Effective April 1, 2014

STATE COLLEGE RC CLUB FLIGHT INSTRUCTION

Membership

Each member participating in modeling activities must maintain a current AMA license.

A member of SCRC is entitled to use the flying facilities of the Club.

Flying Field Procedures

All members using the official Club flying field shall abide by the rules and regulations of the Club, AMA, and the FCC. Non-members may not use the facilities of the Club unless they are the invited guest of a member in good standing, the guest fully complies with the aforementioned rules and regulations, and has proof of current AMA membership.

It shall be the responsibility of each member to remind any member or non-member of any infraction of the rules and regulations and to report any consistent infractions to the officers of the Club.

A readily identifiable frequency flag must be displayed on all transmitters on 27, 50, 72, and 75 MHz bands. These transmitters with switchable frequencies must display the corresponding flag for the frequency being used. Transmitters using 2.4GHz band do not need a frequency flag.

The frequency board will govern availability of channels and will be used by all flyers. Without exception, any member flying at the Club field must have his AMA license or Club Membership card placed correctly on the frequency control board before turning on any transmitter.

State College Radio Control Club Safety Rules

NOTICE: Before proceeding first read and understand the AMA and SCRC Club Safety Manual.

SCRC Flying Field Courtesies

Leave the flying field cleaner than it was when you arrived. If you have an accident make sure you police the crash site completely. Otherwise, harm may come to full size planes, farm equipment, and animals using the area around the flying field.

When a model aircraft lands in an area with planted crops, use the least number of searchers necessary to retrieve the aircraft to avoid disturbing the crop.

Be aware of your transmitter "on" time to avoid monopolizing your frequency or your flying area.

Retrieve your AMA or Club card from the frequency board as soon as possible after turning your transmitter off so that someone else can fly on your frequency. Those flying on 2.4GHz may retrieve their cards at the end of the flying session.

PREFLIGHT CHECKLIST

NOTE: If necessary, or with the help of an instructor, adapt these checklists to your craft, i.e. glow, gas, electric, helicopter, glider, etc.

This checklist is general information intended for novice and experienced radio controlled flyers to promote safety consciousness. This general information should be adapted to suit your particular craft and does not supersede procedures, instructions, warnings and cautions of rules and regulations of the AMA (Academy Model Aeronautics) and the SCRC radio controlled club. An inexperienced flyer is encouraged to seek assistance of an experienced flyer when performing the steps noted in "AT THE FLYING FIELD".

BEFORE LEAVING FOR THE FLYING FIELD

1. Run each servo to maximum throw using sticks and trims. Listen for a buzzing servo that indicates a linkage adjustment is needed or a control surface is binding.
2. Consider doing a radio equipment range check per manufacturer instructions.
3. Check fasteners for tightness such as engine mount screws, props, muffler screws, landing gear, wheel collars, etc.
4. Do a quick-check of the CG to make sure plane is still in balance.
5. Check wing bolts and their threaded inserts. If using rubber bands to retain wing onto fuselage, it is a good idea to replace them with unused ones during pre-flight preparation.
6. At least once monthly, remove fuel tank from plane and check for leaks as well as clean or replace fuel line filters.
7. Make sure flight box is prepared with charged battery, fuel, extra props, glow plugs, paper towels, hand cleaner, etc.
8. Consider drinking water, snacks, sun glasses, sunshield, hats, insect repellent, etc.

AT THE FLYING FIELD

1. **If using a gas engine, be sure kill switch is enabled to keep engine from starting accidentally.** At flying field, assemble your plane making sure to connect plugs of servos in wing to receiver and connect any retractable gear linkage, etc.

