

Getting Started in this Wonderful Hobby of Model Aviation!

Introduction

Radio control model aviation is a family oriented, fun, exciting and educational hobby. It is a great feeling of accomplishment for both young and old alike to see an aircraft that you built and/or assembled take to the air under your control. Aerodynamics, construction techniques, propulsion systems, electricity, battery technologies and hand/eye coordination are just a few of the disciplines that will be learned/honed with involvement in model aviation. There are a multitude of different facets to this hobby. From small electric motor powered park flyer models to medium sized glow fuel internal combustion engine powered models to giant scale gasoline internal combustion engine powered models to helicopters, both electric and fuel powered. The sky is literally the limit when it comes to choosing a flying machine of your liking. The RMRCMA has club members that enjoy every different segment of radio control model aviation. This makes obtaining help and advice for new modelers a snap.

Getting Started

You are in luck if you are interested in getting started in this wonderful hobby of model aviation! The RMRCMA offer the Learn to Fly program for people who are interested in giving radio control model aviation a try. Anyone interested may obtain free flight instruction from a RMRCMA qualified flight instructor and we offer the first lesson free of charge, should you wish to continue with learning to fly, we ask that you join the club and the Academy of Model Aeronautics (AMA). The AMA membership is required for insurance. Annual membership fees for both the club and the AMA are very reasonable for adult members and junior membership fees are even more inexpensive. Please see the Membership Form and AMA Application Form pages on this website for dues information for both the club and AMA.

AMA Website: www.modelaircraft.org

To get started in our club, visit the RMRCMA website:

http://www.rmrcma.org/Join Us.php

Learning to fly

The process of learning to fly radio control model airplanes is gratifying. Students are instructed utilizing what is known as a "Buddy Box" system. Simply put, there are two radio control transmitter boxes used that are connected by a cable. The instructor uses the main transmitter for the airplane. Through a cable another transmitter is connected to the master transmitter, this is the buddy box, which is used by the student. When the instructor wants to give control of the model to the student, he/she depresses a switch on the master transmitter that allows the student to assume control of the model through the buddy box. If the student runs into trouble while flying the instructor simply releases the switch on the master transmitter and immediately resumes control of the model. This makes for a very seamless way of instructing new students and is also quite a positive for model longevity. RMRCMA instructors have buddy boxes and cables for the more popular brands of radios, which are made by JR and Futaba, however having your own buddy box is big help and a large time saver. Buddy boxes are inexpensive and the trainer cables commonly come with the radio control set when you purchase it.



Equipment needed to take the next steps

OK, so you have taken your free introductory lessons and you are hooked. Where do you go from here? Commonly now is the point in time where the new student purchases his/her own airplane and support equipment. There are a number of different trainer aircraft available, made by several companies. Some are more expensive than others and obviously with the higher cost, comes higher quality. Many of the trainer aircraft come highly prefabricated. These are known as ARF's which stands for Almost Ready to Fly. These aircraft are highly prefabricated and commonly require only a few evenings of work to make them ready for flight. There are also airplane kits available where you essentially purchase a box of balsa wood pieces and associated parts, that when assembled, make an airplane. The kits come with plans from which the airplane is built from. The airframe is constructed utilizing different glues and covered with a plastic iron on film. You then install your engine, radio gear, batteries, etc in the completed airframe. While building your first airplane from a kit is a very gratifying and educational experience, we recommend purchasing an ARF for your first trainer aircraft to get you in the air quickly and save the kit building for subsequent aircraft. Reason being is that the trainer is going to get beat up during the learning process, whether it is from less than perfect landings to the occasional crash.

The next decision that must be made is do you want an electric motor powered trainer or a glow fuel powered trainer. A glow fuel engine is an internal combustion engine that runs on a similar premise to a diesel engine and is also the most common. There are both 2-stroke and 4-stroke glow engines. Glow fuel is a mixture of methanol, nitro methane and lubricating oil. Electric power is just that, an electric motor spinning the propeller instead of an engine. With the advent of lithium polymer batteries, electric power is becoming more and more common. In fact, electric powered models have just as much, if not more power than many glow engine powered models. Glow power and electric power each have their pros and cons. Each mode of propulsion gets the job done and it is all a matter of preference.

