New Pilot Check-List

Somerset RC

Student Pilot: _____
AMA #: _____
Primary Instructor: _____
Contact Information: _____

Somerset RC Flight Training Program
(Student Packet)

Waiver of Liability

Student's Name _____ AMA Number _____

Somerset Park Permit #: _____

Address _____ Phone Number (____) _____

_____ email: _____

The above named individual hereby understands that the Somerset RC assumes no liability or responsibility in regards to the material herein, or any resulting action thereof. All information was compiled in good faith from printed materials, past experience and general knowledge of the model aviation hobby.

Safety, safe practices and procedures, have been emphasized throughout this manual. Participants are expected to comply with these guidelines at all times as a member of the Somerset RC.

The Somerset RC flight training program is provided free of charge, by experienced model aircraft pilots who volunteer their time. There are no guarantees as to results. Participants must exercise their own good judgment and common sense in determining their abilities and limitations. The Somerset RC club assumes no liability or responsibility for any action taken, past, present, or future, by any participant in this program.

Participants further attest they are members in good standing with the Academy of Model Aeronautics (AMA) and that they posses a current Somerset County Park Radio Controlled Flying Permit. Should the possibility of conflict exist with club procedures, guidelines, etc. and AMA rules, AMA rules will take precedence.

If you do not find these terms agreeable to your situation, we suggest that you not participate in the program.

Previous model aircraft flying experience:

__ I have never flown a model aircraft before
__ I have a few flights before with an experienced instructor. When:_____ Where: _____
__ I have flown several times before, but have not soloed. When:_____ Where: _____
__ I am an experienced flyer

_____ _____
(Student's Signature) (Date)

This form needs to be signed and turned into your instructor at the first lesson.

Questionnaire for new pilots

Please circle "Y" or "N" where appropriate.

Student Pilot Name: _____

Phone # ( ) _____ email:_____ Date:_____

Why do you want to fly R/C?

Have you ever flown an R/C airplane before? Y / N. If yes please explain.

Have you flown an R/C simulator like Phoenix RC or Real Flight? Y / N

Do you own an R/C trainer aircraft Y / N. If yes what model, engine/motor and radio.

Days and time available:

Instructor assigned:

New Pilot
Pre-Flight Checklist (walk around)

Flying Credentials

Current AMA Member (must be in possession of AMA card while at field)
Current Somerset Park Permit (must be in possession of Permit while at field)

Fixed-Wing Requirements for "P"

The Somerset County Park Commission and the Somerset RC R/C Club have established the following criteria for fixed wing aircraft.

Trainees must be able to perform the following maneuvers unaided and without the assistance of a Buddy Box in the presence of a certified Check Pilot:

- Perform engine startup and appropriate equipment checks.
- Taxi to runway and perform normal takeoff.
- Perform two (2) rectangular patterns from a left to right and right to left direction within the field boundaries.
- Perform three (3) horizontal figure eights while maintaining altitude.
- Perform normal landing approaches from both a left and right direction.
- Perform a normal landing based on wind conditions.
- Taxi back to flight station.

Trainees will be allowed two (2) attempts per day to fulfill the above requirements in obtaining their Pilots status. Those failing are encouraged to practice with a qualified flight instructor and to reschedule their next attempt for another day.

Overnight

Transmitter (Tx) battery charged
Flight/Receiver battery fully charged
Glow initiator charged
Flight box battery charged

Airplane in good flight condition

Aircraft correctly balanced laterally and CG
Control surfaces are clean (ailerons, elevators, rudder)
Clevices are secured to rods/horns and are non-binding (sticking)
Battery and receiver correctly installed and securely wrapped in foam
Wheels turn freely without sticking.
Under-carriage is in proper alignment and tightly fitting
Wheel collars are tight and secure
No tears or rips on surfaces
Propeller is balanced, clean, tightly fitted and has no nicks or cracks

Propeller is appropriate size for installed engine
Spinner is on tightly
Transmitter and receiver have been "bound" and communicate
All servos operate as required; no binding, chattering or buzzing. Arms are screwed down
All "internals" are secured
Wings are tightly secured to fuselage

Power System

Glow:

Engine is not loose
Fuel tubes have no pin-holes
Fuel tubes fit tightly on carb/filter, and muffler
Prop is fitted with compression stroke at approx 2pm position
Flight battery is charged
Switch operates without sticking
Failsafe programmed and enabled

Electric:

Motor is not loose
Wire insulation is not stripped
Battery is fully charged and appropriate for type of aircraft
Failsafe programmed and enabled

Frequency Protocol

72MHz systems require appropriate frequency pin to be attached to transmitter
When not in use, 72MHz enabled transmitter must be placed in "holding station"
2.4GHz transmitters can remain at pit area