2. If not performed previously, do a radio range check per manufacturer instructions.
3. Fill fuel tank and check fuel lines for leaks and good tension on fittings.
4. Put AMA or Club card in proper frequency slot of flight board and be sure frequency flag (if applicable) is placed on antenna of your transmitter.
5. Place the plane in the pit area facing the flight line with a clear area in front of you, switch on the transmitter, and then switch on the flight pack.
6. Operate sticks in all directions and make sure control surfaces are functioning properly in correct directions, and throttle and any retracts are working properly. Watch for glitches that might indicate frequency interference or radio problems. For new or repaired planes, a 2nd set of eyes is recommended.
7. Prime (if necessary) engine through carburetor and make sure needle valve is adjusted per manufacturer's instructions.
8. **Make sure throttle is set to low speed (slightly above idle)!**
9. Connect glow plug connector/battery making sure it is clear of prop. If using a control panel, set heat control to proper setting**. If using gas engine, disable kill switch to allow engine to start.**
10. Tether plane or have an assistant hold fuselage from behind tail.
11. Flip the prop or use engine starter to turn it while **keeping clear of prop!**
12. Once engine starts, **move behind prop and keep fingers clear of prop** while removing glow plug connector/battery of non-gas engine. **Never** reach over or around the propeller.
13. With plane still being held, rev up engine and if necessary, adjust needle valve.
14. Set throttle to idle and if necessary, adjust low speed setting.
15. Rev up engine slowly to full speed while working control surfaces to make sure they function properly. If an engine tuning is necessary and could take some time, consider moving away from others to avoid noise and smoke annoyances.
16. Throttle back and make final carburetor adjustments if necessary (engine still running rich or lean).
17. Once the carburetor is properly adjusted, it is a good idea for your assistant to hold the plane in a high attack mode while you are revving the engine up to about half speed and back to idle to make sure fuel feed is constant. Full speed is not recommended for .45 and larger size engines during high attack mode testing.
18. Fully extend antenna of transmitter and with the throttle set to idle, at your signal, your assistant will release plane pointed toward the flight line.
19. Check for other flyers and spectators to make sure they are clear of your path to the runway.
20. Rev up your engine enough to get plane to taxi and check steering is working properly. If not, bring plane back to flight line, **Kill engine (including enabling kill switch of gas engine)** and make adjustment to steering. Restart engine as noted in steps 6, 7, 8, 9, 10, 11 and then jump to step 17 to continue.

21. Once the plane is ready to fly, carry or taxi the aircraft to just short of the runway, place yourself at a pilot station, announce that your aircraft is taking the active and in what direction you are taking off, make sure the approach path is clear and there are no full scale aircraft in the area, taxi into a takeoff position on the runway, stop and clear the flight path left and right, rev up the engine to adequate speed for plane to take off, maintain directional control and after liftoff depart the pattern on a 45 degree offset from the runway heading.
22. While flying, follow **AMA and flying club rules and regulations**. Have fun flying but **Safety First!**
23. When preparing to land or do any type of low altitude pass over the runway (never fly across the runway!), always check the runway to make sure it is clear of personnel. Low high speed passes should always be beyond the short mowed part of the runway. If you are coming in "dead-stick" and personnel are on the runway, yell for them to clear the runway. You must ditch the plane off the runway if it is still not clear of personnel in time for your "dead-stick" landing.
24. Once your plane has landed, apply just enough throttle to taxi at a safe speed (slow) back to your position at the flight line while keeping an eye out for personnel that may be in the path of your plane. Taxiing back towards the pits presents a risk if pointed toward people or objects and the throttle were to run away for any reason.
25. Throttle back to kill engine and turn off flight pack and transmitter. **For gas engines, also enable kill switch to prevent accidental starting of engine!**
26. Take plane and flight box from flight line, and (if applicable) pick up your AMA or Club card from the frequency board.
27. Wipe down plane and make adjustments to control surface linkage if found necessary when the plane was airborne.

Ground School

The following section is mainly designed for those who have little or no knowledge of aerodynamics, and/or are totally new to the hobby. Even experienced pilots will benefit from this, as there are some differences between models and full scale. Please read it thoroughly.

First, if you are just starting out: There are benefits to getting an ARF (Almost Ready to Fly) as opposed to kits. Generally speaking, by the time you buy a kit, the hardware and the covering, you have spent as much as the ARF. And it will take you at least twice as long to put the kit together. You will also need the appropriate tools to install the covering. So too with an "Almost Ready to Cover" plane. And if you do destroy an ARF, you won't have the time investment loss. The advantage to the kit is you know how well it is constructed, and the covering will probably be better quality material. Keep in mind that covering the aircraft alone is an art in itself, and will probably take 10 to 15 hours. Build kits in the fall and winter; ARFs in the spring and summer.

Second, if you are just staring out: Don't load up your Visa/Mastercard with all kinds of equipment, flight boxes etc. Get to the field for some observation and discussion time. Club members are more than willing to provide a wealth of information for the newcomer. After you've worked with an instructor, and met some fellow pilots, then decide what equipment you want. There is a lot to choose from. And there is a lot of good used equipment available through the club or swap meets. All too often, new hobbyists overspend, don't learn as quickly as they had hoped, and get discouraged. This is especially true if they tear up their first airplane. Keep your investment small until you gain some momentum.

Third, now that you've stared: Unless you're sure of yourself, don't be too quick to buy that "second" plane. Chances are you may be buying a second "first" plane. Take your time. On the other hand, you may surprise yourself and be able to jump directly to a "third" or "fourth" plane. Get some flight time in after you've soled and you'll have a better idea.

We will not get into any discussions of model kit building, or radio systems at this time. Together they could have their own entire manual.