Costs incurred in your initial purchase can be quite economical, however going the inexpensive way will normally get you equipment that is not very versatile and for lack of a better word, cheap. Many ARF trainer aircraft are very reasonably priced as with much of the field support equipment. Where we recommend spending a bit more money is in the radio control set and the engine. By spending a bit more money on the radio you will obtain a unit that you can grow into as your skills advance. The radio control units of today will give you many, many years of flawless service if well cared for. The same goes for the engine. You can go cheap and get an engine that you are constantly having to tinker with to keep it running correctly or you can purchase a quality engine that will run like a Swiss watch. When the time comes to move on to new, more advanced airplane the radio and engine can be utilized in the new airframe. There are so many choices and the RMRCMA Members are here to help you with those choices. Following is a common list of items to get you started for both glow power and electric power.

Glow Engine Power

1. Airplane

2. Engine

3. Radio control set

4. Propeller

5. Engine starter

6. 12 volt gel cell battery

7. Glow driver

8. Glow fuel

9. Fuel pump

10. Flight box to carry support equipment



Electric Motor Power

- 1. Airplane
- 2. Electric motor (may or may not be included w/airplane)
- 3. Radio control set
- 4. Propeller

- 5. At least 3 power battery packs
- 6. Battery charger
- 7. 12 volt automotive battery or power supply for field charging
- 8. Flight box to carry support equipment

How long will it take me to learn to fly on my own?

This is a tough question to answer as everyone learns differently and at their own pace. It will also depend greatly on how often you fly with your instructor. RMRCMA has a novice beginner policy for people who are just learning to fly. Prior to being able to fly solo without the instructor present, the beginner must prove their ability to be able to start the airplane engine, taxi out for takeoff, takeoff, perform both left hand and right hand flight patterns, land, taxi back to the pit area and shut down, all while not utilizing the buddy box. These are the initial skills that you will learn and become proficient at early on. Once you are able to demonstrate your ability, you are signed off to fly solo and able to fly on your own whenever you wish to do so, continuing to hone your skills.

Where can I purchase radio control merchandise? (Updated Feb. 2020)

We have hobby shops in the local area that are here to help you.

Power Hobby in Mahwah, NJ. 8 Industrial Ave, Mahwah, NJ 07430 https://www.powerhobby.com/

America's Hobby Center in North Bergen NJ. If they don't have what you are looking for on the shelf they can order it in for you. The store is located at 8300 Tonnelle Ave North Bergen NJ 07047. The phone number is (201)-662-0777. http://www.ahc1931.com/

Ridgefield Hobby in Ridgefield NJ. If they don't have what you are looking for on the shelf they can order it in for you. The store is located at 508 Broad Ave Ridgefield NJ 07657. The number is (201)-943-2636. https://www.facebook.com/RidgefieldHobby

There are also mail order hobby facilities which carry a large array of hobby related merchandise.

Horizon Hobby

Website: www.horizonhobby.com

Tower Hobbies

Website: www.towerhobbies.com



Troy Built Models

Website: <u>www.troybuiltmodels.com</u>

Esprit Models

Website: <u>www.espritmodel.com</u>

Chief Aircraft

Website: www.chiefaircraft.com

There are also mail order kit cutters and plans facilities which carry a large array of building related merchandise.

Laser Lizard Cut Short Kits

Website: <u>www.laserlizard.com</u>

Precision Cut Kits

Website: www.precisioncutkits.com

Laser Cut USA

Website: www.lasercutusa.com

Dave Platt Models Inc

Website: www.daveplattmodels.com

Nick Ziroli

Website: <u>www.ziroliplans.com</u>

Meister Scale

Website: <u>www.meister-scale.com</u>

The RMRCMA welcomes new members to the club and we are here to answer any questions you may have regarding the awesome hobby of radio control model aviation.