

Miniature Aircraft Society of Truro

MAST RPAS Ops MANUAL (CAR Part IX)

Administrative

GENERAL This RPAS (**R**emotely **P**iloted **A**ircraft **S**ystems) Manual serves as a reference for all rules, regulation, and guidelines for members of MAST and their guests, as pertaining to George Lacey Field, or GLF, and is in addition to those rules and regulations as mandated by the CAR (Canadian Aviation **R**egulations) Part IX RPAS Requirements.

ALL RPAS pilots must have access to a copy of these rules available at the site, either electronically or in print. The club will endeavour to provide a copy at the site.

Safe operation is the responsibility of each and every participant.

MEMBERS To have full operating privilege at GLF, an individual:

- must be a current member of MAAC and comply with the MAAC Safety Code
- must be a current member of MAST
- successfully completed the MAST Wings Program, or equivalent
- hold a current RPAS Basic Pilot Certificate
- meet RPAS aircraft registration requirements
- maintain an RPAS Record Log as required by CAR Part IX
- is responsible for the airworthiness of the model he/she flies

Operation is a privilege and not a right. Any member who consistently is unsafe or exhibits unacceptable conduct, may have his/her operating privileges and/or membership in MAST revoked.

GUESTS To have operation privileges, must be sponsored by a current member of MAST, have current MAAC or equivalent and conform to all RPAS requirements. The MAST sponsor shall assist the guest in observing our rules and regulations.

STUDENT PILOT A member or guest who has yet to complete a wings program is deemed a student, and **will not fly alone or unassisted** at GLF. A MAST student:

- must be a current member of MAAC and in the process of learning the relevant MAAC Safety Codes
- must be a current member of MAST
- is following the MAST Wings Program under the guidance of an instructor or proficient pilot
- is responsible for the airworthiness of the model he/she flies
- hold a current RPAS Basic Pilot Certificate
- meet RPAS aircraft registration requirements
- maintain an RPAS Record Log as required by CAR Part IX
- has agreed that MAST or the instructor are blameless in the loss or damage of his/her model

Other pilots should appreciate the difficulties that a student pilot is undergoing, and operate so as not to intimidate or confuse the student pilot.

SPECTATORS All spectators should be made welcome. Spectators must remain 30 meters from the flight line at all times. They usually observe the signs leading to the pit area, and considering the possible dangers involved, and possible injury, MAST members present must guide spectators if they wish to enter the pit area.

Should a spectator wish to try a flight, it must be done using a buddy box, with an instructor or competent pilot in control, and normally only done once.

Normal Operating Procedures and Club Safety Rules

FLIGHT OPERATIONS

Preparedness Any required maintenance, transmitter programming, supplies, and such, should be dealt with before coming to the field. Refer to **Maintenance** on page 4.

Property GLF's layout is such that parking and spectators are behind all flight operations.

People Be aware of people in the area, such as farmers, gardeners, and hikers. Flight operations must never conflict or endanger people or property.

Planes Our airplanes are the focus of the hobby, and although miniature – are real airplanes, and are dangerous, if not properly maintained and flown in a safe manner.

GLF Flight Operation Rules In concert with or in addition to the MAAC Safety Code, the following rules and guidelines will apply.

1. The **MAAC Safety Code** must be adhered to.
2. The Above Ground Level (**AGL**) maximum is 400 feet, no exceptions.
3. A **range test** will be carried out at the start of each session.
4. A **Pre-Flight Checklist** will be carried out before taking off for each and every flight. A Post-Flight Checklist will be completed after each flight. These Checklists will be recorded as completed in the pilots RPAS Record log. Copies of the Checklists and Record Log are at the end of this manual.
5. Only **three (3) aircraft** are allowed in the air at any given time. Pilots will stand in the designated pilot spots behind the forward barrier. This may be waived for a special event, if approved by an Executive and co-ordinated, with rules or understandings in place.
6. If taking off an aircraft or launching a towed glider while **standing on the runway**, once airborne, all participants will move behind the forward barrier, and stand in the designated pilot spots.
7. If there is a possible conflict, such as a mix of helicopter and fixed wing, or someone practicing IMAC or such, with normal flying, a **spotter** must be used.
8. If test flying a new aircraft, or confidence and/or experience is low, an **assistant** should be used.
9. Always yield to **full scale aircraft** by: reducing altitude, changing area, and landing as soon as possible.
10. If more than one aircraft flying, always **announce your intentions**, such as “*on the field*”, “*taking off from the left*”, “*landing from the right*”, “*low pass*”, “*dead stick*”, etc.
11. **Respect other pilots** by adhering to circuit.
12. **Transmitters** that are not 2.4 GHZ spread spectrum, will use the **frequency impound** and channel strip, and will be responsible to ensure that they or others not on 2.4 GHZ, will not conflict.
13. It is **strongly suggested** that if you fly alone – you should have a cell phone with you.