Transmitter Settings

Throttle stick is at 6 o'clock and idle trim is at low setting (verify carb opening)
Switch transmitter (Tx) to on
Verify battery level
Verify Throttle Cut is enabled (glow engines)
Verify correct model is displayed and surfaces move in correct orientation
Verify Trainer switch works and initiates (assumes Buddy Box scenario)
Verify antenna is fully deployed (FM systems)
Assure neck strap/lanyard will not impede movement of sticks or switches

Aircraft Energized (battery installed and aircraft switched on)

Verify control surfaces operate as required (ailerons, throttle, elevator, rudder)
Perform Range Check
Make any necessary trim adjustments (aileron, elevator, rudder)

Start-up Procedure

Glow: (assumes engine has been broken-in and initially tuned for high and low settings)

Assure aircraft is properly secured (tail hook or buddy legs)
Remove tube from exhaust/muffler nipple
Remove tube from carb/filter nipple

Fuel aircraft to max capacity
Assure fuel has reached carb (open throttle, cover venturi and spin prop 1-2 revolutions)
With Transmitter, verify throttle is at idle setting (eye-ball the carb)
Apply glow igniter
Start engine using either Electric starter, chicken stick or heavy glove
Once started and idling, remove igniter by accessing from behind prop arc
Fully power aircraft and carefully adjust high-speed setting
Once optimal RPM has been achieved, throttle to idle
Apply appropriate trim for idle and stall
Test for lean/rich by pinching tube, elevating aircraft to vertical

Electric:

Verify throttle works by applying some power to aircraft

Take-off Process

Understand wind direction and speed and how it affects take-off performance
Assure path to flight-line is clear
Re-verify all flight surfaces move in correct orientations
Slowly walk your aircraft to flight-line and stand at "pilot monument"
Check wind direction and speed (look at wind-sock and vane)
Familiarize yourself with current pilots and where their aircraft are
Runway starts 25' from pilot stations
Announce loudly and clearly your intention to take-off and direction of travel
(e.g. "Taking off, left to right")
Verify no other pilots are in your path (air or ground), or in conflict with your intentions
Taxi to runway by employing rudder
Verify wind and direction, apply full power, steer with rudder, apply up elevator
Maintain approx 30 degree angle of attack

Flight

Once in air, smoothly turn away from pit area
Pull back on power
Adhere and respect flight pattern. Left to right / counter clock-wise (unless opposing wind exists)
Listen for any pattern changes
Focus on your aircraft; listen to nearby pilots
Acrobatics, 3D maneuvers and "testing" to be done along mid-to far portion of flight area.
Stay within park boundaries

Landing

Wind direction dictates approach
Announce well in advance, loudly and clearly, intention and direction; e.g. "Landing, right-left"
Apply appropriate power management for a smooth transition to descent (takes practice)
Down-wind: 1/2 power
Cross-wind: 1/4 power
Into wind: Idle power
Wings level, wings level, wings level
Glide to runway

Slight up elevator just before touch-down (flare)
Touchdown and run-off
Slowly taxi to flight-line
Throttle to idle (glow), no throttle to electric
Throttle-cut and switch to "off" (glow) / remove battery from electric
Turn off transmitter
"Walk" aircraft to your pit area

Emergencies

Emergencies take precedence over any flight activity
(e.g. dead-stick, control surface failure / flutter, transmitter failure, "glitch", pilot issues)
Pilot to attempt immediate landing
All other aircraft to assume and maintain pattern at safe and controlled speed / altitude
No take-offs or landings (unless emergency) while pilot and/or aircraft are on any part of field

Other

Restrictions

No flight activity while park personnel are cutting or maintaining the field
Flying field is for electric, glow, and gas powered aircraft including helicopters
No turbine powered aircraft are permitted
All other activity is not permitted while flying is occurring
Any conflicts should be handled politely and with discretion
Park Rangers to be called and notified for any potentially uncomfortable confrontations
Excessive engine run-ups or testing should be done away from flight-line
"Experimental" aircraft or "home-builds" must be cleared by Safety Office prior to flight

Field and Parking

Do not park on grass
Loading and unloading of gear to be done at parking lot
Only those with a "Special Park Permit" are allowed to load and unload at the "post"
Maintain a clean and safe table, pit, flight and field
Last pilot tasked with closing pin-board and lowering umbrellas
Lost and Found to be placed in "holding station"

New Pilot check off list

Maneuvers will be illustrated by use of a small model airplane.