Granted, one doesn't have to know how to fly the space shuttle to fly a model aircraft. However, a general understanding of basic aerodynamics will help to understand why it does what it does. Our objective here is to provide you with the concept of aerodynamics, not the technicalities. For those who wish to go into aerodynamics at greater depth, student or private pilot flight manuals are a good place to start.

Note: Referring to aircraft as to right or left, is as a pilot would view it from the cockpit.

Wings:

There are three basic wing profiles.

Flat Bottom:

Creates the most lift and is the most stable. Most trainers are flat bottom.

Semi-Symmetrical:

Still stable, yet allows more maneuverability and extends aerobatic capability. Great for "second" planes.

Fully Symmetrical:

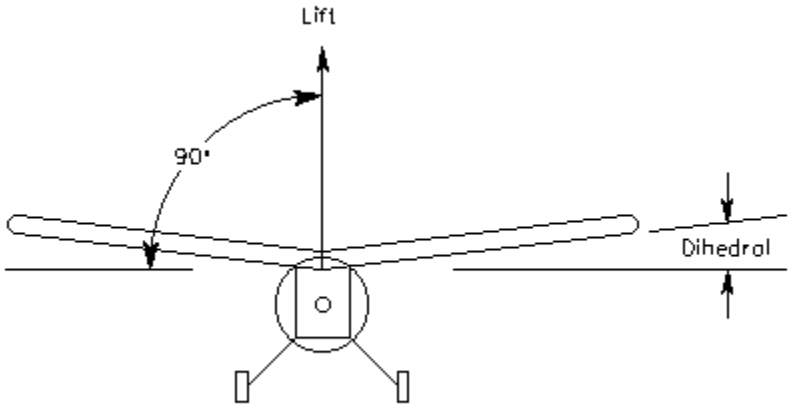
Least stable and most aerobatic. For more experienced flyers only. There are three basic wing locations.

High-Wing, Mid-Wing, Low-Wing:

Stability diminishes as the wing comes down; the high wing being the most stable. Here too, most trainers are high wing. A fully symmetrical, mid-wing with no dihedral is the most aerobatic.

Dihedral:

Dihedral is the angle in the wing when looking at it from front or rear. The more dihedral, the more stable and self recovering. The straighter, the more aerobatic but less stable. A low-wing aircraft requires more dihedral to be as stable as a high-wing, all other factors being equal.



Washout:

Washout is a twisting of the wing when viewed from the wing tip. The trailing edge is higher at the wing tip than at the fuselage. This increases stability and self recovery. It allows the outer wing area to still "fly" (maintain control) even if the inner wing area is in a stall condition. Refer to "stalls" later. Washin is reverse, and has no practical application.

Ailerons:

Ailerons control the bank of the aircraft which turns the aircraft. Refer to "lift" later. The up aileron decreases "lift", while the down aileron creates more "lift", thereby banking the aircraft. The aircraft always banks or turns toward the up aileron.

Vertical Stabilizer:

The stationary part of the rudder assembly.

Rudder:

The movable control surface of the assembly. Its primary function is to coordinate the bank and turn. However, in the case of model aircraft, it can be used to steer or turn the craft.

Horizontal Stabilizer:

The stationary part of the elevator assembly.

Elevator:

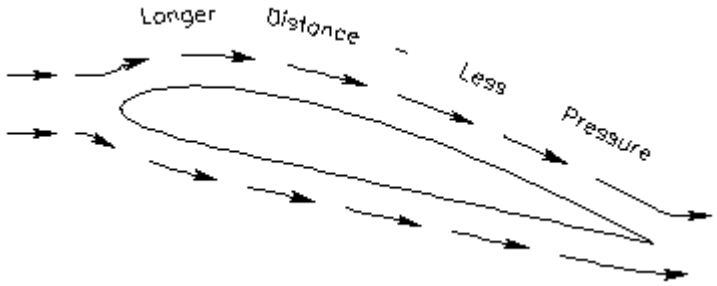
The movable control surface of the assembly. Its primary function is to control the angle (nose up, etc) of the aircraft. However, in the case of model aircraft, it is basically used to control altitude. Technically, power controls altitude and elevator controls angle, which in turn controls airspeed. Refer to more advanced flight manuals.

Flaps:

Flaps create more "lift". There are several basic types of flaps, none of which are used on trainer planes. Refer to more technical manuals.