Unsafe or Unacceptable Conduct If a member observes unsafe operation, or unacceptable conduct, and an amicable approach has been tried, without change, the offender should be reported to a member of the Executive.

1. Model assembly should be done in the designated pit area or under the sunshade.
2. Batteries shall not be connected to electric models unless the model is restrained in the start-up area – **no exceptions**.
3. Gas/glow/turbine models must be restrained and started in the start-up stands or similar, located in the start-up area. Do not conduct prolonged tuning if other pilots are flying.
4. The direction of take-off landing, and traffic pattern will be determined by the prevailing winds. If no wind, all take-offs etc. shall be east or west but away from the sun.
5. Hand launching and bungee launching shall be done in agreement with any pilots flying – normally off to one side of the pilot stations.
6. Our flying area as measured from the center of the pilot stations is a box left, right and straight out. Refer to the site flying area map for no-fly zone depictions :
7. Recovery of RPA that land/crash off the runway but in the flying area will be done in agreement with any pilots flying.
8. A fire extinguisher must be present for all powered RPA operation.

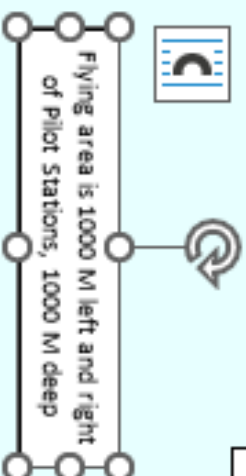
9. If there is an accident requiring emergency services, cellular service is adequate to call 911. The civic address is 253 Marshland Drive, Truro N.S.
10. Pilots may fly in formation provided they agree to do so.

MAST operates within 3nm of an aerodrome as listed in the CFS or CWAS and is required to provide all members with the following information:

- a. The aerodrome name is Truro (Colchester Health Center (CEH9 CERT HELO) and it is located 1.78 nautical miles SSW of our modelling site.
 - b. The aerodrome is a Heliport for medical life flight landings.
 - c. There are no CFS RPA procedures and no other CFS PRO comments that affect our modelling site. The CFS listed arrival and departure paths do not normally go near our site.
 - d. In the event of a “fly-away” towards SSW, you may call the aerodrome operator at **1-800-743-1334** and advise them of the issue. Our site is in uncontrolled airspace so there is no need to notify ATC.
11. MAST club members should check for related NOTAM either using the [NAV CANADA NOTAM](#) portal or using RPAS Wilco app or similar. If you are the first pilot of the day and have printed a RPAS Wilco site survey, please leave it at the site for fellow modelers to reference.
12. The (OPR) of Truro Heliport have expressed no issues with our RPAS site. George Lacey Field
13. No flying will commence until half an hour after sunrise and will end a half hour before sunset, the time of which is available on the Weather Network App for the town of Truro. No night flying is allowed at MAST Club unless your RPA is brightly lit.
14. Visual observers and MAAC “spotters” are optional at our site. The following are club procedures for ensuring full scale aviation safety:
 - a. When any member or other person spots a full-scale airplane that might come near the site, they are to yell out “AIRPLANE” in a loud voice or use the airhorn in the club house or ring the bell.
 - b. ALL Pilots **must** immediately descend to as low an altitude as possible and then land as soon as safely able.
 - c. When the full-scale airplane is no longer a threat, the person who gave the warning shall yell “ALL CLEAR”, or the pilots may make that determination themselves, and resume flying.
15. If there is any type of near miss or safety concern between a full-scale aircraft and our RPA, **ALL FLYING** SHALL cease immediately. The members involved should fill out a MAAC reportable occurrence report and submit that to the Club executive and follow MAAC policy with the following exceptions:
 - a. If the member(s) involved believe the risk was very minimal, they may complete their own self declaration or risk assessment using the MAAC form. Submit a copy of the form to the club executive when able and recall you must keep this form for one year (CAR901.49 (2)). Resume flying when done.
 - b. If the member or Club executive deems the event serious, flying will not resume until members are given permission by the Club executive – in writing.
 - c. If there is actual contact between an aircraft and a MAAC RPAS – all flying will cease until MAAC confirms we may resume operations
 - d. This process is for **your** protection.

