



www.tcws.org

# Getting Started with Radio Controlled Planes and Helicopters

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www.modelaircraft.org

## Choosing Your First Model

The best thing you can do before buying your first RC plane or helicopter is to contact an experienced RC pilot or flight instructor. This pilot will be able to advise you on which model will be best for you, considering your budget, the type of flying you'd like to do, the locations you'd like to fly at, etc.

The easiest way to find an experienced RC pilot or flight instructor in your area is to contact a local Academy of Model Aeronautics (AMA) charter club, like the Tri-County WingSnappers (TCWS). Contact information for our club and instructors can be found at the end of this brochure. If you'd like to see all of the AMA charter clubs in your area, go to the AMA web site at <http://www.modelaircraft.org> and use the charter club locator feature.

If you get advice from an instructor who is willing to teach you how to fly, he can also tell you which type and brand of beginner aircraft he is familiar with. If you get equipment that he is familiar with, it will be much easier for him to instruct you.

It is very important to start with a good beginner or "trainer" aircraft. Unfortunately, many of the "cool" looking scale and aerobatic aircraft are quite difficult for beginners to learn on, so resist the urge to start with a model that is too advanced for your skills!

You'll have to decide whether you want to start with a nitro or an electric powered aircraft. The small electric "park flyers" and micro helicopters are generally less expensive than the larger nitro models, but they typically don't have the aerobatic performance or stability of the larger models. The small electrics can be flown at a large field or a park, while it is best to fly the larger nitro aircraft at a club airfield for safety. In general, larger models are more stable and can be flown in higher winds, and smaller models are less stable and can only be flown with little to no wind.

At the end of this brochure, you will find a listing of some popular beginner/trainer planes and helicopters at each end of the size & price spectrum.

## Learning to Fly

To help ensure your model survives your learning process, it is best to learn with the assistance of an experienced RC flight instructor. With most model aircraft, you can learn with the help of an instructor via a trainer box or "buddy-box". This "box" looks very similar to an RC aircraft transmitter, but it does not actually transmit a radio signal. The trainer box plugs into the transmitter that goes with your aircraft. The instructor flies the aircraft with the transmitter, and when the instructor flips a switch on the transmitter, the trainer box has control of the aircraft. This enables the instructor to fly the aircraft, while allowing the student to have control for short periods of time.

As you become more experienced, the instructor will do less flying and you will be controlling the aircraft most of the time.

Many clubs, including TCWS, have trainer boxes that are compatible with some major brands of transmitter. Again, if you find an instructor before purchasing your equipment, you can find out what type of trainer boxes your instructor or his club already has, and what brand of transmitters they are compatible with. Otherwise, you may have to purchase your own trainer box that is compatible with your brand of radio.

Another powerful tool to help you learn to fly your RC aircraft is a good **RC flight simulator**, like RealFlight G3. While this type of simulator is rather expensive (around \$200), it can help you increase your flying skills very quickly, saving you time and money (fuel and crash costs). As a result, many RC pilots claim that a good simulator more than pays for itself! Some Ready-To-Fly (RTF) trainer planes sold today, such as the Hobbico Nexstar, actually include a "Lite" or stripped down version of a simulator to help you learn to fly!

## Planes vs. Helicopters

You can start with planes or helicopters, whichever interests you the most. Most people seem to start with planes, but that is not necessary if you really want to fly helicopters.

In general, planes are typically less expensive and a little easier to learn to fly. Helicopters have a relatively steeper learning curve, and due to the greater mechanical and electrical complexity, typically cost more and are more difficult to set up properly. Many helicopters require high-end computer transmitters that have the proper mixing functions, while most airplanes can be flown with a simple (i.e. inexpensive) analog transmitter without any mixing functions.

To learn to fly a plane, you typically fly with an instructor on a trainer box, and practice using a simulator if you have one. To learn to fly a helicopter, you can learn with an instructor on a trainer box as well, but simulator practice becomes much more important!

When you first start with a plane, the instructor can get you "3 mistakes high" and let you figure out left from right, up from down, etc. The high altitude gives the instructor plenty of time to recover from your mistakes. Only after you become more skilled do you attempt low altitude flying or take-offs and landings.

With helicopters, the first thing you must learn is to hover the helicopter "tail-in" (tail towards you), which is a low altitude exercise. This means the instructor has less time to recover from your mistakes to save your aircraft, and simulator experience is recommended. One additional piece of training gear for beginner helicopter pilots is called... well... "training gear"! This "gear" typically resembles two dowels, crossed to form an "X", with wiffle balls on the ends. It is strapped to the landing gear of the helicopter, and it allows the helicopter to

slide on the ground, preventing it from tipping over (causing a great deal of damage).

