

## SAM 35 DICK ROBERTS MEMORIAL TROPHY FOR AIRCARS RULES.

Here are the rules for the Dick Roberts Memorial trophy event held annually for the award of a mounted, silver plated bust of Dick commissioned by SAM 35 to remember our dear friend and long term Committee and Life Member of our Society, who passed away in December 2020.

Right is an image of the bust sculpted by Dave Banks which was then professionally lost wax cast and silver plated. It is held for a year by the winner of each annual event to be held in Dick's name at the BMFA Buckminster tethered car track, and was won by John Goodall in 2021 (see images on next page).

This event will be open to all comers, not just SAM 35 members, to encourage participation in this aspect of the tethered car modelling activity, subject to entrants having the necessary BMFA insurance and having paid the site entry fee for the day, and for cars meeting all necessary safety guidelines (see separate guidelines document). To give broader appeal and encourage participation of all types of aircar models, this will not be just an out and out speed contest, but will give all types a chance by incorporating design and concours elements in the scoring, as set out in the rules later.



Dick was an avid tethered car enthusiast as well as vintage control line speed aeromodeller and model engineer, and the image here shows him with his innovative skeleton type tethered aircar, Oliver Tiger Mk 3 powered, which was the track record holder at the Retro Racing Club track in Lincolnshire in 2019 when the photo was taken. This car has been donated to SAM 35 for safekeeping by Dick's widow Babs, and will be awarded alongside the Trophy to the winner each year and be held in their safekeeping until the following year's event, and hopefully also given a commemorative timed run on the track by the winner when the results are declared, to make it a living memorial.

The 2021 event was held at the SAM 35 Retrofest weekend at Buckminster in June, and then each year at this event. The event will be run in SAM 35's usual relaxed and participative manner over both days, with maximum regard to safety aspects at all times, and entrants should be prepared to support in timing, horsing etc activities as needed please. You should be able to make a timed run on the Saturday morning of these events starting at 10am and up to say 2pm, subject to the availability of judge(s) and timers. You should hopefully be able to make two official timed attempts, and a maximum of three if possible depending on entry numbers in this and other car track events at the time, the best time to determine your placing. Please bear in mind that your SAM 35 organisers will have duties at other SAM activities and organising other events, but times can still be recorded when necessary during their absence by others delegated to keep the event rolling.

The outline rules are:

1. Engines. A single tractor or pusher diesel engine of 2.5cc maximum capacity must be used. No glow engines or tuned pipe or performance enhancing exhaust systems are permitted. No metal propellers shall be used.
  2. The engine's thrust line will be along or closely parallel to the centre line of the car. The distance between the thrust line and the centre of the bridle attachment hole to the tether cable must be in the range 9 to 10 inches (usually a standard 9 inches), and the hole must be of 4.5mm diameter to accommodate the standard FEMA style connector which is provided and must be used. The maximum distance of the wheels (including any balancing outrigger wheels) or any part of the car (apart from the bridle) on either side of the thrust line is 5 inches. This is to ensure that the car runs only on the quite narrow track flat running surface and does not foul any timing sensors which may be placed on the outboard track edge.
- Any car which does not, in the Judges' assessment, meet necessary safety standards for any reason will not be permitted to run on the track until satisfactory remedial alterations are made to make it safe. A maximum of 2 cars can be entered by each competitor.



3. Speed. Each car entered can make at least one and up to three officially timed runs over 8 laps/500m on the track as possible over the event weekend, the best time to count. Score is 1 point for a run of less than 50mph, 2 for 50.1 to 60mph, 3 for 60.1 to 70mph, 4 for 70.1 to 80mph, and 5 points for 80.1mph and above. Use a small fuel tank to avoid excessive running time on the track. A standard Buckminster specification tether cable of 0.8mm diameter piano wire with FEMA style connector will be used for all cars. A special safety “flag”/smother blanket device will be available to stop the engine on any car deemed to be causing any danger during a run, and the attempt will receive a nil speed score for the run. For safety, any car likely to reach a track speed of 100mph or more must be fitted with an effective fuel shut off device, either mechanical, electronic or both, w.e.f. July 2024. Timing should preferably be done using an electronic timing system, or if unavailable the average time from 2 stopwatches.

4. Concours. The Judge(s) will assess each entry on quality and the excellence of engineering execution of the mechanical build and Concours/quality of finish of each car to determine overall points for this category. Score is 5 or 4 points for points for best standards, 3 for good, and 2 or 1 for average.

5. Design and Technical Innovation. Again, the Judge(s) will assess each car for the degree to which a car represents an interesting, practical and original overall design with any desirable and appropriate features (such as sprung suspension, streamlining, etc.). Points score as for Concours above, 5 or 4 for best, 3 for good and 2 or 1 for average.

6. Add up the points for these 3 aspects for the overall score, the maximum is thus 15 out of 15.

7. In the result of a tie for 1<sup>st</sup> place for the overall score, the Judge(s) will allocate an additional 1 point at their discretion to the car which they consider the best on further and final consideration.

This scoring scheme has a reduced emphasis on outright speed, which is of course is still important, but it is perfectly possible for a slow to medium speed car to score well and win if innovative and beautifully made. The scoring system worked well for the first event in 2021, but may need to be revised in the light of experience of future events, so this will be considered at the end of each season with any suggestions input by participants.

Steve Betney and Nigel Bathe May 2024.

Here are some images from the inaugural 2021 event:

