Aero Modelling - Hobby, Passion, Addiction

There's more than a few pilots who put their aircraft away at the end of the day or week, then get out their model plane and have a great deal of fun flying that as well. With about as many model aircraft clubs and events around the country as there are for full size aircraft, this is a very popular sport. In fact some of the models nearly are full size aircraft. KiwiFlyer correspondent Janice Angus has written a beginners guide to the sport for readers who may have watched from the sidelines with more than just a passing interest.

AERO modelling is no longer only the realm of middle aged men spending innumerable hours sequestered in their sheds covered in balsa wood dust.

Today, the sport encompasses many different and interesting regimes from foam flyers through to insanely maneuverable helicopters and gently soaring gliders. Regardless of what or how you fly, the basic components for model flying are the model, engine, and radio equipment.

Spot the difference to the real thing. Keen modellers ensure that all details are as accurate as possible. When some larger models are airborne, it can sometimes be difficult to tell what is real and what is not.

Genuine turbine power for this EC135 model !

The Models

Models can be scratch built from plans, though more popular now are Almost Ready to Fly kits (ARFs), which only require a few hours of airframe assembly, then add an engine and the electronics for control. A third type are the Park Flyers. These are usually of foam construction (expanded polypropylene), are electric powered, come complete with all components for flying the model and require very little assembly.

Types of models available include gentle and predictable trainers, true to life scale models, vintage and classic civilian and war planes through to competition level pattern ships and the full range of helicopters. Most model aircraft have a wing span of between 1 and 1.8m.

The Engines

Power options vary from electric to glow fuel, all the way through to genuine gas turbines. Glow fuel powered motors are currently the most widely used and run on a mixture of nitro methane, methanol and lubricant. Larger models are powered by petrol motors.

Radio Equipment

This includes the servos, receiver and transmitter. Servos are the components that move the control surfaces such as ailerons, rudder and elevator. The signal to move is picked up by the on board receiver based on the pilots control movements on their transmitter. Model airplanes fly in exactly the same manner as a full sized aircraft – aileron movement for bank, elevator for pitch etc. In club situations a peg board system is operated to ensure that each pilot is on their own unique frequency, for obvious reasons. More recent technology (spread spectrum) radio systems avoid this problem though most clubs are maintaining the good habits of the pegboard system.

Getting Involved

As with life sized airplanes, there is a lot to learn in order to get the aircraft back on the ground in one piece. A model aircraft is not a toy and is potentially a dangerous and lethal object. Beginners should always learn to fly through their local model aero club. The New Zealand governing body of model flying is the NZ Model Aeronautical Association Inc, branded as Model Flying NZ. Your local club is listed on the Model Flying NZ website (nzmaa.org.nz).

Most clubs have instructors and their own training aircraft to start you off. This is usually done on the "buddy system" where two radio transmitters are linked together via a cable. This enables the student to fly the aircraft, with the instructor overriding the controls if it becomes necessary.

Some very good computer flight simulators are also available and are used even by experienced flyers to fine tune skills or to get the flying fix when the weather won't comply. And of course, if you crash on the flight sim you won't have to spend time making repairs afterwards!

Be warned

This is an addictive pass time and I don't know of any model flyers with only one aircraft. If you get hooked then be prepared to require a larger vehicle for transporting your equipment, and to lose all your spare time as well as a bedroom or shed for building or storing your aircraft.

Contacts and Upcoming Events

Start with looking up your local club through Model Flying New Zealand, **www.nzmaa.org.nz**. Their website also has an extensive list of upcoming events, the next being an ANZAC Jet Meet at Tokoroa on February 13-15th. Or contact your local model store who should have all the information you need to get underway.