

An Introduction to Radio Controlled Model Aircraft

People have all types of hobbies to occupy their free time. Hobbies provide enjoyment for those who simply want to unwind from the daily routine of going to work, coming home, and then going to sleep. Hobbyists may take on any number of projects, such as crocheting, woodworking, and scale modeling. The latter has attracted a following further breaks down into niche interests, such as model railroading and aircraft. Building models takes a lot of patience and craftiness, especially when it comes to aircraft. Model aircraft are basically small-sized replicas of historical, modern, or imaginary aircraft. Model aircraft can be made from a variety of materials, including wood, foam, metal, plastic, paper, and fiberglass. Most model aircraft hobbyists use balsa wood, card stock, and polystyrene. Aircraft design range from gliders to scale models. Some hobbyists may design their model aircraft to actually fly. All of this requires time, effort, and patience to obtain a rewarding experience.



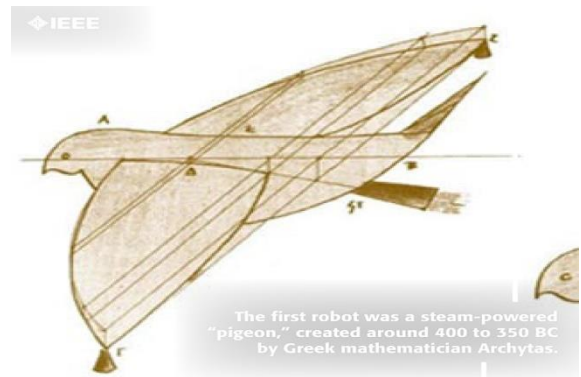
Today at very reasonable prices, starting at around \$200.00, one can purchase a 'new' 'Electric' plane, small or large, that is "READY TO FLY" complete with radio and auto stabilization. This is a way to enter the hobby to see if you have the aptitude for flying 'before' committing.

- [Great Hobbies](#) - Radio Controlled Airplane page & ["Getting Started"](#).

- The ["Model Aeronautic Association of Canada"](#) has low cost (\$20.00) 3 month introductory memberships. Membership also provides Liability Insurance and Safety Guidelines which supports government requirements.

Model aircraft creations extend back to ancient civilization. Remarkably, the oldest model aircraft was excavated in 1898 from the ruins of Saqqara tomb. Archeologists removed a six-inch object with a fuselage and curved wings.

At the time, none of the archeologists recognized the significance of the relic. In fact, nobody recognized the aerodynamic nature of the artifact until the 1960s, when Dr. Khalil Messiha initiated a debate about the origins of model aircraft craftsmanship. Other civilizations have created model aerodynamic machines with the intention of



One of the first robots was a steam-powered "pigeon," created around 400 to 350 BC by Greek mathematician Archytas. Archytas constructed his bird out of wood and used steam to power its movements. The bird, suspended from a pivot bar, was at one point able to fly about 200 meters (656.1 feet) before it ran out of steam. This makes Archytas' experiment not just the first known robot, but also one of the first recorded instances of a scientist doing research on how birds fly.

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having humans fly. Archytas, a Greek inventor, build a self-propelled machine called "the Pidgeon." In addition, Leonardo da Vinci documented his thoughts on model aircraft with his "Arial-screw" design. All of these resembled modern-day aircraft.

Modern model aircraft builders started their designs almost immediately after the Wright Brothers launched their first flight. Children and future pilots spent time building



scale models of the Wright flyer. By 1914, the military had developed flying aces which prompted the recreation of them on school yards. The progress in aeronautics also propelled the development of model building from World War I to World War II. After the wars, model

builders imagined airplanes taking the skies as passenger planes. Fifty years later, airline companies vied for attention by introducing toy model designs of commercial planes. During the 1970s, stealth bombers became the newest rage in model aircraft design. After the successful launch of the space program, model aircraft expanded to include spacecraft as NASA continued to grow. Replicas of the Discovery and Hubble Telescope were very popular among model builders. Radio-control models became the next best thing to flying a real aircraft or

spacecraft. It still continues today, where many hobbyists launch model rockets and fly planes. Today, model aircraft building can focus on futuristic aircraft that may one day mirror "UFOs" and Star Trek spaceships.



- [Academy of Model Aeronautics](#) - The American equivalent of the Model Aeronautic Association of Canada (MAAC) - there is a reciprocal agreement that allows us to fly in the U.S.A and still be covered by MAAC's liability insurance.
- [Model Aviation Canada - MAAC magazine.](#)

Building model aircraft to scale requires a lot of research, time, and patience. Hobbyists must pay close attention to finite details about the actual plane, including the individual

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parts and paint scheme. Many hobbyists purchase model aircraft kits to avoid creating one from scratch. In either case, model aircraft building requires the right equipment, paint, and tools to create a small-sized object. To create a model aircraft, a hobbyist mainly needs a sizable workspace, acrylic paints, knives, balsa wood, and fine-tip brushes.

To begin a project, a hobbyist must choose the right model to build. Modelers choose according to scale, also known as the relationship between the size of the model and the object it represents. In other words, a 1/48 scale means that the real object is 48 times larger than the model. Next, research the details of the model aircraft for the color shape, size, weight, and color schemes it represents to the real object. Read magazines, view photos, and search the Internet for information about the real object before building its replica.

Hobbyists using a kit can simply read the instructions to finish their first step in the building process. Kits have pre-fabricated parts and decals. Be sure to count all of the parts and match them



with the instructions. Call or write the manufacturer if any parts come up missing. Clean the parts with warm water and solution to remove any residue. Use a clean towel to dry the pieces.

Place all of the parts, tools, and equipment within arm's reach. Follow the instruction manual to paint all of the parts before assembling them. It takes about twenty-four hours for the paint to dry. Next, detach each of the parts and use sandpaper to smooth the jagged edges. Use glue to affix the parts in their right locations. Apply the decals in their right spot to complete the project. Be sure to inspect the model from a multiple of angles to see if any parts pried loose during the assembly.

- [Technical Articles](#)

Follow these links to learn more about building and flying model aircraft:

- [AMA Flight School](#)
- [Model Airplane News](#)
- [Model Aircraft Design: A Teaching Series for Secondary Students](#)
- [Model Aviation: Publication for the Academy of Model Aeronautics](#)
- [Hyper Scale: The Online Resource for Aircraft & Armour Modellers](#)
- [Fly RC Magazine](#)
- [Sports Aviator Magazine](#)