

OTOW RC FLYERS FIELD RULES

FIELD OPERATIONS

1. OTOW will unlock the main gate at 6 AM and lock it at 9 PM except for Sundays and major holidays when it will be closed at 7 PM. Flying is permitted during these hours except Sunday where only electric powered airplanes are allowed prior to 9:30 AM.
2. The pasture gate must be closed behind you after entering and leaving when retrieving airplanes from the pasture. Be cautious of possible cattle in the pasture.
3. Guest Policy: see Attachment (1) RC Flyers & RC Car Club Community Amenities - Behind the Gates

Definitions

"GUEST": Anyone not having a current Resident, Guest Services, or Gateway of Services ID Card. Guest is anyone flying either their own or someone else's aircraft or bringing an aircraft for a Club Member to fly.

"RESIDENT SPONSOR": OTOW Resident or Sales Department Representative who brings the Guest to the use the field. They will be billed by OTOW and are responsible for paying the Guest Service Fee.

"CLUB SPONSOR": A Club Member who assists the **GUEST** in filling out the Guest Log & Hold Harmless Forms, reviews Club Field Rules, assures the Guest is a current AMA member, and remains with the Guest while they use the field. They are responsible for the Guest following Club and AMA Rules. **Club Sponsor may or may not be the Resident Sponsor.**

Guest Policy Summary

- All Guests MUST be accompanied by a Club Sponsor to use the Field.
 - Club members are not required to act as either a Resident or Club Sponsor. If you are unable/unwilling to do so please assist the Guest in contacting a Club Officer or Flight Instructor for assistance.
 - Guest Log must be completely filled out. It is the Club Sponsors responsibility to see to this.
 - Guest Fee is \$2 per day. The Resident Sponsor will be billed by OTOW monthly.
 - Guest may use the Field 3 times a month.
 - Overnight Guests may use the field for the duration of their visit. Guest Log must be filled out daily. Guest Fee is waived.
 - Employees of OTOW must have written permission from the HR Department. They can use the field unlimited times each month, no Guest Fee. They must sign the Guest Log each visit, sign a Hold Harmless, and have a Club Sponsor with them.
 - Resident Sponsor must pay invoice within 30 days to avoid amenity suspension.
 - OTOW General Rules of Conduct apply to all members and guests.
4. Spectators will remain outside the pit area behind the spectator fence unless escorted into the pits by a club member who is held responsible for their guests.
 5. Smoking is discouraged entirely (but prohibited in the pit area, under the pavilion or on the flight line). TAKE YOUR BUTTS HOME if compelled to smoke.
 6. Alcoholic beverages are not allowed on site. This includes non-alcoholic beer and wine coolers.
 7. There will be **NO** turbine engine operation at the field.

FLIGHT SAFETY

1. AMA membership is required for both members and guests. All flyers must comply with AMA rules for Safe Operation of Model Aircraft.
2. The NO FLY deadline extends from the edge of the main runway east and west to infinity. Do not overfly the east end tree line and construction road. A checkered flag indicates the NO FLY east boundary.
3. The club encourages use of 2.4 GHz systems. Those continuing to use 72 MHz systems must use their AMA card, the frequency board and transmitter impound. This requirement and safe use of 72 MHz equipment will be self-policing without jeopardy to OTOW RC Flyers, Inc., or its officers.
4. Pit safety stands/starting benches (hereafter called starting benches) and ground restraints must be used for starting gas or glow powered aircraft. Electric powered planes must be armed (battery connected) at these locations whether switch or shorting equipped and then unarmed prior to the taxi gates after landing or at a starting bench. When working on electric powered aircraft *with batteries installed*, the propeller must first be removed.
5. A transmitter range check must be accomplished for any repaired, modified or new aircraft prior to the first flight. A Fail Safe check should occasionally be performed.
6. DO NOT taxi in the pit area. Walk or carry the plane directly to a taxi gate. Take offs and hand launches are initiated from the gates and flown from one of the four pilot stations. Intentions to exit onto the runway or hand launch and all landings, particularly dead sticks, must be announced by the flyer and acknowledged by other flight station pilots.
7. All flying is to be done from pilot stations. It is allowed for pilots of both gliders and powered aircraft to stand behind their plane on the main runway for a first flight or glider launch into the wind, but you must have consent of other flyers and retreat to a pilot station for the balance of the flight.
8. Flyers are encouraged to NEVER fly alone and use a spotter when multiple aircraft are in the air.

