Learning to Fly

First Flights
First Flights Introduction

It has been said that fear is what happens when one finds himself in a situation that he’s not prepared for. Confidence has been described as a feeling of optimism. That is, instead of hoping for success, a plan is in place to succeed.

Let’s assume that before you fly for the first time that you have practiced on a simulator, or at least you have rehearsed the turn, straight line, and course adjustment control inputs on your transmitter. That way, when you do fly, you will be less concerned with how to fly and be able to devote more attention to flying well.

Note: You should delay flying in wind until you gain more experience. Wind (turbulence) does more than increase a pilot’s workload. Wind’s principle effect is exaggerating any mistakes or bad habits that a person can otherwise get away with in calmer conditions (something golfers know all to well)! You need to know that wind has an exponential effect on light models. That is, a 10 mph wind will effect a light model a lot more than a 5 mph wind. Thus, it is better to wait for a perfectly calm day to fly your first flight, than to learn the hard way that wind and light models don’t mix well.

If you’ve never flown before and your radio setup offers “beginner (low) and sport (high)” control rates, start out with the more forgiving low rates. Save the high rates for when you have developed a need for them. You should also avoid adding extra bells-and-whistles to your radio setup, even though they may sound good, until you have the experience to know whether they will really help or become a hindrance.

Some R/C transmitters have a signal range of over a mile. If you’re not flying at an R/C club site, you need to be certain that you are at least 3 miles away from the nearest club site to avoid radio interference when flying an FM or PCM radio. To be safe, it would be better if you were at least 4 miles away. Inquire at your local hobby shop if you’re not sure where the nearest club is located. (No one wants to crash or be responsible for interfering with the control of someone else’s pride and joy!)

If you have no R/C flying or simulator experience, you should initially seek help from an experienced R/C pilot, especially to help with trimming your airplane to fly hands off straight and level at half throttle.

KPTR: Practice good control inputs and fly with a plan and you’ll likely be rewarded with first flights that consist mostly of improving your skills, developing confidence and having more fun, instead of trying to stay out of trouble.
**Tips for Planning a Successful First Flight**

There are several things that you can do to set the stage for early flying success: First, pick a day with no wind and a flying site with a grass landing area free of obstacles preferably larger than a soccer field. You’ll cover two or three times that much space in the air, so preferably the surrounding area is also free of any obstructions that could interfere with your flight.

Avoid flying in areas surrounded by large trees and buildings, such as schoolyards. Air circulating over and around large obstructions tends to become turbulent and can create tricky conditions to fly in.

A mowed grass field is preferable because landing on grass is far more forgiving than hard concrete.

Light models struggle to penetrate wind and can be quickly carried away by it. Therefore, if there’s any wind, plan to drive the plane further upwind before turning around, and start your turns at the downwind end of the field earlier.

Always fly with the sun behind you. There is no “trick” to flying facing the sun. You simply have to avoid it!

KPTR: When choosing a flying site, consider that it will seem smaller when you’re flying than it did prior.
First Flights Agenda: Ground References and Positioning

A successful pilot controls where the airplane is going, instead of letting it go where it wants. Plan to fly the airplane back and forth out in front of you within comfortable view. Be especially careful not to let it fly over your head or too far downwind of your position.

Initially, turning the airplane away from you will seem a lot easier than turning in toward yourself. Therefore, plan ahead where to start your turns: Pick an area at each end of the field that will allow you to comfortably turn out in front of yourself without the airplane getting too far away. Then, use whatever ground references you can find in those areas to give you something definite to aim for.
A person driving a car doesn’t have to think about whether to apply left or right inputs because he’s facing in the same direction the car is traveling. All he has to do is simply move the steering wheel in the direction that he wants the car to go. Similarly, rotating your body (esp. the transmitter) to face in the general direction the airplane is heading, and thinking in terms of applying the control stick left or right in the direction you want the plane to go, eliminates most left-right confusion.

If your plane requires you to hold in rudder during a turn, there will be no question which way is opposite when it is time to level the wings. Otherwise, you will have to remember the direction that you’re turning and anticipate the opposite direction. If you struggle with this, talking aloud works every time!

Facing the airplane and applying the “stick to the low wing” is a popular method used by recreational club instructors to forgo having to think about which way to level the wings (at least when a low wing is apparent).

KPTR: Facing in the general direction the plane is heading cuts down on left-right confusion.
First Flight Trimming

You will almost certainly need to “trim” your airplane once in the air. For example, if your airplane persists in veering to the left, right rudder trim would be placed in to eliminate that tendency. Or, if you needed to keep holding in up elevator to maintain level flight at half throttle, putting in some up elevator trim would alleviate that need. How much trim depends on how sharply the plane wants to descend. Note: Simulators are terrific tools for learning to trim. If you don’t have a sim, at least take some time to rehearse raising your transmitter and adjusting the trims before flying.

Tip: Trim adjustments are much easier to make when you raise up the transmitter and glance at each trim adjustment as it’s being made.

A-21  KPTR: The plane is trimmed and much easier to fly when you establish straight and level flight and it stays that way.