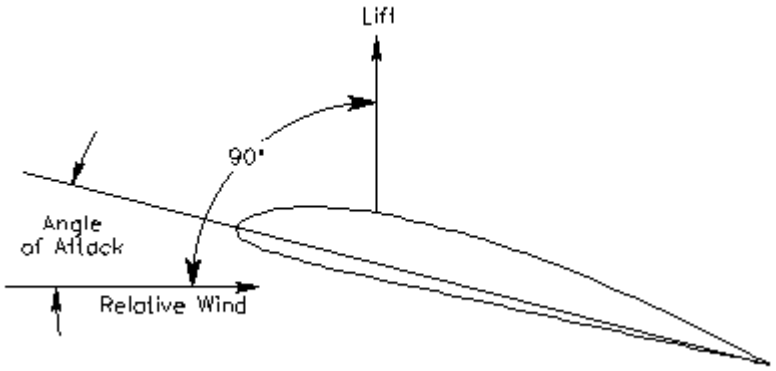
Lift:

Lift is created when the air moving over the top of the wing moves faster that the air underneath. Air over the top must travel a greater distance, therefore it must move faster to get to the rear at the same time. The faster the air moves past a surface, the less pressure it exerts on that surface. The pressure underneath is greater pushing the wing up. This is lift. Lift is always 90 degrees to the relative wind. Lift is always 90 degrees to the span of the wing.



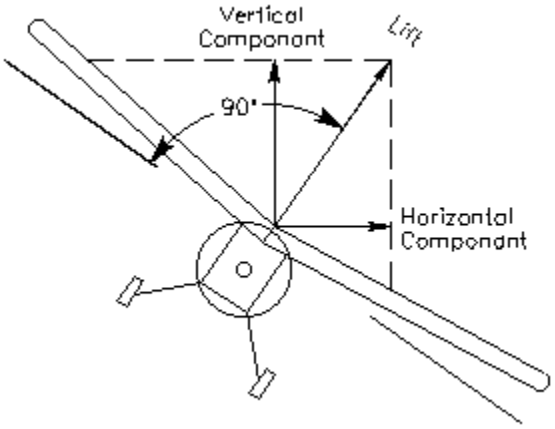
Relative Wind:

RW is the air coming at the aircraft; it is always exactly opposite the direction of travel. Do not confuse this with the wind conditions you are flying in. The angle of the wing as it hits the RW is called the angle of attack. Too high of an angle of attack, without enough airspeed, will cause the wing to stall. Refer to "stalls "later.



Components of lift:

When the aircraft is banked, the "lift" is banked too. The "vertical component of lift" is no longer as great. This is why you have to add up elevator to maintain altitude. The "horizontal component of lift' causes the aircraft to turn. If you bank too steep, the "vertical component" will lessen even more and the wing will stall and fall. Refer to "stalls" later.



Propellers:

A propeller is nothing more than a rotating airfoil in the horizontal direction. Applying more power creates more horizontal lift (better known as thrust) which pulls the aircraft through the air. Do not think of a propeller as blowing air rearward.

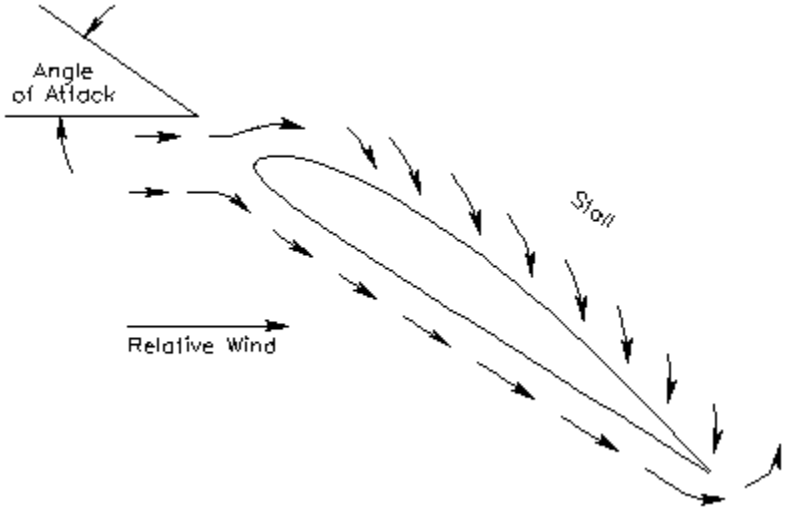
P-Factor:

For the sake of simplicity we will only say that P-factor is the unequal thrust or torque of the propeller. During power on, or climbing conditions, the right side of the propeller produces more thrust. This causes the aircraft to drift left. This is why an aircraft that rolls straight, will run off to the left of the runway on take-off. Correct with a slight right rudder.