9. 3D style maneuvers or high speed low passes must be performed away from the safety fences over the center of the primary runway or beyond.
10. DO NOT fly over vehicles or flyers retrieving aircraft, whether on the field or in the pasture. Pilots ready to fly must wait until these flyers have returned to the pit area.

COURTESY

1. Do not run engines for prolonged periods in the pits like break-in or substantial tuning or engine starting adjustments. Use the west test area for this purpose. Perform brief run-up testing for gas and glo powered aircraft at the starting benches and NOT at the taxi gate where other pilots cannot hear their aircraft in flight.
2. Use the sunshade assembly tables only for aircraft assembly or minor repairs. Remove equipment such as toolboxes, fueling equipment and transmitter cases so the tables are clear for other flyers if needed. Field boxes and starters removed from starting benches must be placed out of the way to prevent a tripping hazard for the next user.
3. Be aware of the amount time you're flying. Be considerate and don't be an air hog as there may be other flyers waiting to fly.
4. Keep aircraft out of the pavilion and stage them in the pit area.

OTOW RC Flyers Multi-Rotor and Small Helicopter Field Rules

1. The Multi-Rotor field has been designed with a layout prescribed by the Academy of Model Aeronautics document entitled "FPV Multi-Rotor Club Sport Racing Recommendations" and the timing trials layout prescribed by the "MultiGP Special Interest Group (SIG)". The course perimeters are 300' long and 150' wide with the pilot line set back 50 feet from the course perimeter and the spectator line 75 feet from the course perimeter. All normal AMA and club rules pertaining to operations and spectators will be governed by these layouts. Flight is to be contained within the course, notwithstanding inadvertent excursions which require immediate correction.
2. This Multi-Rotor was developed primarily for FPV Multi-Rotor pilots with line of sight Multi-Rotor and small helicopter use on a non-interference basis. FPV Pilots flying at this site have priority on 5.8 GHz video frequencies. Any RC club member flying FPV aircraft on the main runway must determine if the Multi-Rotor field is being used. If the Multi-Rotor field is being used they must coordinate to insure they are not operating on the same frequencies.
3. All FCC Rules for FPV operations on the 5.8 GHz video band shall apply (See United States Code 47 CFR, Part 15) pertaining to system power, certification and amateur radio licensing. A minimum FCC Technician license is required for any system with transmission power exceeding 25mW. See also AMA Document entitled "System Licensing Guidance for FPV Flight".
4. FPV Multi-Rotor Racing. Racing will be conducted on a layout similar to that used by the MultiGP SIG. Quad rotors up to 250 mm frame size class and 3S LiPo batteries may be used. Larger/heavier aircraft or higher battery voltages are restricted from racing due to increased speeds and impact energy.
5. In part, FPV operations are governed by AMA Document 550, "Unmanned Aircraft Operation Utilizing First-Person View". All multi-rotor novice pilots in training must have a spotter with them at all times. Once the pilot is proficient and checked by a multi-rotor instructor, the line of sight pilot will no longer require a spotter. All FPV pilots will require a spotter. FPV racing will be conducted under the vigilance of a fully qualified flight line supervisor.
6. FPV pilots turning on video transmitters must announce their frequency and that they are turning on. When turning on they must also be 20 feet away from the flying FPV pilot's headset. If you notice any interference, turn off your transmitter immediately. Use of the frequency board can be helpful, but the best solution is to use the "racing league protocol" and choose mutually agreed frequencies prior to racing. Some Multi-Rotor frequencies cannot be changed so pilots must cooperate in selecting frequencies. Note! These frequencies do not affect the safety of the flight control motors, only the video portion, if video deteriorates, the Multi-Rotor is immediately landed (dropped).
7. Any aircraft being flown from the Multi-Rotor & Small Helicopter Field that goes down north of the track perimeter on the Main Runway flight path will NOT be retrieved until all aircraft being flown from the Main Runway have landed and cleared.
8. Once the Main Runway is cleared, your intentions must be effectively communicated prior to retrieving the aircraft from an area north of the track perimeter.
9. After all pilots have been notified of a downed aircraft on the Main Runway flight path, all pilots will refrain from staging, occupying or taking the Main Runway until such time as the downed aircraft has been retrieved and the flight path has been cleared of all personnel.
10. All new Quad and Helicopter pilots must demonstrate proficiency and be checked by a club instructor before solo Flying is permitted. See attached qualification sheet "OTOW R/C Club Student Solo Flight Check list"

