The Diversity of Aero Modelling

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LIKE ANY HOBBY, aero modelling brings together like minded people who share a common interest. Model flyers are a diverse bunch of people. On the field you could be rubbing shoulders with retired and currently working CEO's or airline pilots, people in IT, project managers, engineers, tradesmen and the not so common female enthusiasts such as myself. Within this community an extensive range of disciplines and sub interest groups have developed which makes this such an addictive and diverse pastime.

No matter what your preference is, you are sure to find a genre of model flying that suits your tastes. Some enjoy the sedate flight of vintage aircraft, others the adrenaline rush of pylon racing or the discipline of aerobatics. The beauty with aero modelling is that you can generally afford to have different aircraft from one or more of the classes. And isn't variety the spice of life?

The diversity of modelling: A 4m glider, pylon racing (note the crash helmets) and vintage balsa.

Gliders (Sail Planes)

Gliders were the original flying models. The technology has certainly advanced a long way from the rubber band powered paper and dope constructions of yesteryear. Modern gliders can be either powered or non-powered but all have characteristically large wing areas to generate maximum lift. Considered a relaxing, peaceful form of flying, a glider is very stable and a slower craft compared to powered planes. Control is via a standard transmitter/receiver set-up as used in powered aircraft.

Control Line

Control line flying has been around since the 1930's and is where many current senior flyers probably started their model flying. This was the first generation of controlled powered flight. Flying is restricted to a tethered circle as the aircraft is controlled by the pilot through two thin steel wires attached through the inboard wing tip. This control, through movement on the handle, operates the elevator giving the aircraft manoeuvrability along the pitch axis. These aircraft can perform extreme manoeuvres at a dizzyingly rapid speed.

Vintage

This category involves reproductions of a bygone age of modelling where the aircraft were a traditional design, scratch built, large balsa models. The originals, which date back to the 1930's, were powered by diesel motors and for the purist, modern diesel engines are available to power your modern version.

Vintage models are great for the building enthusiast but can now be purchased in kit form for easier construction if that is your preference. These are large, slow and gentle flyers and many have only have 3 channel control – throttle, elevator and rudder.

Pylon Flying

Considered the grand prix of flying where speed junkies get their fix racing against each other and the clock. Pylon racing is generally done around a triangular course with up to four planes of similar specification racing against each other. The aim is to fly as fast as possible around the pylons. A flag man is positioned at each pylon to ensure no shortcuts are taken (points are deducted for cutting inside a pylon). Each pilot has a caller who instructs the pilot when a pylon has been successfully rounded by watching the reaction of the flag man. This is not for the faint hearted – pilots, callers and flag men all wear crash helmets for protection!

Aerobatics

If you are into loops, rolls and knife-edges you will get a buzz from radio controlled aerobatics. Essentially there are two classes – Precision and 3D.

As the name indicates, Precision flying involves a series of precise, predetermined manoeuvres performed flawlessly. In aerobatic competitions there are two precision flying divisions – Pattern Flying and Scale Aerobatics. Pattern flying is for a specific type of model, referred to as a Pattern Plane which is designed for precision flying and has a wingspan of less than 2 metres. Scale aerobatics are performed with scaled down models of full sized aircraft and, typically, these planes have the same flying characteristics and aerobatic limitations as their big brothers.

A relatively recent development in model flying, 3D Aerobatics is more of a free style and gravity defying type of flying. These models have the kind of thrust to weight ratio that allows a 2 metre plus wingspan plane to hang vertically from the prop. The manoeuvres are generally done at an insane speed and this makes for a great spectator sport.

Scale Models

The challenge in scale modelling is to build a smaller version of a full sized aircraft that is authentic not just in appearance but that retains the performance characteristics as well. The finish is usually painstakingly detailed, right down to painting individual rivets and dials in the cockpit. There is no specific size restriction for scale models but generally they tend to be larger planes, some big enough to seat a small child in.

In summary

If any of the above types of model flying don't appeal there are other aspects that might such as free flight, electric, helicopters, soaring, jets and general large modelling and sport flyers. Most model aero clubs have Special Interest Groups (SIGS) that cater for members who want to concentrate on specific types of aircraft and flying. During the summer regular events and rallies are held for different aircraft types. These provide a good opportunity for pilots to show their latest builds and flying skills and to have a good catch up and get together. It's all good fun. Roll on summer (we live in hope)!