16. No RPA or other model aircraft flying will occur below the Club mandated weather minimum:
 - a. If cloud is present below 1000' above the model flying area
 - b. a horizontal visibility requirement of less than 3sm around the flying area, and
 - c. if there are other obscuring conditions (fog, smoke, haze etc.) which could make spotting full-scale aircraft difficult.
 - d. If you can see traffic on Highway 102 (West of field), flying is normally permitted.
17. There are no other risk mitigating strategies required at MAST Club.
18. The Club executive will review these rules at least once a year.
19. When visual observers are required, the club rules are as follows:
 - a. The sole role is to scan the sky for approaching full-scale aircraft – do not watch the RPA. Pay particular attention to the south area behind the pilot stations, for any air traffic transiting or approaching from that direction. c.)
 - b. The visual observer should stand or sit at the start-up stand closest to any pilots flying, but away from the start-up stand(s) in use. Be close enough so they can hear you.
 - c. When spotting a potential conflict – yell AIRPLANE in a clear loud voice.
 - d. When you believe the airplane is no longer a problem yell – ALL CLEAR.
 - e. Whenever a visual observer is required, all other club members present must keep unnecessary ambient noise to a minimum. NO run-ups on adjacent start up stands.

Miniature Aircraft Society of Truro
George Lacey Field
45°22'40.31"N 63°17'37.65"W
253 Marshland Drive