Stalls:

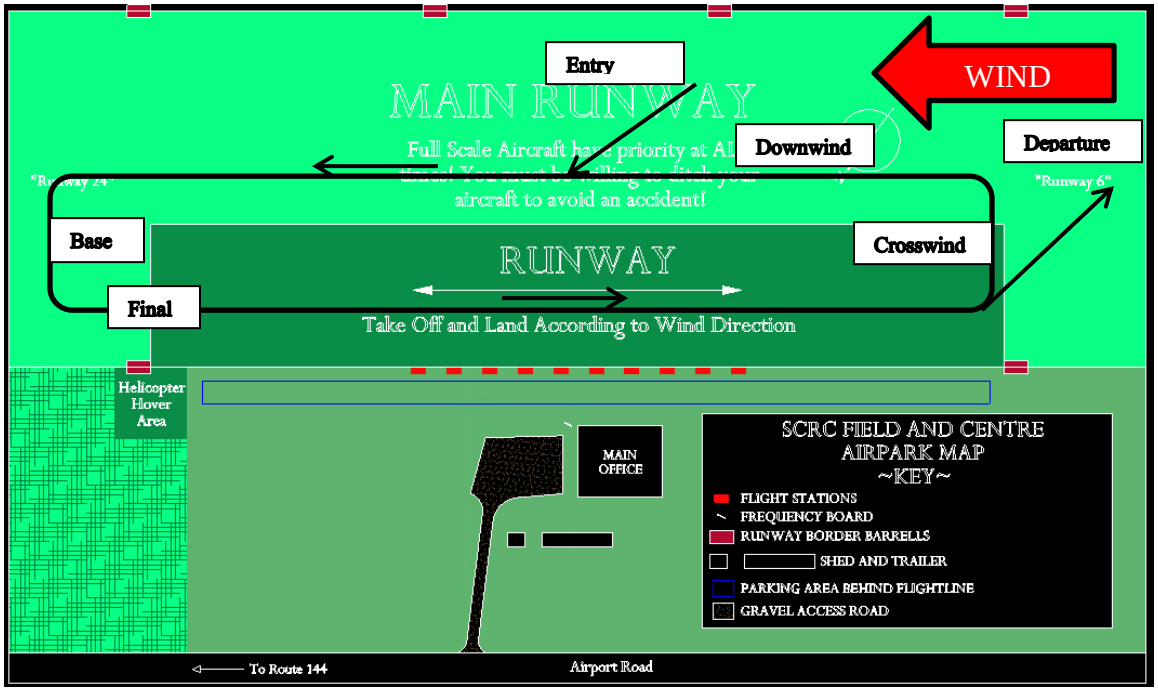
A stall is the loss of "lift". This condition occurs when the angle of attack becomes too great for the air to flow smoothly over the top surface. The air then becomes turbulent (much like the spoiler on a race car) and no longer produces lift. When this happen, the nose of the aircraft will drop

abruptly resulting in the loss of altitude. Stalls can occur with power on, or power off, at low speed or high speed, depending on various other conditions. The most common are while climbing too steeply and turning after take-off, or when banking too steeply while turning final to land. All stalls have one thing in common. They all require lowering the nose to recover. Point of interest: A spin is nothing more than a sustained stall with rotation.



Flight Pattern:

The FP, or traffic pattern, is made up of four legs. Starting at the runway, the first 90 degree turn is the crosswind leg. The second 90 degree turn becomes the downwind leg which is parallel to the runway. The third turn is the base leg which is 90 degrees to the runway again. The forth turn becomes the final leg towards the runway. Henceforth the term: "Turning final". Proper departure for the pattern is to turn only 45 degrees not depart straight out the crosswind leg. Proper approach and entry is to head in on a 45 degree angle towards the downwind leg. Aim for the end of the runway where you plan to set down. Turn downwind when you are at an appropriate distance away from the runway. Do not enter the pattern straight in on the downwind as you may encounter departing aircraft.