Student Pilot Name: _____ Email _____

Phone Number: _____ Date Started: _____

Instructor Pilot (IP) : _____ Email _____

Pre Flight

1) _____ Set up engine/motor in a safe manner
2) _____ Explain what a take off is.
3) _____ Explain what a landing is (controlled crash)

Flying

1) _____ Take off
2) _____ Fly the "BOX" around the field
3) _____ Fly a straight line across field up-wind and down-wind.
4) _____ Horizontal figure eights
5) _____ Landing
6) _____ Touch & goes in direction according to pattern flown that day (announce touch & goes)

_____ Remove Student from Buddy Box when instructor is satisfied with Student's ability to control aircraft .

When the Student is confident they can pass the test, schedule a checkout pilot.

Checkout Pilot: _____ Date Checked: _____

Other notes/comments:

Flight Achievements to Fixed Wing Aircraft

Flight Log

Student Name:_____ AMA # _____

Instructor Pilot: _____

Maneuver	**Date**	**Instructor**
General Safety, Set-up, Start-up	____/____/____	_____
Ground control & Taxi	____/____/____	_____
Right Take-off & Right Hand Pattern	____/____/____	_____
L&R Oval Patterns	____/____/____	_____
Left Take-Off & Left Hand Pattern	____/____/____	_____
Figure 8 Patterns	____/____/____	_____
L&R Approach and Go-Around	____/____/____	_____
Right Landing & Right Hand Pattern	____/____/____	_____
Left Landing & Left Hand Pattern	____/____/____	_____