Truro Heliport is
1.75 NM SSW



Pilot Station Coordinates
45 20' 40" N 63 17' 38" W

RUNWAY

Pilot Stations

Pit Area

Gate



Common Roadway

Parking

Debert Airport
CQO3
Is 7.5 NM WNW



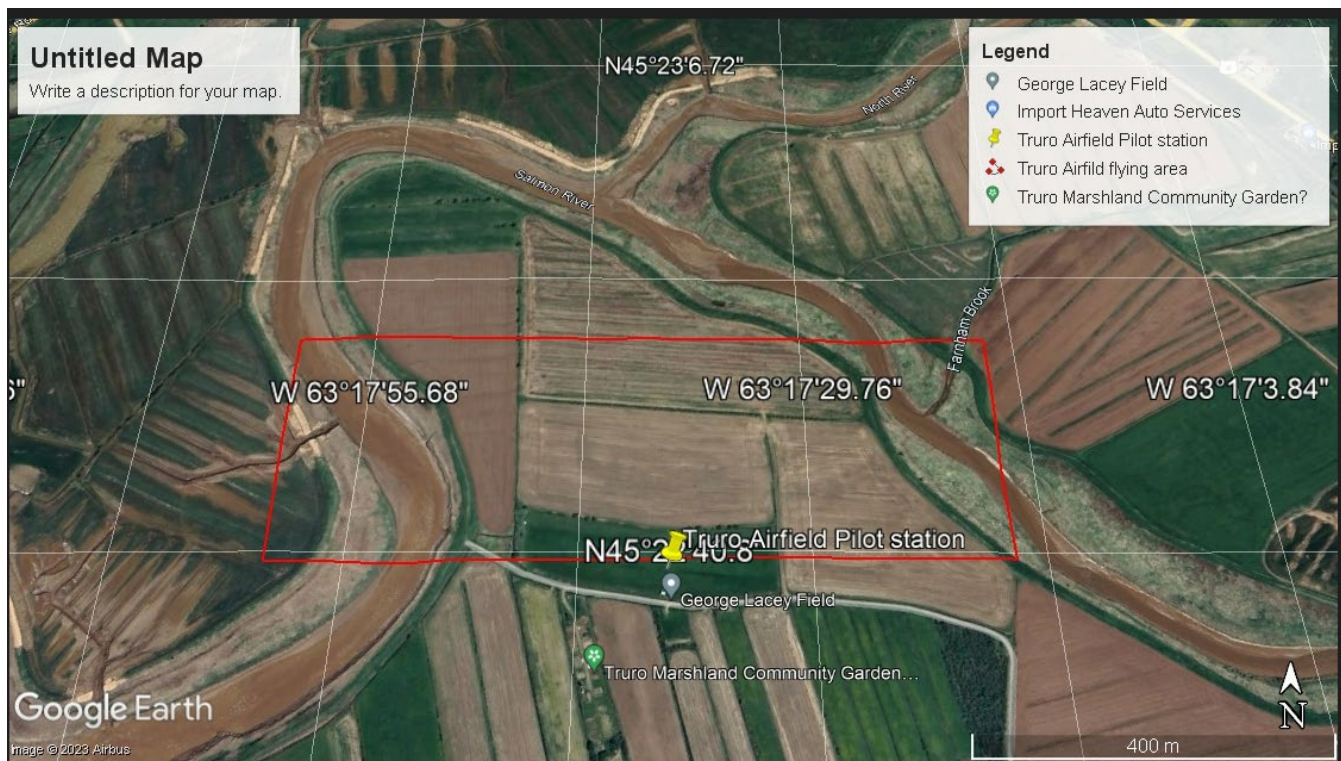
NO FLYING
behind the
FLIGHT LINE

Farmer's Road



FLY ZONE

FLIGHT LINE



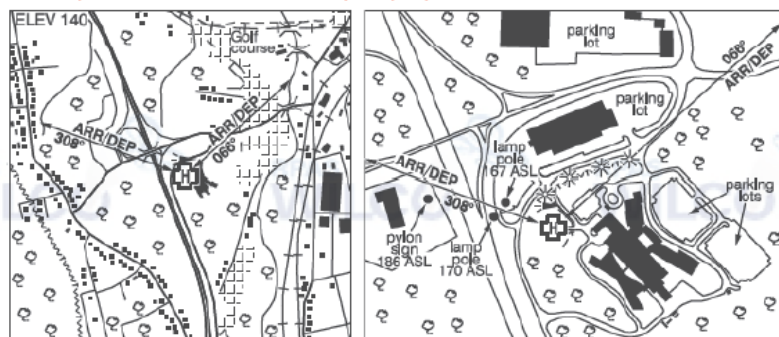
CANADA FLIGHT SUPPLEMENT / GPH 205 Effective 09012 29 December 2022 to 09012 23 February 2023

NOVA SCOTIA

AERODROME / FACILITY DIRECTORY

TRURO (COLCHESTER HEALTH CENTRE) NS (Hel)

CEH9



REF	N45 20 59 W63 18 20 1.3WSW 18°W (2013) UTC-4(3) Elev 140' A5003
OPR	Colchester East Hants Health Centre 902-893-4321; O/T 902-893-5554 ext 42222 Cert PPR
PF	A-1,4 C-2,3,5,6
FLT PLN	
FIC	London 866-WXBRIEF (Toll free within Canada) or 866-541-4104 (Toll free within Canada & USA)
ACC	(IFR only) Moncton 506-667-7177 or 866-480-8200
HELI DATA	FATO/TLOF 79' dia ASPH Safety Area 105' Max heli overall length 52.49'
RCR	Opr
LIGHTING	RW(LO) green
COMM	
ATF	ttc 123.0 5NM 2900 ASL
PRO	Arr/dep 066° fr heli, Slope 12% (H2). Arr/dep 308° fr heli (H1).
CAUTION	Heli lies within CYR747 PPR Opr. P-Line N to NE of pad ball marked and lit (portion of P-Line btwn the lit power poles under 308° arr/dep path is buried). Power and lamp poles E of pad marked and lit. Civic centre NE of pad marked with obst lights. Roadway (hosp entry drive) E of heli. Sloped hillside NW of pad. Treed area on embankment, to aprx 65' abv pad elev W of hosp aprx 120' S of pad.

VFR CIRCUIT PROCEDURES AT UNCONTROLLED AERODROMES

Communications Requirements

Information can be exchanged with a flight service station (FSS), community aerodrome radio station (CARS), universal communications (UNICOM), or vehicle operators by directed transmissions, or with other aircraft by broadcast transmissions. See the *Transport Canada Aeronautical Information Manual* (TC AIM) RAC 4.5 for the current requirements.

It is essential that pilots be aware of other traffic and exchange information when approaching or departing an uncontrolled aerodrome, since some aircraft may be receiver only (RONLY) or no radio (NORDO).

Standard Left-Hand Pattern

Before arriving at an uncontrolled aerodrome, plan your approach to the circuit.

If it is necessary to cross over the aerodrome prior to joining the circuit, or after departure, it is recommended that the crossover be made at least 500 ft above the circuit altitude.

Where designated, a mandatory frequency (MF) or aerodrome traffic frequency (ATF) area is normally a circle with a 5-NM radius, capped at 3 000 ft above aerodrome elevation (AAE). All radio-equipped aircraft must monitor a common designated frequency.

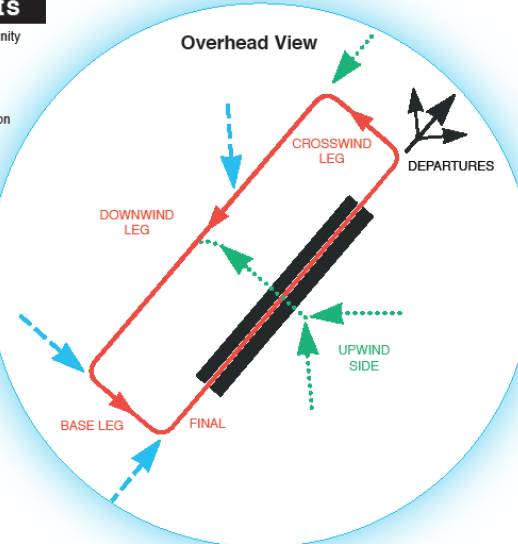
At aerodromes that have published instrument approaches, the MF area may be expanded to include the approach area. See the *Canada Flight Supplement* (CFS) for current information.