Example of a left hand pattern

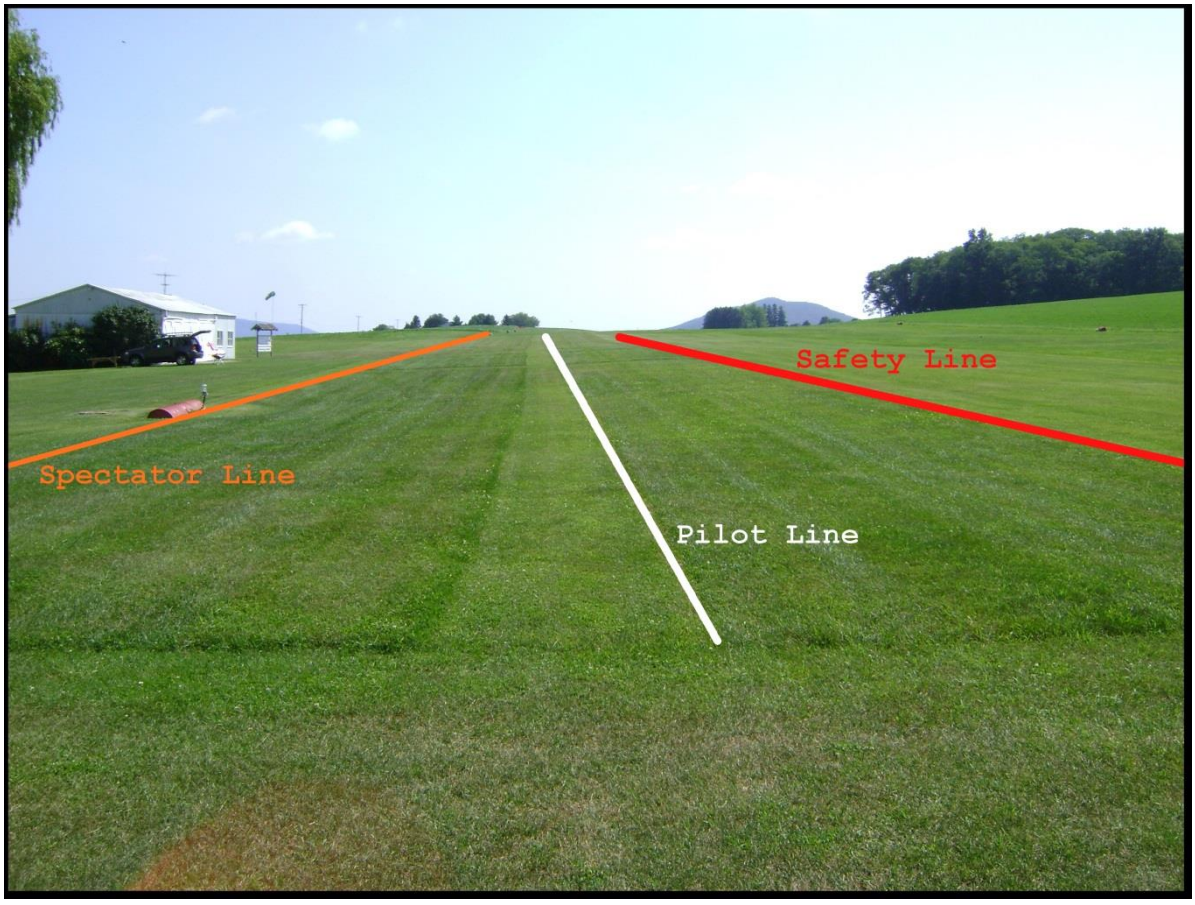
Flight Reference:
There are those who believe that flying a model aircraft is more difficult than a full scale. Visualizing yourself from the aircraft view takes some practice. It's like an out of cockpit experience. Everything is fine so long as you are going away from you; coming towards yourself is a whole different story. Think of it as sitting backwards on the dashboard of your car steering wheel between your legs, and driving down the road. Here's a reference list to help you along.

Aircraft Direction	
Control Movement	**Aircraft Reaction**
Aircraft Going Away	
Aileron	Same
Elevator	Same
Rudder	Same
Coming Towards You	
Aileron	Reversed
Elevator	Same
Rudder	Reversed
Inverted Going Away	
Aileron	Same
Elevator	Reversed
Rudder	Reversed
Inverted Coming Towards You	
Aileron	Reversed
Elevator	Reversed
Rudder	Same

Flying Site

With the permission and encouragement of the owner of Centre Airpark, Jack Garbrick, the State College Radio Control Club (SCRC) has established and maintains an RC flying site on the Centre Airpark airport property. Visiting flyers (AMA Required) and spectators are welcome at the flying site. A portion of the active runway is used for the RC runway.

The pit area is adjacent to the runway and between the airport office and the runway. Parking for the pilots is located directly behind the pit area. Spectators should park off the entry road to the right near the shed and trailer.



Spectator Line - The Spectator Line is marked by the red barrels and is also the edge of the active Centre Airpark full-scale runway. All vehicles and equipment must remain behind this line. No spectators are allowed beyond this line. Only RC pilots and spotters can go beyond this line. All pilots, spotters, aircraft and equipment must move behind this line when a full-scale aircraft enters the landing pattern or is preparing to takeoff.

Pilot Line - The Pilot Line is marked by a shorter grass cut. RC pilots and spotters must stand behind this line while flying.

Safety Line - The Safety Line is marked by a shorter grass cut. All RC aircraft flying must be done beyond this line.

Aircraft Check Out & Maintenance Guideline

The following items should be checked regularly, at least before the first flight every flight date. It is recommended that most items be checked after each flight date, at home, so there will be no surprises at the field next time out. Do not fly aircraft that does not pass all of these criteria.