OTOW Multi-Rotor Pilot Practice Instructions

1. Take Off and Land:

Main goal: Practice throttle/altitude control.

Sub goals: Control drifting using roll and pitch

Description:

1. Take off and stay at 3 to 6 feet for a few seconds, then slowly coming down to ground and land.
2. Make sure the take-off and landing is soft and gradual.
3. Don't cut your throttle too rapidly, hard landing may cause damage to your quadcopter.

2. Flying forth and back:

Goal: Practice forward flying, yaw turns, speed control, altitude control.

Description:

1. Take off and stay at about at 3 to 6 feet high.
2. Fly forward by pushing pitch stick, for maybe 60 feet. Keep your height constant at all time by adjusting throttle.
3. Start to slow down by pulling the pitch stick towards you, and come to a stop.
4. Turn around left or right using Yaw, accelerate again (pitch forward) to fly back to where you took off, slow down and turn around.
5. Repeat!
6. You can increase speed and distance as you progress. Feel free to use roll as well to level your craft while making yaw turns.

3. Square pattern turns:

Goals: Some more turn practice and making corrections to path after turns. Getting used to flying in a bigger area ...

Setup: Square of about 100 x 100 feet marked with a white ribbon or any other thing you think is right.

Description:

1. Fly along the sides of the square while trying to keep a constant altitude and pace.
2. Switch between CW and CCW direction.

4. Circle a flag while constantly facing it:

Goal: Practicing yaw, roll and throttle control combined.

Description: Circle a flag while constantly making roll, yaw and throttle adjustments to keep a constant distance from the flag and altitude.

5. Make a figure-8 around 2 poles:

Main goal: Much better coordination between both hands, you should be able to control all 4 axis better at the same time: throttle, yaw, pitch and roll.

Description:

1. It's easier to have the 2 poles further away.
2. Try to turn around as smooth as you can.
3. Fly in an 8 figure while trying to maintain constant altitude

6. Sharp turns:

Main goal: Able to make a accurate sharp turns, enables you to avoid some crashes. Sharp turns are also an effective way of braking.

Description:

1. Fly towards to the side of a pole or with some speed, and turn 180 in yaw axis in a fast manner.
2. You will need to use roll and pitch to help leveling the aircraft, and fight some of the momentum.

7. Fly through an Air Gate:

Main goal: Practice fast flying combined with fine stick control.

Setup: a long field with one air gate in the middle. Start with a big gate.

Description:

1. Starting at one end of the field, above the height of the gate, fly towards the gate and descend slowly to the height of the gate.
2. Increase altitude once you passed through the gate. Sharp turn and repeat.

July 24, 2017



RC Flyers & RC Car Club Community Amenities- Behind the Gates

Associations/Organizations/Clubs nationally

Charters

- > **3 Special Events** each year **without guest fees**

Non-resident members

- > **Private community – club member must be OTOW resident**
- > **Non-resident participation with a club member must attend with a resident at all times and pay guest fee. Visits shall not exceed more than three in one month.**
- > **Overnight guests would be permitted to attend with the member resident and fees would be waived.**
- > **All other guest must be accompanied by the club member and a fee of \$2 per day would apply.**
- > **All guests will be required to sign the guest log book & provide sponsor information**
- > **Resident sponsors will be invoiced monthly for guest use fees by On Top of the World Recreation office.**
- > **Invoices must be paid within 30 days to avoid amenity suspension**
- > **Employees of On Top of the World must have written approval from the HR Department and can only fly with a member resident. Guest fees are waived for approved employees.**
- > **General Rules of conduct apply to all members and guest and may be found at www.otowinfo.com**