Transiting Aircraft

Overflying Aerodromes (See TC AIM RAC 5.5)

Transiting aircraft shall not operate at a height of less than 2 000 ft above an aerodrome.
[Canadian Aviation Regulation (CAR) 602.96(4)]

At aerodromes where MF procedures are in effect, aircraft may also join the circuit from the flight paths indicated in blue.



MF/ATF Communication Procedures (see TC AIM 4.5.7)

Note: If your aircraft is radio-equipped, it is recommended that the same calls be made at non-MF aerodromes.

Arrival: (CAR 602.101)

- Report position, altitude, arrival procedure intentions and estimated time of landing (ETL) at least 5 min prior to entering the area.
- Maintain a listening watch on the designated frequency.
- Report when joining the circuit, giving position in the pattern.
- Report when on the downwind leg, if applicable.
- Report when established on final.
- Report when clear of the active runway after landing.

Operations on manoeuvring area: (CAR 602.99)

- Report intentions and maintain listening watch prior to entering the manoeuvring area.

Departure: (CAR 602.100)

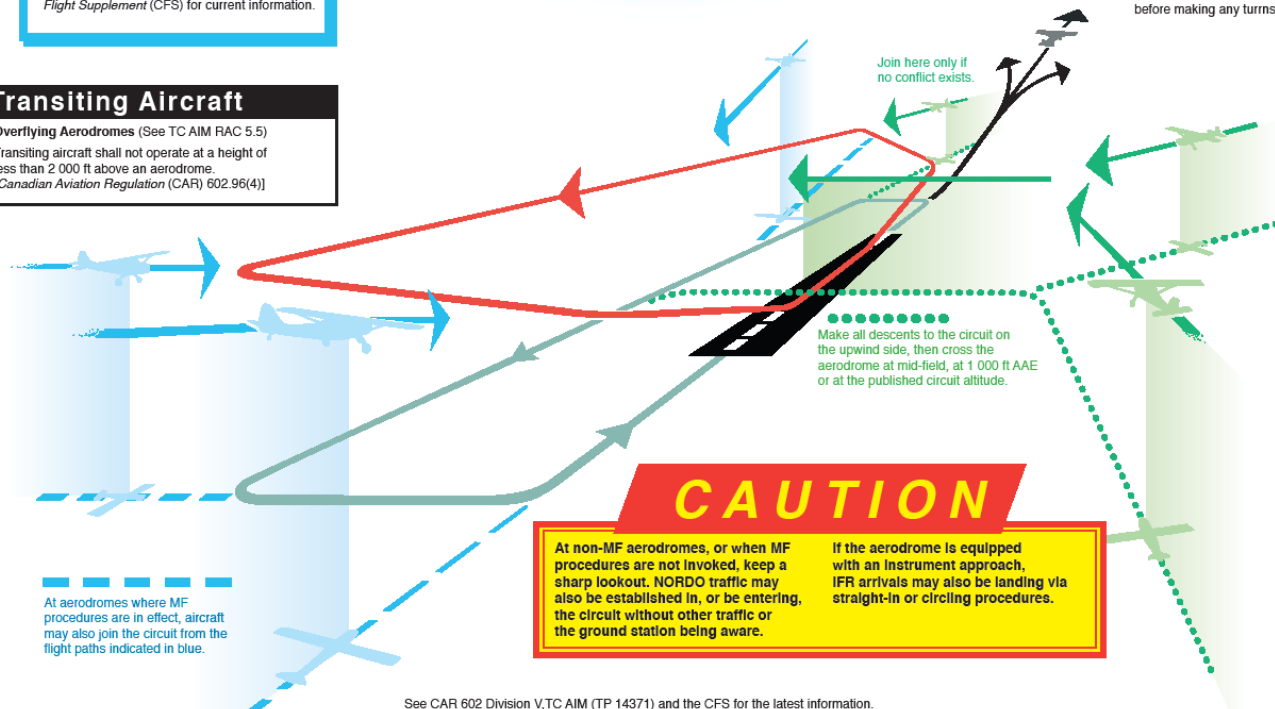
- Report intentions before moving onto take-off surface.
- Ascertain by radio and by visual observation that no conflict is likely during takeoff.
- Report departure from aerodrome traffic circuit.
- Monitor the designated frequency until well clear of the MF/ATF area.

Circuits: (CAR 602.102)

- Report when entering the downwind leg.
- Report, with intentions, when established on final.
- Report when clear of the active runway after the final landing.