1. Propeller & spinner secure - propeller properly balanced & undamaged - Do not use a damaged propeller.
2. Engine bolts secure to mount - Mount secure to firewall.
3. Fuel tank secure, preferably in foam rubber - Tank clunk free.
4. Receiver, battery, all servos secure - Receiver in rubber - Wires clear of all moving control horns & pushrods - Antenna clear of servos.
5. Minimal free play in servo horns & pushrods - Control horns secure - Clevis' secure with safety retainers.
6. All control surface hinges secure (especially ARFs) with minimal gap - Free movement (no binds) all control surfaces - Rudder, elevator, ailerons
7. Throttle travel, idle to full - Shut off travel OK - No servo bind at full throttle (nothing drains a battery more than a servo bind.)
8. Nose wheel straight, at least sensitive position - Roll test on pavement
9. Aileron servo connected - Retainer or baffle to keep aileron wire from entangling in aileron rods.
10. Rubber band quantity & installation - Do not use old or used rubber bands. Recommended installation: 2 crisscross, 6 straight (3 each side), 4 crisscross
11. Balance empty (no fuel) - Do not fly a tail heavy aircraft. Remember, a nose heavy plane flies sluggish; a tail heavy plane usually only flies once.
12. AMA number & proper identification - Name and address inside
13. Receiver battery voltage - Do not operate below 4.9 volts.

Basic Flight Training

This section is not intended to teach you the mechanics of flying an aircraft. That is left to the instructors. Rather, its purpose is to give you an overview of what to expect, what you should know, and the sequence to learn.

It is recommended that all student pilots fly with more than one instructor. Each individual instructor has his own methods and techniques. What works for one, may not work for another. It is wise to get exposure to several and decide for yourself. Remember however, the basics of aerodynamics never change.

Most students can expect to fly 2 or 3, 10 to 15 minute flights each time out. Most can expect to have 5 or 6 of these sessions before earning their "wings". Don't get discouraged. Some students struggle along until one day everything just clicks, and then it's: "Hey look, I'm doing it!"

Familiarize yourself with the transmitter. Practice at home. You should be as familiar with it as you are with the location of the controls of your car, or a ten speed bike.

Likewise, before any flight instruction, familiarize yourself with he "Field Procedures".. Make safety your number one priority.

Note: There are computer model aircraft flight simulators available. They may help you in the learning process. The general opinion still remains that there is nothing like actual "stick" time. Simulators are also useful in helping you experiment with more advanced maneuvers after you've soloed.

Student Pilot Training

Basic Flight Training Lesson Plan

Task #1 Ground support equipment, engine starting, & taxi training

Dual Control

Goals:

• Perform aircraft preparation and inspection. Refer to "Aircraft Check Out Guideline"
• Perform engine start and radio checks.
• Perform taxi course.

Task #2 Orientation Flight

Dual Control

Goals:

• Observe orientation flight.
• Note ground and flight safety restrictions.

Task #3 Basic flight skills development

Dual Control

Goals:

• Become familiar with speed, yaw, pitch, and roll commands.
• Become familiar with flight trim techniques.
• Execute straight and level flight.
• Execute left and right turns.
• Initiate stall or unusual attitude recovery.

Task #4 Takeoff

Dual Control

Goals:

• Execute proper upwind takeoff runway alignment.
• Initiate takeoff throttle setting.
• Maintain runway centerline ground steering during takeoff acceleration.
• Execute takeoff rotation at proper speed.
• Execute proper climb speed, pitch, and bank angle.
• Perform a takeoff abort if required.

Task #5 Turns

Dual Control

Goals:

• Perform level shallow turns (left & right) at approximately a 20° bank angle.
• Perform level medium turns (left & right) at approximately a 40° bank angle.
• Perform level steep turns (left & right) at approximately a 60° bank angle.
• Execute shallow, medium, and steep turns (left & right), level flight, at low, medium, and full speeds.
• Execute turns in a designated area.

Task #6 Planning maneuvers

Dual Control

Goals:
• Perform level rectangular patterns (left & right) as well as figure eights over specific ground location(s).
• Apply crosswind technique to maintain proper ground tracking during planning maneuvers.

Task #7 Landing pattern and go-around

Dual Control

Goals:

• Execute upwind landing patterns.
• Execute crosswind landing patterns.
• Execute downwind landing patterns.
• Perform go-arounds at a 2 – meter height on final approach.

Task #8 Touch-and-go landing

Dual Control

Goals:

• Perform traffic pattern(s), final approach, and touchdown, followed by power application and pattern reentry.
• Perform normal and crosswind traffic patterns with touch-and-go maneuvers.

Task #9 Full stop landing and supervised solo

Dual / Solo Control

Goals:

• Execute full stop landing followed by taxi back and takeoff.
• Execute simulated engine failure landings.
• Perform a supervised solo flight.
• Be prepared for simulated engine failure calls from instructor regardless of position in pattern. Upon receiving call, immediately pull throttle to idle and safely land aircraft on runway.

