Check list for organizers of Nordic Scaleauto Championship

In the rules for the championship published on the website nm.embrey.se most things are clarified, but this check list is to support the organisers to meet them in a transparent and accurate way. The list is drafted by the two organisers this far, Lars Harrysson and Kimmo Rautama based on their experiences as both strengths and pitfalls. Then the draft is commented, reworked and accepted by the national delegates for the championship; Lasse Maté, Jaakko Pohjola, Rolf Andersen and Claus Henriksen.

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Pre-race

An organiser has a lot of preparations to do. The experiences from Gothenburg and Hyvinkää witness on the importance of a club providing a platform for a race to take place in their venue using their hospitality as well as knowledge about their venue and track. Further we wish these events to extend beyond a race meet and hope that the clubs may be able to grasp some fruits from the possible attention the race attracts. Live broadcasting from the events would be a great addition and we believe that the event 2017 can do this from using the LapMaster system.

Information

Provide a first invitation to the race at the latest in mid-September. It shall provide information on where the race will be held and some practical information on accommodation and such things. If possible provide details on best ways of travelling to the place (closest airport, trains and

ferries), or provide a link to a website where this can be obtained. An important issue is always to provide information on the recess of the braid on the track and if positive is on left or right.

Use the existing website for the championship (nm.embrey.se) for all official information. There is a linked Facebook site as well, which provides opportunities for discussion and updates along the way. Mia Ekman (mia@miman.se) supports both sites and the organisers can ask her for help if needed.

At the latest on December 1 there should be information on the race direction and other officials and a finalised timetable, if the one in the rules has to be altered for some reason. It is also up to the organiser to make the entries send in information to our Mia Ekman about the teams representing each nation; a short text about the teams and preferably team photos before individual photos. Use the national representatives to push for this to happen. It is good if this is all up on the web by December 15.

Venue

As slot racers we are used to various quality of venues. For the championship we wish the venues to be clean and to provide enough space for the 32 racers that may participate. Each team must be able to expect a pit space for each member of the team. This is a friendly meeting; hence if possible make teams share pit rooms across national belongings. If the pits are divided into several rooms, please make sure that all are equipped with equivalent services such as computer screens, sound, lighting, and comparable access to the track.

It is important that there are refreshments available at the venue. This becomes extra important in case of a venue isolated from a city centre, like in Gothenburg. There are no restrictions against the use of alcohol in the venue unless, as in Finland, there are restrictions from the club. However, it is important that racers behave. It is the organiser that points this out.

Track conditions

A championship requires a track in good condition. The Scaleauto cars are not that sensitive to uneven surfaces, but they do handle far better if the track is flat. It is also a requirement to chose a track without too many home driver advantages. A good track surface takes away some of this advantage. We want, and the organiser provides, a track that allows for the race to be decided by high quality driving figuring the layout of the track out.

We run most of our races on tracks that are used both with and without glue. The championship is run with added glue following a specific formula, and the track is broken in during the practice sessions leading up to the race. The formula is: 1/8 of a bottle of medium glue to 1/3 liter of solvent. This is sprayed lightly in the entry of every corner (20 cm before and 25 % in through the corner).

Important is that the braid is clean. It is particularly important that the organiser cleans the braid before the beginning of the race. A simple way of doing it is to allow for the teams to clean their starting lane.

Test the minimum lap time in the lap counting system properly before start as to make sure it is correctly set for the race. These cars roll a bit if the track is not fitted with a break circuit to break all cars irrespective of controllers and settings. We believe that feature is the case in Denmark.

Parts

During the championship the organiser provides the teams with handout tires. These shall be well prepared with branding and truing to an equal size presented on the website. The size has to be within the rules of course. It should be possible for the teams to purchase tires from the same batch as the race tires, but without branding.

It is advisable that the organiser presents an opportunity for participants to purchase parts during the event either by own sales or by allowing someone to do it for them.

Practice sessions

The rules provide a layout for the practice sessions. Follow it closely. Open practice before the scheduled practice starts shall be equally distributed between the teams except in a situation where it is asked for driving to break the track in either at the beginning of the meet or in the morning of the racing day. This exception may never extend over longer time than 30 minutes and shall always be initiated by a question to all teams if they want a spot.

Always keep an updated timetable visible announcing earliest starting time of a practice session.

During practice there must always be some present at the race control and run track calls. Observe that the turn off of the track shall be an override of the computer as to allow for the practice time to run during the track call.

During practice session it shall be possible for the teams to technically test a motor and have it branded and put in parc fermé if passed. It may have cables and pinion mounted. It is advisable that each team have at least one extra motor tested and ready to use if needed during the race.

During all scheduled practice sessions the equipment used in technical inspection shall be available for the teams to test their cars widths, weights and revs.

As through the race, the teams must marshall the corner related to the lane they drive on in practice sessions. Keep good control over this.

Race direction and Race jury

The organiser presents a race direction consisting of a race director and a few deputies making sure that race control always can be manned, that technical control can be fulfilled, that the track can be fixed if faulty, and that race results are updated and available.

It is important that these officials are knowledgeable about the rules and the technical requirements. They must also be aware of their independent status from the organiser and the organising nation. All falls back ion the race director to have control.

In the case of rule interpretations and in situations where rules are not existent, for example regarding the tight space behind the drivers in Hyvinkää, the race director shall turn to the Race jury. The Race jury consists of the nation representatives, and if they are not present, by their prepresented deputy. The Race jury advices the race director whom will finally make a decision. In the case of a rule dispute during racing, the race can be interrupted for the jury to meet and sort the issue. The decision following a race jury meeting is final.