DEPARTURES

Climb to circuit altitude before making any turns.



CAUTION

At non-MF aerodromes, or when MF procedures are not invoked, keep a sharp lookout. NORDO traffic may also be established in, or be entering, the circuit without other traffic or the ground station being aware.

If the aerodrome is equipped with an instrument approach, IFR arrivals may also be landing via straight-in or circling procedures.

See CAR 602 Division V, TC AIM (TP 14371) and the CFS for the latest information.

MAINTENANCE

Crashes are almost 100% pilot error and are a result of either losing control while flying, or lack of maintenance.

Airworthiness, or a properly maintained aircraft, is very important, not only for your investment but also the safety of yourself and others. Refer to the extensive Airworthiness Checklist on page 6.

Ensuring your aircraft is properly maintained begins before going to the field, while at the field, and returning home after a session.

New Aircraft Maintenance starts with a new aircraft in which everything is checked **before** the test flight, then, if required, corrections are made to both the aircraft and the transmitter after the test flight. The aircraft is test flown again to ensure that the adjustments are correct. This process is repeated until the aircraft is deemed airworthy, or taken home for extensive repairs or adjustments, and then test flown another day.

Before or After Most maintenance is done at home, where you have the space, materials, tools, and are not rushed. All maintenance is to be recorded on the RPAS Record Log

During Some minor maintenance can be done at the field during a flight session.

Another aspect of maintenance is having all the necessary supplies, tools, and so forth, “topped up” before leaving home or after returning home.

PRE-FLIGHT CHECK

When arriving at the field, and before the first flight, a range test must be carried out with the motor or engine not running, and the aircraft restrained. **Never fly if the range test fails.** Then check that nothing is loose including all control surfaces.

Before taking off for each and every flight, always carry out the Pre-Flight checklist and then with the motor or engine running, and the aircraft restrained ensure;

- No vibration or unusual noise
- ☐ Control surfaces move in the correct direction and correct amount of movement – always done while **BEHIND** the aircraft
- ☐ Act on premonition – if you think something is wrong then likely it is

Carry the airplane out to the edge of the runway. **Never taxi within the pit area.**

TAKE-OFF CHECKLIST

Never rush a take-off. Always carry out this checklist, and bear in mind that take-offs are optional while landings are mandatory.

- Determine wind direction – you will take off into the wind
- Is the runway clear?
- If anyone else flying, are they preparing to land?
- If clear, announce that you are taxing either to the left or right
- Taxi out and point aircraft into the wind
- Always pause at this point
- Announce your take-off direction – left or right
- Throttle up and start the take-off roll, rotate, then climb out at a safe angle, then turn so as not to overfly the **NO-FLY** zone.

LANDING CHECKLIST

With the exception of a “dead stick” situation – never rush a landing. Use the following checklist.

- Check the wind direction – and normally land into the wind
- Check whether anyone is on the field or have announced that they are landing
- Announce your landing direction – left or right
- Enter your intended landing pattern – if approach is not favorable then slowly throttle up, gain altitude, announce that you have aborted, and then repeat the landing checklist again
- Reduce throttle, flair, touch down
- If you have to retrieve your airplane out on the runway – check that all is clear and announce that you are “on the runway”
- Taxi back to the flight line and cut your engine
- Announce that the runway is clear

Dead Stick A dead stick situation has priority over all other flight operations.

- Announce “dead stick”
- **Never use up elevator**
- If on the final, then complete the landing
- If sufficient altitude and speed, then use some down elevator to lower the nose and maintain speed, and make a turn to land in the vicinity of the field
- If not sufficient altitude or speed, then use some down elevator to point the nose down, make only a minor turn, if necessary, then flair if possible close to the ground and hope for the best

Touch and Go Use the Landing Checklist and announce “touch and go” and direction rather than “landing”.

Airworthiness Checklist

Pilots are responsible for the airworthiness of the model aircraft they fly. This checklist should be used for all new, major repairs, or rebuilt models. Relevant sections may be used as a checklist when a model is suspect and/or undergone repairs.

General

- ☐ The center of gravity, or CG, with fuel tank empty, or battery in place but not connected for electric, should be in accordance with the manufacturer or designer.

The CG will never exceed 35%, nor be "tail heavy". A CG that is slightly "nose heavy" is preferable for initial flight testing.

