



Model Makers Badge Requirements.

To gain this badge you must complete all the requirements in one of the following alternatives:

A

1. Construct a model aeroplane (the use of a kit is permitted) which, when flown, meets one of the following minimum flight performances:

Glider (hand launched) - 25 seconds

Glider (tow launched with 50 metres (164 feet) maximum line length) - 45 seconds

Rubber-powered - 30 seconds

Engine-powered - (15 seconds maximum motor run) - 45 seconds.

2. Have a knowledge of the basic principles of flight, including the three axes and their effect on stability and control.

B

1. Build an electric or engine-powered model boat or yacht, not less than 45cm (18 in) in length (kits permitted) and show it to be capable of maintaining a straight course of not less than 23 metres (25 yds).

2. Give a clear explanation of Archimedes' Principles.

C

1. Either:

Build an electric slot car racer (not from a kit, though a commercial body and other parts may be used) and drive it a minimum distance of 122 metres (400 ft) on any track without stopping or leaving the slot more than four times.

Or:

Build a free running car of any type (kits permitted) and demonstrate that it will run for at least 18 metres (20 yards). Airscrew drive is allowed.

2. Know how track and wheelbase are measured and sketch and explain Ackerman steering.