## Intro Pilot Program

TCWS is one of only two clubs in the area that participates in the AMA's "Introductory Pilot Program". This program gives you a free 30-day training period. New pilots that aren't AMA members can fly with instructors designated as "Intro Pilots" and still be covered by the AMA's liability insurance. This means you can start learning to fly your model before deciding to spend the money to join the AMA or an RC aircraft club (to join most clubs, you must first join the AMA).

If you plan to fly nitro helicopters or airplanes, you should ultimately join a club to have a safe place to fly. If you wish to fly only small electric model aircraft, such as "park flyers" or micro-electric helicopters, joining a club is not absolutely necessary, but is still highly recommended. This Intro Pilot Program allows you to try out our club, and get free flight instruction for a 30-day period, after which time you can join up and continue to fly at our field if you wish.

## Some Popular Planes & Helicopters for Beginners

### *Hobbyzone Aerobird 3:*



380 direct drive brushed motor, NiMH battery pack, 3-channel control. Rear mounted pusher prop with V-tail. **CANNOT BE USED WITH A TRAINER BOX!!** Can be flown at a large field or park.

### *Hobbico Nexstar:*



A .46 sized 4-channel nitro powered plane, available in RTF or ARF (Almost Ready to Fly) versions. RTF version has "flight stabilization" electronics to help reduce risk of crashing. Has ailerons, so it is more aerobatic than a 3-channel aircraft without ailerons. Has flat bottom airfoil, so not as aerobatic as semi-symmetric airfoil. Should be flown at an RC aircraft club field for safety.

### *Eflite Blade CX2:*



A micro-electric RTF coaxial rotor heli. Extremely stable and easy to learn on, relative to other micro helicopter types. Includes a 2.4GHz spread spectrum radio system! **CANNOT BE USED WITH A TRAINER BOX!!** Can be easily flown indoors or outdoors with little to no wind.

### *JR Venture 30 CP:*



An entry level .30 sized collective-pitch nitro powered helicopter, available in ARF form. eCCPM mixing allows for use of cheaper servos than standard mix helis, but transmitter must have proper mixing capability. No thrust bearings in the head. Not as powerful or as aerobatic as a .50 sized heli. Should be flown at an RC aircraft club field for safety.

## Tri-County Wing Snappers can Help You!

If you want to get into RC planes or helicopters, check out our club website: <http://www.tcws.org>. Contact one of our instructors or club officers, they'll be glad to help you get started!

Our club is one of the nicest in the area. We have a beautiful flying field overlooking the mountains; golf-course quality grass that is mowed several times a week and kept very short for smooth landings and takeoffs; several safety benches to make starting nitro aircraft easier and safer; full service kitchen; hot dogs, hamburgers, cheese-steaks, cold drinks, and hot coffee can all be had for lunch on most weekends during the flying season and at all of our flying events; covered pavilion area with picnic tables for eating and talking about our hobby; on-site workshop with woodworking power-tools; on-site frequency-checker to scan all 72MHz aircraft channels for interference; more than six instructors designated as Intro Pilots; instructors that can train you with any type of aircraft, including jet turbines and helicopters; the list goes on and on!!

### Flight Instructors (all are Intro Pilots):

Lee Buskirk [lbjms@verizon.net](mailto:lbjms@verizon.net) 610-751-1464

Greg Sheets [sheetsg77@msn.com](mailto:sheetsg77@msn.com) 610-737-2246

Dave Renninger [xxspeed@comcast.net](mailto:xxspeed@comcast.net) 610-374-2306

Erik Rudjord (Turbines) [erudjord@ptd.net](mailto:erudjord@ptd.net) 610-285-2176

James Ellis (Helis) [racer8297@verizon.net](mailto:racer8297@verizon.net) 484-951-4322

### Check out our upcoming RC Aircraft events for 2008! (see our website for more details):

**May 17<sup>th</sup>, July 19<sup>th</sup>, & Sept 14<sup>th</sup>:** Learn to fly a nitro powered RC trainer plane at TCWS! Ages 8-80 are welcome to come to our training days. We'll give you some flight simulator experience, and let you fly one of our club trainer planes on a buddy-box with our instructors! See club website for details! [www.tcws.org](http://www.tcws.org)

**August 22<sup>nd</sup> - 24<sup>th</sup>:** TCWS/Farview Giant Scale Fun Fly. Come out to Farview's airfield to see large (25% scale and larger) RC airplanes fly! Check out the club websites for details: [www.tcws.org](http://www.tcws.org) and [www.farviewflyers.net](http://www.farviewflyers.net)

**October 10<sup>th</sup> - 12<sup>th</sup>:** Hamburg Jet Jamboree! Hosted by Farview Flyers and TCWS, held at Farview's airfield. Come see large RC model jet planes, powered by real turbine engines! Speeds can hit 180-200+mph! Check out the club websites for more details:

[www.tcws.org](http://www.tcws.org) and [www.farviewflyers.net](http://www.farviewflyers.net)