

Border Bogie Challenge

Denholm, The Scottish Borders



Rules

Based on UK Gravity Sports Association Guidelines

Please bear in mind that we are not affiliated or part of the UK gravity sports association. We publish these rules and ask simply that you adhere to the spirit therein. These are not intended to be applied in a hard and fast manner – we're here for fun, but the bogies **MUST** be strong, safe, stable and have effective brakes and sound steering.

CONSTRUCTION RULES

1. DIMENSIONS AND WEIGHT:

Maximum overall length - 2300mm
Maximum overall width - 1500mm
Minimum track width - 700mm
Maximum weight of vehicle and ballast - 100kg

2. WHEELS

1. Bogie must be designed to have at least four load bearing wheels. Each wheel must support at least 10% and no more than 50% of the Bogie's unladen weight. Minimum wheel diameter - 200mm

3. DRIVING POSITION

1. The driver must be seated and forward facing.

4. DESIGN

1. Bogie must be powered solely by gravity. Unfortunately energy storage devices are banned (although they would be very interesting!)

3. Bogie must have an effective steering system with adequate turning ability for the course lay out. There must not be excessive free play, or any characteristic tending to promote instability.

4. Bogie must have an effective braking system. The brakes must be capable of holding the vehicle on a dry horizontal road surface, when laden with driver and ballast, against a horizontal load of 500 Newtons (50kg). Brakes should be graduated and apply equally to both sides of the Bogie.

5. Vehicles must be fitted a towing eye at the front in order to fit the organisers' towing equipment and to perform a brake test. The towing eye must be robust. The towing eye must be positioned to allow a towrope to pass freely beneath the vehicle to the rear without fouling the steering or braking systems.

6. It must not be possible for any part of the driver's body to become trapped in moving parts of the Bogie (i.e. wheels, steering assembly, etc).

7. Bogie must have no loose parts or sharp edges.

8. No glass or other materials that would shatter or cause injuries to drivers and spectators in the event of a crash can be used in the construction of the vehicle.

Any steering column, brake lever or other protrusion must be designed and fitted such that puncture injuries cannot happen. Bodywork and controls must not impede the driver in exiting the vehicle unaided. Any doors or hatches required for driver access must be readily operated from both inside and outside the vehicle without the use of tools.

If any part of the vehicle other than the seat back, upper parts of the wheels and the steering wheel/bar together with a central supporting column for this is higher than the hips of the driver when he/she is seated normally in the vehicle the following safety devices must be fitted and used:

5. SCRUTINEERING

1. Bogies can be Scrutineered two weeks before the event by prior arrangement or on the morning of the event. Bogies that pass may not then be substantially modified. Bogies that fail may only make required changes. Modified Bogies will be required to pass a further inspection before they are permitted to take part in the time trial. Bogies from teams that are based far away from Denholm Bogie Challenge organizers may request alternative scrutineering arrangements. Such requests will be negotiated on an individual basis and will be accommodated if at all possible.

2. Bogie must, in the opinion of the scrutineers, be safe, soundly made and robust enough to compete up to 3 times. It must not pose an unreasonable threat to the driver, other team members, event officials, members or the public, any property or animals in the vicinity, the environment or world political stability.

3. Bogies that the scrutineers believe to be safe and fit to take part but which do not meet all of the construction criteria will, at the scrutineers' discretion, be allowed to take part but will only be eligible for the non-race prize(s).

4. The scrutineers' decision is final.

THE EVENTS – CHILDREN & ADULT CHALLENGES

THE TEAM – AGE REQUIREMENTS

1. Any number of people can be in a team but only two will take part in the timed challenges. In the case of the Children's Team both competitors must be between 8 and till 15 years of age by the day of the race.
2. Adult team members are 16 years and above.

1. DISPLAY

1. All bogies must be available on the green between 9am and 11am for registration and scrutineering. Any team failing to display their Bogie at registration will be deemed to have withdrawn from the event. Bogies may be held overnight at The Denholm Meet so that the bogie can be moved over to the green on behalf of the team.

2. THE DRIVER

1. Adult Bogie driver must be 16 years or older on the day of the time trials.
2. Bogie driver must wear a full-face helmet, sturdy gloves, appropriate jacket, long trousers and appropriate footwear that will adequately protect the driver in the even of a "spill"
3. Bogie must have only one driver and no other people on board for each run.
4. Children Bogie driver must be under 16 years of age by the day of the race, but over 8 years of age on the same.

3. THE TIME TRIALS

1. No practice is permitted on the course on the day of the time trials.
2. Each Bogie will be allowed up to three timed runs on the course. Teams will be Allocated a start number before the event and must be ready to begin their timed run when called by the Start Marshal. Any undue delay may result in that run being voided.
3. The organisers reserve the right to eliminate the slower Bogies from the event after the second run if the event is running significantly behind schedule. Please note that this is only a contingency plan and it is hoped that it will not be necessary to invoke this rule.
4. Each Bogie will start from behind a marked start line, and will be timed from the start signal to when the front of the Bogie crosses the finish line. Running push starts by up to two people are permitted.
5. The Bogie will proceed down the course when signalled to start, and the timer will stop when the Bogie crosses the finish line. Any penalties, such as false starts and slalom cone hits, will be signalled to the Timekeeper and added on to the time for the run to produce the final time for the run.

