights be allowed over the areas surrounding Tangerine Field in all directions nor over the club house and other buildings, parking lot or driveway to the road.
 - b. North & South Drone & Helicopter Zone These 2 zones are where helicopters and drones are free to fly at any time.
 - i. The North Free Flight Zone is bounded by:
 - 1. North the fence separating the field from State Road 414
 - 2. South the south edge of the launch / landing pad
 - 3. East the west side of the runway
 - 4. West the tree line separating RCACF from the dump
 - ii. The South Free Flight Zone is bounded by:
 - 1. North the north edge of the launch / landing pad
 - 2. South the tree line at Keen Rd or the driveway to the clubhouse from the road
 - 3. East the west side of the runway
 - 4. West the east side of the driveway leading to the clubhouse or any parked vehicles
 - c. Runway and North & South Runway Approach Zones The runway as well as the north and south extension of the runway to the limits of Tangerine Field.
 - d. Racetrack Pattern Area The area to the east of the runway, bounded by the trees on the south and east sides and the fence separating RCACF from State Road 414 on the north.
- 2. First Person View (FPV) pilots must observe the separate rules pertaining to FPV flight at Tangerine Field. See "RCACF FPV Flight Rules" for details in addition to the flight rules specific to the type of aircraft.
- Multi-rotor drones and helicopters must take off from either the north or south pad. Alternatively, if the runway is clear of all other aircraft, helicopters and drones may take off from the runway itself. Multi-rotor drones and helicopters must not take off from the flight line or hangar area nor the parking lot.
- 4. Pilots must announce their intention to:
 - a. Bringing the aircraft onto the runway for takeoff ("Coming Out")
 - b. Take off ("Taking Off") or land ("Landing")
 - c. Cross the runway or come out to the runway ("Crossing Over")
 - d. Dead stick ("Dead Stick")
- 5. The runway is for takeoff and landing only. Multi-rotor drones and helicopters may take off or land on the runway but only after verifying that no other aircraft are already on the runway or are in final approach to the runway.
- 6. North & South Runway Approach Zones the runway and its north and south extensions are primarily for fixed wing aircraft to take off and land. Before crossing the No Hover Zone, the helicopter or multirotor drone pilot must:

- a. Verify that no fixed wing aircraft are preparing for takeoff, taking off, approaching or landing
- b. Announce intent to cross the runway either inbound or outbound ("Crossing Over")
- c. Fly directly across the runway or approach extension to / from the Free Flight Zone
- 7. The North and South Free Flight Zones are for casual use by helicopter and drone pilots. If a single helicopter or drone pilot is using either Free Flight Zone then the pilot is free to maneuver at will within these zones. However, if other helicopter or done pilots are sharing these zones, then care must be taken to prevent collisions. Flight Spotters¹ for each pilot are recommended.

8. Racetrack Pattern Area –

- a. When helicopters or drones are flying in the main Racetrack Pattern Area with other pilots:
 - i. All pilots should have a Flight Spotter.
 - ii. All aircraft must fly a racetrack pattern (to be determined by wind direction at that time).
 - iii. Drones / helicopters are NOT permitted to stop and hover when flying in the Racetrack Pattern Area with other aircraft unless well below the level of the runway in "the pit".
- b. When flying in the main field east of the runway with no other aircraft in the zone:
 - i. Drones / helicopters are free to hover or maneuver at will
 - ii. If another pilot announces intent to take off, then the drone / helicopter pilot must resume normal flight patterns for this area or immediately return to one of the Drone & Helicopter Zones
- 9. All pilots must abide by all FAA, AMA and RCACF club rules to the best of his/her ability.

Gas Turbine Powered Aircraft Flight Rules

Although most Gas Turbine Powered Aircraft are fixed wing, there are helicopter models that can be powered by Gas Turbines. For the purpose of this document at this time, we will assume that these rules are intended for fixed wing aircraft.

Gas Turbine Powered Aircraft pilots must observe the following rules:

- 1. Be certified by AMA with the "Turbine Waiver" designation. A pilot without this certification is not allowed to fly a gas turbine powered aircraft at Tangerine Field.
- 2. Observe the previously detailed *Fixed Wing Flight Rules*
- 3. Must abide by all FAA and AMA rules to the best of his/her ability.

Due to the extreme high speed of these aircraft it is strongly recommended that all Gas Turbine Powered Aircraft pilots request assistance from another member to perform the function of a "spotter" for each flight.

First Person View (FPV) Flight Rules

All pilots using First Person View (FPV) technology to fly their aircraft, regardless of aircraft type, should observe the following rules.

- 1. Prepare the aircraft based on the specific type of aircraft.
- 2. Announce all intentions based on the rules for the specific aircraft type.
- All RC Pilots utilizing First-Person View technology must adhere to AMA Guidelines published in "Academy of Model Aeronautics – Unmanned Aircraft Operation Utilizing First-Person View" (Document #550). The link to this document can be found above in section 4. Follow AMA Guidelines.
- 4. Abide by all FAA (see rules regarding Unmanned Aircraft Systems at <u>https://www.faa.gov/uas</u> for specific information).

Role of a "Spotter"

When flying at RCACF, it is strongly suggested that pilots have a flight "Spotter" available to monitor your flight as well as those flights around you. The purpose of the flight spotter is to help prevent accidents that may:

- 1. Injure other pilots, members or visitors
- 2. Cause damage to your own aircraft or those of other pilots
- 3. Cause damage to club property, buildings or vehicles

At RCACF, a flight spotter:

- 1. <u>MUST</u> be an AMA member. The spotter must understand radio controlled aircraft flight and be aware of what to look for in anticipation of possible conflicts. AMA members should be capable of monitoring flights and identifying potential hazards.
- 2. On taxi and takeoff, the spotter and pilot must ensure that no other pilot is preparing to take off or land.
- 3. Should be aware of what the pilot that you are spotting for, is going to do. Sudden changes in flight direction may cause the aircraft to fly directly into the flight path of another aircraft. When utilizing a spotter, the pilot should alert the spotter to any plans to make sudden changes to flight pattern
- 4. Should be scanning the area in front of the expected flight path to identify any potential flight path conflicts
- 5. Should always be aware of the possibility that another aircraft may make a sudden change in flight path that may lead to possible flight path conflicts
- 6. Must NOT be concentrating on the pilot's own aircraft while ignoring what other planes are doing
- 7. On approach and landing, the spotter and pilot must ensure that the runway or landing pad is clear of aircraft or other obstructions