- ☐ Lateral balance the a/c so that one side is not obviously heavier than the other side

Fuselage

- ☐ No evidence of cracks or fracture
- ☐ Adequately covered
- ☐ Fuel proofed (n/a if electric or glider)
- ☐ Stabilizers, such as horizontal stab, vertical stab, canards, etc, are adequately fastened to the fuselage
- ☐ All control surface hardware, i.e., hinges, horns, clevis, etc., are serviceable with no excessive play or unwanted wear
- ☐ No visible warps or incorrect angles
- ☐ Wing dowel mating hole and threaded wing bolt blocks are serviceable, or if rubber band, the fuselage dowels are correctly fastened and serviceable

Wing(s)

- ☐ No indication of spar or rib fractures
- ☐ Adequately covered
- ☐ Ailerons (and flaps) correctly hinged
- ☐ Control linkage secure and no excessive "play" or unwanted "wear"
- ☐ Each aileron moves in the opposite direction
- ☐ If aileron differential is used, the up distance will be greater than the down distance
- ☐ Flaps, if installed, both move in the same direction and distance
- ☐ All control surface hardware, i.e., hinges, horns, clevis, etc., are serviceable
- ☐ Wing dowel(s) and wing mounting bolt hole(s) correct. or if rubber band mounted, there is no crushing of the wing surfaces

Landing Gear

- ☐ Landing gear adequately mounted
- ☐ Nose or tail gear, if controllable, turn in the correct direction
- ☐ If gear is retractable, there are no restrictions of movement
- ☐ Wheels are both serviceable, adequately fastened and move freely never "toe out"

- ☐ Main gear will preferably have "toe in"

Engine

- ☐ Firewall adequate
- ☐ Engine mounting secure
- ☐ Muffler secure
- ☐ Throttle arm movement is correct and ensures that the engine can be "killed" from the transmitter
- ☐ Fuel tank secure
- ☐ Fuel & pressure lines serviceable
- ☐ Fuel system is free of leaks

Electric Motor

- ☐ Motor mounting secure
- ☐ Adequate ventilation

Propeller

- ☐ Prop tips distinctively painted
- ☐ Prop balanced before installing
- ☐ Prop (and spinner) on tightly
- ☐ Prop free of nicks or cracks

R/C System

- ☐ Both the transmitter and receiver meet or exceed current standards
- ☐ The system operating frequency is on an approved channel if not spread spectrum 2.4 Ghz
- ☐ No known faults in any of the radio system components
- ☐ Both transmitter and receiver batteries have adequate current storage capacity, and if ESC with BEC, sufficient current capabilities for the entire system
- ☐ Transmitter is correctly set up and/or programmed
- ☐ Receiver battery correctly padded if not electric, and adequately held in place
- ☐ The OFF/ON switch is firmly mounted and accessible
- ☐ Receiver adequately padded against shock and vibration, and adequately held in place
- ☐ Receiver antenna avoids close proximity to servos, servo arms, and metal control rods
- ☐ Servos are firmly mounted
- ☐ Servo and battery leads are restrained so as not to interfere with servo control arms or control rods
- ☐ Servo arms do not conflict with any other movable or fixed objects
- ☐ Control rods or mechanisms do not interfere with each other
- ☐ If push rods are used, there is no undue flexing

Pre-Flight Checklist

Pilots are responsible for the airworthiness of the model aircraft they fly. This checklist must be used prior to any flight and the results recorded in the RPAS Record Log.

General

- ☐ The center of gravity, or CG, with fuel tank empty or battery in place but not connected for electric, should be in accordance with the manufacturer or designer. The CG will never exceed 35%, nor be "tail heavy". A CG that is slightly "nose heavy" is preferable for initial flight testing.
- ☐ Lateral balance the a/c so that one side is not obviously heavier than the other side
- ☐ Complete Site Survey

Fuselage

- ☐ No evidence of cracks or fracture
- ☐ Adequately covered
- ☐ Fuel proofed (n/a if electric or glider)
- ☐ Stabilizers, such as horizontal stab, vertical stab, canards, etc, are adequately fastened to the fuselage
- ☐ All control surface hardware, i.e., hinges, horns, clevis, etc., are serviceable with no excessive play or unwanted wear
- ☐ No visible warps or incorrect angles
- ☐ Wing dowel mating hole and threaded wing bolt blocks are serviceable, or if rubber band, the fuselage dowels are correctly fastened and serviceable

Wing(s)

- ☐ No indication of spar or rib fractures
- ☐ Adequately covered
- ☐ Ailerons (and flaps) correctly hinged
- ☐ Control linkage secure and no excessive "play" or unwanted "wear"
- ☐ Each aileron moves in the opposite direction
- ☐ If aileron differential is used, the up distance will be greater than the down distance
- ☐ Flaps, if installed, both move in the same direction and distance
- ☐ All control surface hardware, i.e., hinges, horns, clevis, etc., are serviceable
- ☐ Wing dowel(s) and wing mounting bolt hole(s) correct. or if rubber band mounted, there is no crushing of the wing surfaces

