

Outdoor Scale Free Flight



A collection of 61 Scale Free Flight models celebrating the BMFA Centenary.

The free flight class of model can provide a very wide range of subjects to build, be they scratch built by the modeller, built from a plan or from a kit. With the introduction of modern technology in the form of a gyro this range of subjects has been expanded to the more unstable types previously not contemplated.

The cost of such models can be quite modest relatively speaking, compared to the radio-controlled type, and can be well be within the budget of most pockets. If flying scale models interests you, there is always an option to get started and advance further up to the Superscale class. For outdoor competition within the BMFA there are many varied classes of power and build complication from Rubber Precision up to the Superscale class which decides a National Champion.

Listed below are brief explanations of each outdoor class in the BMFA Rule Book. The latest version of the Rule Book is available via the BMFA and STC websites at [BMFA Public - Rule](#)

[Books](#)



Bill Dennis's consistently winning rubber powered Bucker bu 131 Jungmann. Based on the Eric Coates plan

Outdoor Free Flight Superscale Class's



Mike Smith's US Airmail DH4 flying at the BMFA National Centre, Buckminster

The FF1 Superscale class is the pinnacle of the Scale Free Flight contests.

In previous years there have been three separate contests for different powers with trophies awarded for each discipline. Internal combustion, usually a diesel. Rubber power and Co2 /Electric.

The Superscale contest now has all the powers in one class.

In this class the competitor is required to provide comprehensive documentation to enable the static judges to accurately assess the build accuracy and realism of the model. This is now a much simpler task with the availability of the internet than it was in the past, as long as the subject chosen is not too obscure.



Static Judging amongst the daisies at North Luffenham

The flying part of the contest is judged on the best flight from 4 or 6 rounds. Each flight is considered for the Initial climb, cruise, transition to descent and landing approach. There is also a score for overall realism in flight.

The landing is not judged.

The static score is added to the highest flying score to give a total score.

FF2 Scale Free Flight



You need a sense of humour in Scale Free Flight. Mike Kelsey with his Post WW1 SE5a.

This class is an updated version of the old Flying only class. The Flying Only has proved very successful over the years. But it was felt that a modest reward was needed for the better made and more realistic model. No documentation is needed to keep the class simple. The judges assess the models for craftsmanship and realism and awarded a score up to ten percent of the maximum flight score. If you have a recognisable scale model within the model characteristics specified in the rules, then you can compete in this usually very laid-back competition where the flying is judged with emphasis on realism in the air. No take-off required, which suits most of us.

FF3 Rubber Precision



This class has evolved somewhat since its beginnings and continues to have a good entry. Originally this class was for rubber power kit models only, hence it was called Kit Scale. The entry criteria has been extended to include any rubber powered scale model aeroplane. There is no static judging, but the model must be recognisable as a scale model. There is no flight judging for realism either, as the aim of the competition is to fly the model for a predetermined precision time, usually 30 seconds for three flights, not unlike a Bowden type of contest. The score is the time over or under the target time in seconds that are added up. The lowest score wins. The simplest model can compete with the open class type

on equal ground. All you have to do is make 3 flights of 30 seconds. Sounds simple doesn't it.

FF4 Eddie Riding Competitions



This class has two elements that make up the overall competition.

Eddie Riding Competition

The first element is a Scale Free Flight competition flown to the current BMFA FF2 Scale Free Flight rules for the Eddie Riding Memorial Rose Bowl Trophy. Trophies are also awarded for different model powers, I/C, Rubber and Co2/Electric. The best multi-engine and reaction motor powered models are also rewarded.

Eddie Riding Designs Competition

The second element is also run to FF2 Scale Free Flight rules and celebrates the designs of E J Riding who was a major contributor to the development of Scale Free Flight in the UK.



FF5 Assisted Scale Free Flight



A new class has been introduced in 2025 to make use of modern electronics, i.e. Radio Control and Gyros. This class enables the model to be flown in venues that are restricted in size. Rudder only RC with the option of a throttle and a gyro allows the model to be kept in the field where it was launched from. A modest amount of control is permitted but the model should be allowed to fly in a realistic free flight manner. Some degree of controlled landing is also afforded to the competitor. A pre-flight assessment is made in this class for Craftsmanship and Realism.

Build a model for this class or convert an existing model.