The race jury and the race director always meet past the race for an evaluation. See below.

Race

The event starts as soon as the practice sessions are on their way, while the race starts when the race meeting is held prior to that technical inspection opens.

Race meeting

The race meeting is to inform the teams about what to expect, times, rules and specific judgemental issues around the track such as track call zones.

Technical inspection and Handout of parts

To technically inspect a Scaleauto car requires knowledge of the rules and of the technical specifications of the cars. The rules are written in a way to say what is expected from a car and allows for car builders to develop their cars within these boundaries. To some respect there are details that are hard to test, but the tech director has the discretion to make decisions of rule interpretation and reason issues with the race jury through the race director. Take for example the issue of body thickness. According to the rules you are not allowed to in any way make the body thinner. A body resprayed painted from a white kit is tough to assess, particularly if it is painted on the inside. However, you are allowed to trim details inside of the body that extrudes after fitting the interior, lights, vents and so on. You are allowed to reinforce the body inside with tape or glue, but not making it visible outside. Observe that a lot of reinforcements at some position should lead to a higher total weight of the body. Do not allow teams/drivers to hang over the technical officials when they fulfil their task. Take your time; it is only 8 cars to be tested.

Engraving of chassis, motors and bodies is a wise way of making sure that the same car is ending the race as started it. Use ways that are visible, but also some that are not known to anybody but the race direction. This is done past technical inspection but before the line-up.

The handout of the tires is done in technical inspection. The tires shall never leave parc fermé unless fitted on the car for racing.

The motors are tested using a revolution meter. The motors are fitted in the car and tested using the only accepted gear ratio (12-44). Check the gear ratio well. Check so that the rear axle runs easy (there should be a slight movement of the axle sideways and the bearings fitted straight) and that the mesh between pinion and gear is not too tight. Our experiences in Hyvinkää were that the accepted revolutions were set to cut out the best motors, but also that we perhaps were to close to a normal broken in motor. Ask the rule responsible group (race jury) about a level prior to the race. Use a stabilised power supply to run your test equipment. Easiest would be to run it on a non-adjustable 12 V supply. A possible solution is that technical inspection has a "roller" without motor in which a team's motor can be tested and branded. Then during the inspection mount their engraved motor to their car.

Race direction should do at least a couple of unannounced technical checks on the fly. During these checks clearance (0,8 mm), width (front spur 80 mm and rear spur 83 mm), overall car weight (190gr).

Required services under green light and tech table

It is a continuous discussion during model car racing what and when things have to be repaired. In Gothenburg the race jury had a discussion concerning the use of silver tape to repair during

the race. It was decided that it was ok as in real racing that is a typical way of fixing body problems. It does not, however, allow tape to be used prior to start on the outside or to fit things in a non-intended position (give or take). To use tape across the lights in the front and the rear is a classical way to reinforce them in racing and was accepted in Hyvinkää. It is acceptable to reinforce the rear wing stands with tape during a repair as long as the tape is placed under the wing only and allow the wing to be fixed in its original position. Tape reinforcement is not allowed at start of the race.

The rules are sort of clear that acceptable losses during the race is windshield vipers and revision mirrors and that the loss of a rear wing requires immediate repair. Still it is impossible to run a race without some levy to this. The rules state a few things that may advice us. First there is a minimum weight on the body (55 grams) and on the car (190 grams). The former is tested in tech, the latter both in tech and in post-tech. Second there is a visibility rule saying that nothing of the chassis except for the sides of the wheels may be seen from the outside viewing it from above and from the sides. With these two rules we may be able to say that as soon as a lost part allows us to either see something of the chassis or that the weight of the body has fallen below 55 grams, or both, then it has to be fixed immediately. Rear wings excepted. Such an interpretation requires us to stop the track to make a call, particularly the weight issue. As soon as a problem is found and repairs are necessary the track is put on again.

The Dodge Viper model does not present any spare parts kit, thus the loss of a light glass or other detail may present it impossible to fix. Light glasses and towing rings should hence be included in the vipers and mirrors section of the rules. However, the loss of them must not make the weight of the body go below 55 grams. A body should hence be heavier than 55 grams in tech to allow for the loss of two mirrors, the light glasses and the tow ring, or the test weight after tech should be reduced by the weight of these details, approximately 1 gram. An interpretation like this shall concern all accepted car models.

All repairs shall be fulfilled on green light. No work in track calls or lane changes. The organiser must control this. Repairs may be fulfilled in their own pit, but the car may not be put back on the track until tested by the tech. If repaired at own pit, engravings on chassis, body, motor and tires are checked as well as the repairs themselves before re-entering the racing and making laps. Easiest is that an official is following the repairs at site. This is of course the case also at the tech table. As organiser you need to be aware of providing this service to the repairing teams. The post tech is done on green light.

Required driving times per driver

As organiser you are responsible for that the driving times are noted down properly and preferably available to all teams to see. If not the latter, let all know at times what the situation is like.

Result services and Internet broadcast

Use a well-established lap-counting system. Make sure that the participants easily may follow results, and in case it is needed explain how the layout of the system works. The Danish LapMaster has several screens and provides a lot of unnecessary information on the main screen. Try to minimize the info on that screen.

To broadcast online during the race would be fun. It is possible to use the official website to announce a link which people can use to follow it live. Update of results in table form can be done on the official Facebook site and at the end of course on the official website.

Post-race

The Race jury and the Race director summarises their experiences and draft discussions for next year's event directly after the race. It is very good if the organiser and the coming organiser participate in parts of that meeting as well.

Most important rule!!!

We do this to have some fun (when we win © or lose)

Kimmo and Lars