Landing Gear

- ☐ Landing gear adequately mounted
- ☐ Nose or tail gear, if controllable, turn in the correct direction
- ☐ If gear is retractable, there are no restrictions of movement
- ☐ Wheels are both serviceable, adequately fastened and move freely
- ☐ Main gear will preferably have "toe in" and never "toe out"

Engine

- ☐ Firewall adequate
- ☐ Engine mounting secure
- ☐ Muffler secure
- ☐ Throttle arm movement is correct and ensures that the engine can be "killed" from the transmitter
- ☐ Fuel tank secure
- ☐ Fuel & pressure lines serviceable
- ☐ Fuel system is free of leaks

Electric Motor

- ☐ Motor mounting secure
- ☐ Adequate ventilation

Propeller

- ☐ Prop tips distinctively painted
- ☐ Prop balanced before installing
- ☐ Prop (and spinner) on tightly
- ☐ Prop free of nicks or cracks

R/C System

- ☐ Both the transmitter and receiver meet or exceed current standards
- ☐ The system operating frequency is on an approved channel if not spread spectrum 2.4 Ghz
- ☐ No known faults in any of the radio system components
- ☐ Both transmitter and receiver batteries have adequate current storage capacity, and if ESC with BEC, sufficient current capabilities for the entire system
- ☐ Transmitter is correctly set up and/or programmed
- ☐ Receiver battery correctly padded if not electric, and adequately held in place
- ☐ The OFF/ON switch is firmly mounted and accessible
- ☐ Receiver adequately padded against shock and vibration, and adequately held in place
- ☐ Receiver antenna avoids close proximity to servos, servo arms, and metal control rods
- ☐ Servos are firmly mounted
- ☐ Servo and battery leads are restrained so as not to interfere with servo control arms or control rods
- ☐ Servo arms do not conflict with any other movable or fixed objects
- ☐ Control rods or mechanisms do not interfere with each other
- ☐ If push rods are used, there is no undue flexing

Post-Flight Checklist

Pilots are responsible for the airworthiness of the model aircraft they fly. This checklist must be used after any flight and the results recorded in the RPAS Record Log.

Fuselage

- ☐ No evidence of cracks or fracture
- ☐ Adequately covered
- ☐ Fuel proofed (n/a if electric or glider)
- ☐ Stabilizers, such as horizontal stab, vertical stab, canards, etc, are adequately fastened to the fuselage
- ☐ All control surface hardware, i.e., hinges, horns, clevis, etc., are serviceable with no excessive play or unwanted wear
- ☐ No visible warps or incorrect angles
- ☐ Wing dowel mating hole and threaded wing bolt blocks are serviceable, or if rubber band, the fuselage dowels are correctly fastened and serviceable

Wing(s)

- ☐ No indication of spar or rib fractures
- ☐ Adequately covered
- ☐ Ailerons (and flaps) correctly hinged
- ☐ Control linkage secure and no excessive "play" or unwanted "wear"
- ☐ All control surface hardware, i.e., hinges, horns, clevis, etc., are serviceable
- ☐ Wing dowel(s) and wing mounting bolt hole(s) correct. or if rubber band mounted, there is no crushing of the wing surfaces

Landing Gear

- ☐ Landing gear adequately mounted
- ☐ If gear is retractable, there are no restrictions of movement
- ☐ Wheels are both serviceable, adequately fastened and move freely
- ☐ Main gear will preferably have "toe in" and never "toe out"

Engine

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- ☐ Engine mounting secure
- ☐ Muffler secure
- ☐ Fuel tank secure
- ☐ Fuel & pressure lines serviceable
- ☐ Fuel system is free of leaks

Electric Motor

- ☐ Motor mounting secure

Propeller

- ☐ Prop (and spinner) on tightly
- ☐ Prop free of nicks or cracks

R/C System

- ☐ No known faults in any of the radio system components
- ☐ The OFF/ON switch is firmly mounted and accessible
- ☐ Receiver adequately padded against shock and
- ☐ Servos are firmly mounted
- ☐ Servo and battery leads are restrained so as not to interfere with servo control arms or control rods
- ☐ Control rods or mechanisms do not interfere with each other
- ☐ If push rods are used, ensure there is no undue flexing

Owner _____ ***RPA and Transmitter Flight/Maintenance Log*** PC _____

Date	Pilot	Total flight time of each flight or series	RPA Registration #	Transmitter Make and Serial # TX #1 - TX #2 - TX #3 -	Spotter	<u>Maintenance or Repairs (RPA or Transmitter)</u> Describe, who, what parts, instructions, part numbers, or comments