

Horsham & District Radio Control Model Club

Part nine - The types of engines for Model Aircraft

By the time you've read this far, you will have noticed that there are a wide variety of model engines available. Choosing the correct engine for a model is mostly down to personal choice, but the following information may be of use.

In the early days of model flying power was limited to rubber motors, indeed some free flight models still use this method today, and there is quite a degree of skill in achieving the correct power ratio for a particular model. Developments of the internal combustion engine for model use, started out with Spark Ignition, Diesel and eventually Glow-Plug engines.

All of these were initially 2 stroke engines, and it's only in the last 15 - 20 years that 4 stroke engines have been mass-produced for model use at a sensible price. More recently Gas-Turbine engines have been developed, which although expensive for the average modeller, do perform in a very scale like way. Therefore it can be quite a daunting challenge for the new modeller to choose the right engine for his/her model.

If you are learning to fly on a trainer, or indeed have progressed to a more advanced sport model, then a suitable 2-stroke glow-plug engine is probably the most suitable. These provide ample power for a very reasonable price.

If your interest is scale models, then it's likely that a 4-stroke engine is more suitable. Not only do these sound more realistic, but they do not need a large silencing system, therefore it's an easier job to hide the engine inside the airframe, enabling you to keep the scale lines of the original aircraft. This is not to say that you couldn't put a 4 stroke in a sports model, or indeed a 2 stroke in a scale model - it's really up to the individual.

Electric motors have also come on leaps and bounds in the last few years. The motors are relatively cheap but quite powerful. You also need to take into account the model batteries, a speed controller, charger and a battery to charge it up from. Although the initial outlay is probably more than a single internal combustion engine, you will not have to purchase fuel for several years, so in time it could work out fairly inexpensive.

Finally if you're building a scale jet aircraft, then do take time to look at the new gas turbine engines. Ideally go to a show where one is being flown. I think they will impress. All you need now is the money to go out and purchase one!