7. A false start is where the Bogie crosses the start line before the start signal is given.
8. The driver must be in the Bogie when it crosses both the start and the finish line.
9. The driver of the Bogie must not intentionally touch the ground or get out of the Bogie during the run, excepting if the Bogie has come to a complete stop. If the Bogie has come to a complete stop, the driver may get out of the Bogie and/or touch the ground only for the purpose of getting the Bogie moving in the right direction again.
10. In the event of the Bogie coming to a stop because of an accident, the run may not be restarted until a marshal has confirmed that the driver is fit to continue.
11. Team members may follow their Bogie down the course. If the Bogie comes to a complete stop they may assist in getting the Bogie moving again. Team members may push to get the Bogie moving again after it has stopped. Team members must either return to the start or move to the end of the course as quickly as possible after their run is complete.
12. Bogie drivers will stop their carts as quickly as is safe if any race official gives them a stop signal. Failure to do so will result in immediate disqualification, and all previous runs will be deemed void.
13. Children Bogie Run starts at 10.30am sharp on the day. Each team has two timed runs using both drivers and an average score from both runs secures the time taken.
14. Adult Bogie Run starts at Midday on the day. Each team has two timed runs using both drivers and an average score from both runs secure the time taken..

4. THE COURSE

1. The course runs down the Dean Road (link from Denholm to Bonchester)
2. The course will be laid out on the morning of the time trials. It will include several features to test the skill of the driver and the handling of the Bogie.
3. The course will be no less than 4 feet wide at its narrowest.
4. The Children's Run is half the distance of the Adult Run.

5. BOGIE MODIFICATIONS

1. The Bogie may be repaired and adjusted but it may not be significantly modified after it has passed scrutineering, except that temporary decorations may be added to the Bogie for the Gala Display. The Bogie must be returned to the state in which it was when scrutineered before the start of the time trials on Saturday.
2. Parts may be replaced on a like-for-like basis, but no parts may be added to or removed from the Bogie.
3. Any replacements made during the time trials must be indicated to the pit lane marshal prior to being carried out and must be inspected and approved on completion.
4. Bogies may be inspected at any time to ensure continued compliance with the rules throughout the event.

6. PENALTIES

Certain rule infringements will incur time penalties, which will be added to the overall time for the run in which the rule infringement occurred. For the purpose of determining which run a penalty applies to, a run is deemed to start at the point at which the Bogie crossed the finish line of the previous run, or the start for the event for the first run. The following penalties are defined;

Infringement Penalty (seconds)

False start 5

Hit slalom cone 1

Unapproved modification (see rule 6) 5

Failure to stop Disqualification

Other penalties may be applied at the discretion of the event officials.

7. THE PRIZES

1. Border Reivers Trophy.

The team that makes the single fastest run down the hill, including any time penalties for that run, will be awarded the Border Reivers Trophy. In the event that more than one team has the same fastest time, their respective second fastest times will be considered, followed by the third fastest times. If the times are all equal, then the team with the fewer or fewest time penalties will be adjudged the winner. If, after all that, there is still no way to differentiate the teams, then the result will stand as a tie. The shield will be engraved with the Bogie's name and the year, and displayed in Denholm Meet. You don't get to keep it - sorry.

2. Team Trophy.

Awarded to the team with the lowest aggregate time for all three runs. In the event of a tie on aggregate time, the team with the fewer or fewest time penalties will be adjudged the winner. If, after all that, there is still no way to differentiate the teams, then the result will stand as a tie.

3. Isaac Newton prize for Bogie Science & Engineering.

Each team will pick the three Bogies that they think are best engineered, ranked in order of merit. Three points will be awarded for each first place vote, two for each second and one for each third place vote. The Bogie with the highest number of points will be declared the "Best Engineered". In the event of a tie on points, the Bogie with the most first place votes will be the winner, followed by second place votes if it is still a tie. If the Bogies are still equal after that, then the result will stand as a tie. National Class entries are not eligible for this prize.

4. Recycled Bogie Award.

The machine that is considered has the highest content of recycled material.

5. Best Decorated.

This is voted for by the general public on the morning of the event when the bogies are lined up on the green.

6. Most impressive Bogie Moments.

This is voted for by the marshals and helpers at the Bogie Challenge. It is awarded to the team responsible for the most memorable or most sporting moment of the day. If nothing warrants such a description, then the most spectacular crash will probably do.

7. Appeals

1. Any team may present an appeal regarding the actions of another team or teams, or regarding any adjudication, except that they may not appeal against a adjudication that is itself the result of an appeal.
2. All appeals must be received by the Chief Marshal Alexander White within 15 minutes of the Completion of the last run of the day.
3. There will be a fee of £10 per team for each appeal. This fee will be refunded if the appeal is upheld.
4. The team(s) that raise(s) the appeal will be bound to accept the decision. Multiple appeals on the same issue will not be entertained.