Task #10 Supervised Solo Proficiency/Mid-phase Evaluation Review

Dual / Solo Control

Goals:

• Practice Task 1 – 9 maneuvers.
• Place additional emphasis on instructor-recommended areas of needed improvement.

Task #11 Evaluation and Solo Certification Task

Solo Control

Goals:

• Perform the sequence of maneuvers required during the solo evaluation.

Ground support equipment, engine starting, & taxiing
Takeoff
Turns (Left and Right)

Figure 8 and Rectangular pattern
Landing pattern and go around
Touch and go landing
Full stop landing

• Review flight evaluation results and discuss strengths and weaknesses with instructors.

Even long after you've soloed, don't be afraid to ask for additional help or instruction.

That's what we're here for!

Flying & Safety-Tips & Hints
For the Beginner and Novice Pilot

- Roll test steering in a driveway or basement. If it doesn't roll straight at home, it won't roll straight on a runway. Set control to the least sensitive position.
- Put Monokote (or otherwise) small marks at the C.G. (Center of gravity) on the wing to indicate balance location. Makes it easy to check at field.
- Balancing laterally (side to side) will help aircraft track better in maneuvers. Hold at spinner and tail. Add wing tip weight as necessary.
- Check receiver battery every 2-3 flights. Make a chart of how long you have flown vs. Voltage drop. Do not operate below 4.9 volts.
- Always turn on transmitter 1st, receiver 2nd. Always turn off receiver 1st, transmitter 2nd.
- Range check your system before 1st flight every time out. This should be performed with engine running at both idle and full throttle.
- When using the buddy box system, make sure both boxes are ste identical. Never turn buddy box power "on"!
- Remove transmitter neck straps when staring engines.
- If you don't have a starter, at lease use a "chicken stick". Do not hit it against the propeller; start your flip with the stick next to it. (Touching)
- Never jamb a running starter onto the spinner. Back up the propeller, and place the starter cone against spinner before turning on.
- When you start your engine, look at your watch and keep track of time. After flight, check fuel level to judge maximum available flight time.
- Do not reach over propeller to adjust needle valve. Do it from the rear. Do not position yourself (or others) to the side of a rotating blade. It could fail on run-up or kick up debris.
- Fly with a copilot/spotter.
- Never practice maneuvers at low altitude. Fly 2-3 mistakes above the ground.
- When trimming an aircraft in flight, trim only until it stops the incorrect movement. Trying to correct entirely will only put it out of trim to the opposite direction.
- Most trainer aircraft will recover from unusual attitudes (mistakes) by killing the power and pulling up elevator (depending on altitude). Be ready to level out and apply power.
- Remember, unless you are "dead stick", you do not have to land. If it's not right, go around. It's much easier, and safer, to do it over rather than try to salvage a bad approach.
- If you get nervous for any reason, climb out and do some horizontal figure eights over the field. When you calm down, try again. Don't' push yourself to try again too soon. Take your time.

- Do not fly too far away as it is easy to get disorientated. This is especially true when the sun is low on the horizon and the aircraft becomes a silhouette.
- If you are using dual rates, return to high rate before entering the landing pattern. Do a couple of turns to adapt to the greater sensitivity again.
- On flat bottom wing trainer planes: Low speed handling (banking characteristics can be improved by raising each aileron an 1/8" or so. It makes the "up" aileron more effective.
- Installing larger (2 3/4", 3") wheels on your trainer will:

    1) Make taxiing in grass easier.
    2) Improve your visual orientation in the air.
    3) Improve your landings as gear won't bend as easily.

- Maintain your flight path. Do not make any erratic maneuvers to avoid faster, more maneuverable overtaking aircraft (experienced pilots etc.). It is their responsibility to avoid you. However, make a conscientious effort to not be a hazard either.
- If it is obvious that you are going to crash, kill the power to minimize damage.
- If for any reason an aircraft is in trouble and headed for the pit area or spectators: Do your level best to kill the power and ditch it. Don't try to save it. Planes are cheaper than people. It's a small sacrifice to make.
- If your aircraft does go down in the field or trees-Don't move! Note where you are standing, and pick a far distance reference point or object. Follow a straight line in your search and rescue effort.
- If you are searching in the trees, listen to aircraft overhead to orient yourself to the flight line and runway. It's a jungle out there.
- When you do recover a crashed aircraft, be sure to pick up every last part, piece and splinter. You'll be glad you did when you decide to rebuild it after the shock wears off. All those little pieces can be glued together to make templates to create replacement parts.
- After each flight, immediately reset the elevator trim to the "full fuel tank" position. Otherwise you probably won't remember until you are about 10 feet off the ground on the next take-off. (And headed back down to mother earth!)

Again, even long after you've soloed, don't be afraid to ask for additional help or instruction.

That's what we're here for!