I certify that this student is qualified for unsupervised solo flight

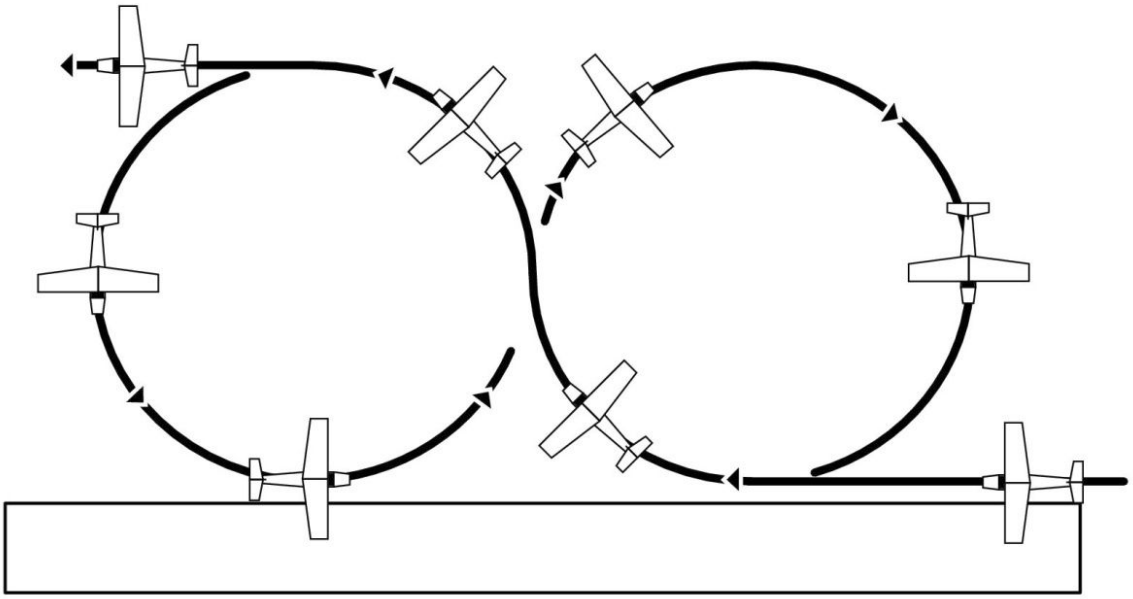
_____ _____

INSTRUCTOR **DATE**

_____ _____

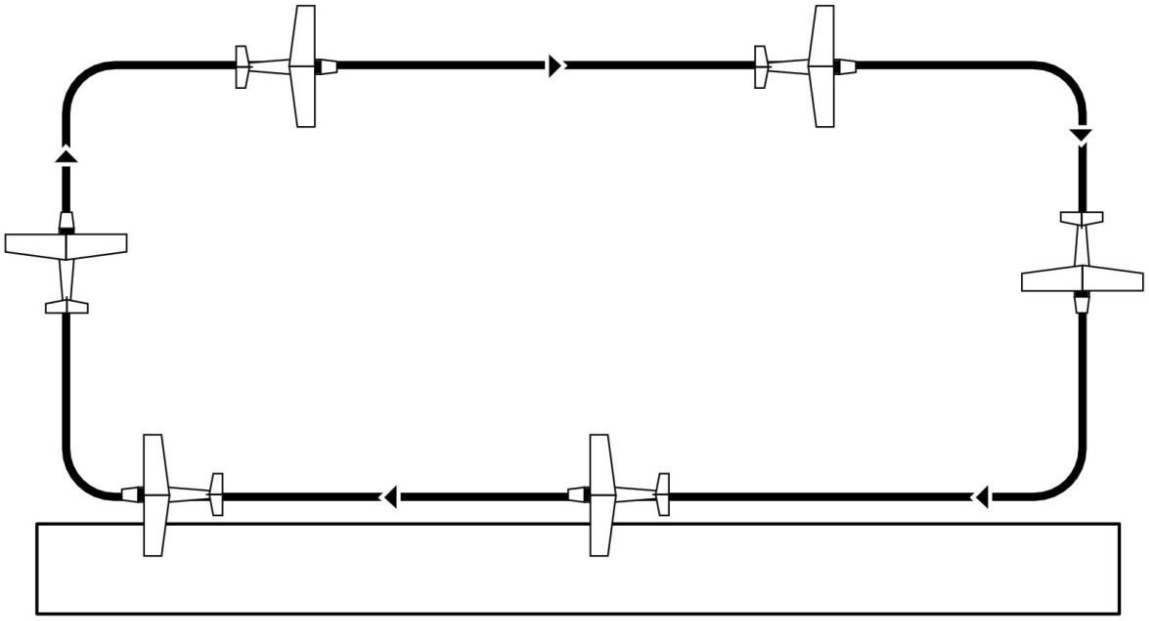
Check Pilot **DATE**

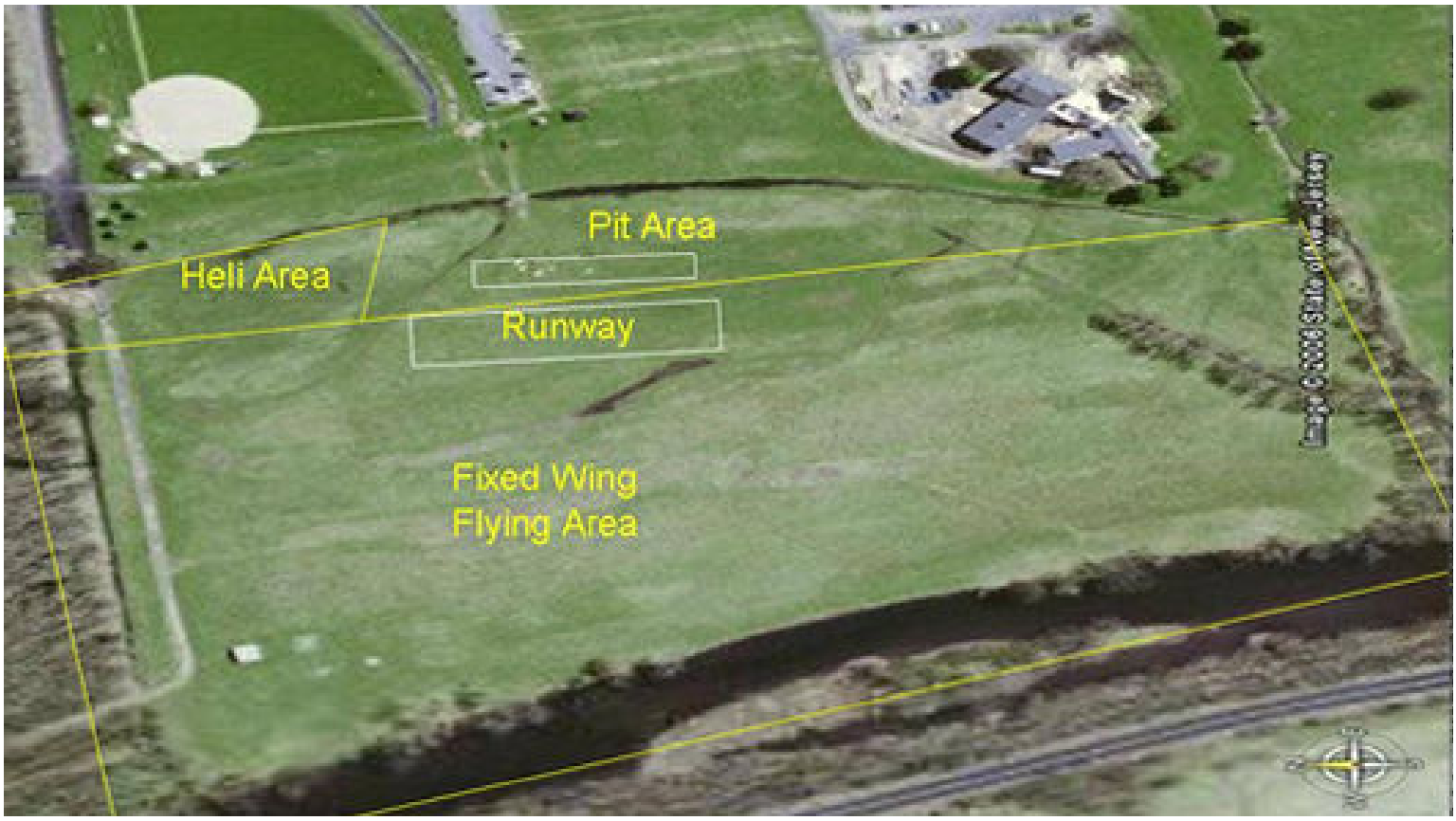
Figure 8s

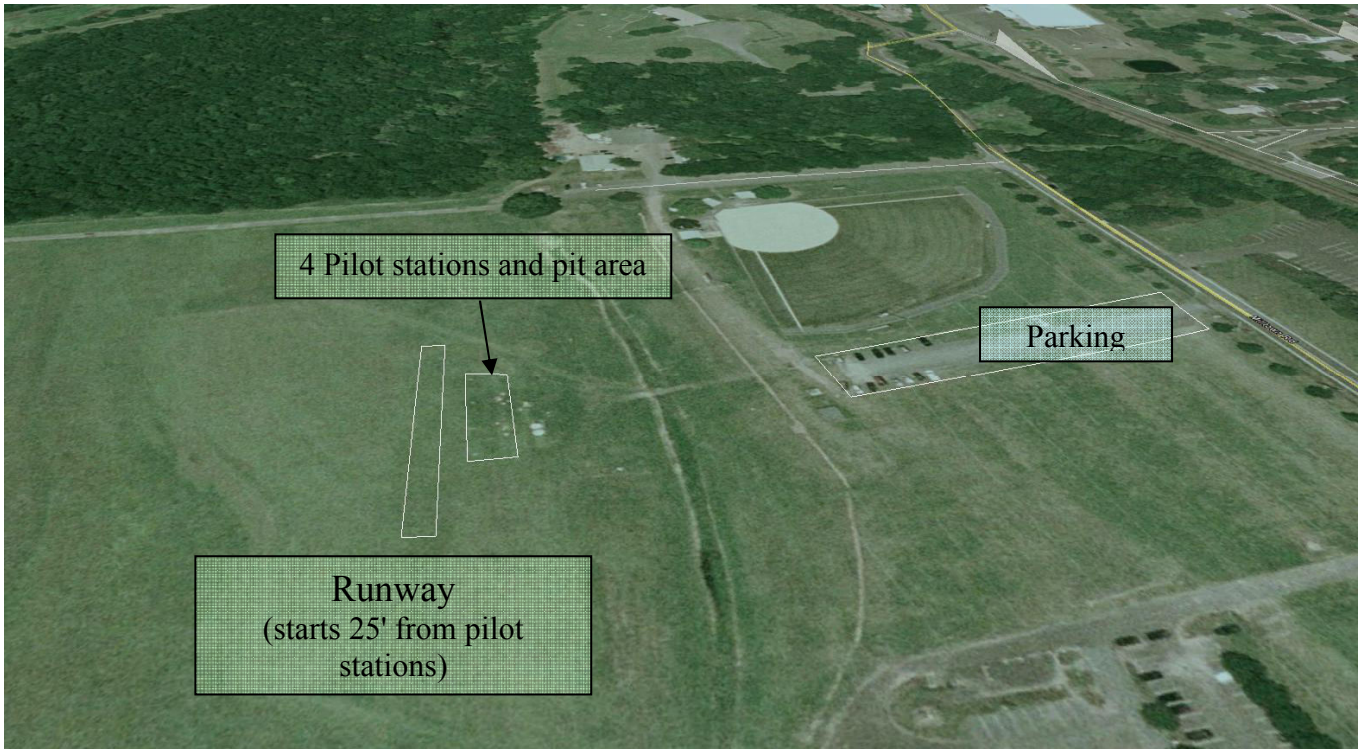


Flying the "Box"

Wind Direction ⟶




Heli Area
Pit Area
Runway
Fixed Wing
Flying Area


4 Pilot stations and pit area
Parking
Runway
(starts 25' from pilot stations)


1140'
Boundary perimeter = 4508'
1350'
1040'
River Rd
N
W
E
S
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