

# SCRUTINEERING NEWS

Compiled 31/3/08

*The latest points of interest from the Scrutineering and Off Road Committee meeting held 12<sup>th</sup> January 2008:-*

## **Marshals Training**

Denis Bourne has created a draft document and sent it to Simone Birch and Paul Barton for review. 2 or 3 reps from each club can attend training sessions run by the ALRC and then cascade down to club members using the "Train the Trainer" principle. The training will not be obligatory. Fire training was discussed. Details of training courses can be found at the British Rally Marshals Club. See page 54 of the Directory section of the 2008 MSA Yearbook.

**This is an on-going issue – we will inform the membership if the courses go ahead and will be seeking volunteers.**

## **Seat-Belts in CCVs**

Rule F.2.1. says "Minimum of a lap belt to be worn by all occupants whilst on a section."

Q. Is a lap-belt adequate or should the ALRC seat-belt rules reflect the MSA minima as defined in MSA reg "**C(c) Seats, Seat Belts and Headrests.**" on page 158 of the MSA Yearbook 2008?

A. Several members reported recent incidents where they felt that a lap-belt was not adequate. Others felt that as a CCV is harder than an RTV, then the seat-belt specs should be at least 3-point or maybe 4-point. Agreed that seat belts must be worn as designed. Start marshal to check at start line.

**See also Ian Davis's comment (below). Ian pointed out that the ALRC is entitled to set a higher standard than that set by the MSA.**

## **Smokey Diesel Engines**

Q. Are smokey diesel engines acceptable?

A. This would be a fail in the visual smoke visual test in an MOT test so wouldn't be acceptable in an RTV. But what about other events? Smoke can emit from a diesel engine on hard acceleration and not be a fault. Similarly, highly tuned diesel engines also smoke. What about environmental considerations? The ALRC has not conducted any environmental impact of its activities as yet.

## **Window Aperture Mesh on Comp Safari Vehicles.**

A statement from Peaks & Ducks LRC - "At Tuesdays committee meeting it was decided that all our 2008 P&D Comp Safari SRs will include the use of a side mesh/net to prevent drivers arms/hands becoming injured in the event of a roll. The decision was taken after a recent such accident at Norwood. Of all the accidents we have had over the past few years arms/hands beneath roll cages has been the most cause for concern and resulted in three such incidents, we feel would have been prevented by the use of nets. We would like for these recommendations implementations to go forward for consideration on Safety Grounds to the ALRC for inclusion in the Green Book." This raised questions regarding securing method, mesh pitch, material width thickness, etc. Furthermore, marshals would need to know how to detach the net and/or be equipped with appropriate knives to cut the net open. General view was to see what P&D come up with.

**See also Ian Davis's comments (below). P&D will require this at all of their comps.**

*Ian Davis, representative from the MSA, was at the meeting for a question and answer session. Items of interest are listed below:-*

### **Seat Belts for Trials**

Q. Should the ALRC change its seat-belt requirements for trials?

A. Lap and diagonal type is designed primarily for forward impact, not a side impact which is the most common in trials. The lap-belt is adequate for this type of trial and also enables the drivers to have free movement to enable them to look around during manoeuvring. An inertia reel full harness set is being tested. Allows driver to have free movement but will restrain them in event of an accident. Cost around £45-50.

### **Seat Belts for Timed / Speed Events**

Over-shoulder belts requirements – the combined / merged design is no longer homologated, i.e. each over-shoulder belt must go to a separate attachment eye-bolt.

### **Side Mesh / Window Net**

Usual design enables the window to be opened providing a mesh protection. Normally attaches to the door and opens with it. Most Comp Safari vehicles don't have full door frames and so the mesh would have to be attached to the body / roll cage and would have to be detached prior to extracting the occupants. The MSA has discussed this at length and decided that a side net would be more of a hindrance than a help.

### **Aggressive Tyres**

The MSA has looked at two levels of off-road tyres loosely categorised as "Mud Terrain" and "All Terrain". It's possible that a list of acceptable tyres could be issued but there are so many types. The Goodyear Mud Terrain was used as one of the control tyres. Resulting ground damage is one of the factors and some events have already been run using less aggressive tyres. Noteworthy was the reduction in transmission failures resulting from reduced traction. Authorities are using satellite imaging to identify land condition.

### **Use of Bio-diesel and Other Natural Fuels**

All MSA event vehicles must use pump fuels and these are defined in the Terminology section of the MSA Yearbook pages 59/60. Bio-diesel and bio-ethanol may be used only with specific approval of the MSA.

### **Comp Safari Average Speeds**

Speeds are creeping up but vehicle design is not advancing to compensate. It's easy to set up courses to keep average speeds down to the required level. The organisers are responsible for keeping the speeds in check. Higher speeds have the potential for more serious accidents and consequently require a greater level of medical cover and safety equipment. In particular, the roll-cage material needs to be considered. For example, the MSA allowed the "blue band" tube used in ALRC roll-cage designs to be used but only in slow events such as trials and Comp Safaris run to the slower range of speeds.

### **Underslung LPG Gas Tanks**

LPG tanks and associated systems are safer than petrol systems which use rather fragile tanks and vulnerable plumbing. He stated that it's really up to the scrutineer to make the judgement but felt that vehicles so equipped were not really suitable for trialling.

*The following is a rule proposal only – for all those to bear in mind in modified classes:-*

### **Suspension Rule Proposal**

Below is the draft proposal for suspension on modified class vehicles.

#### **DRAFT - C5 SUSPENSION & AXLES**

*C5.1 Three suspension system types are allowed - leaf sprung, coil or air sprung and must be of original Land Rover design.*

*C5.1.1 The use of Air suspension shall be restricted to classes and periods where fitted as original equipment.*

*C5.1.2 Components from each shall not be mixed unless the original LR design allowed for parts to be interchangeable between systems.*

*C5.1.3 Components shall not be cut, welded, bent or shortened or lengthened and shall each be a standard size and LR production design to match the appropriate LR part number.*

*C5.1.4 Mountings of suspension (leaf, coil, air) to axles shall match the corresponding standard vehicle type in terms of LR design, position, strength and location. Strengthening of mountings from standard is permitted.*

*C5.1.5 Locations of mountings of shock absorbers shall be free provided that they are not attached to roll cage members unless they comply with the MSA blue book 2007, P254, H.36.5.2.. Strengthening from standard is permitted.*

*C5.1.6 The function of any part of a suspension system, (be it leaf, coil, air), including axle mountings, shock absorber mountings, bush mountings and radius arm mountings shall match the standard suspension system and it is not permitted to use any element from a standard suspension system for a different purpose than that designed for by LR on the standard suspension system.*

*C5.1.7 Suspension shock absorber turrets may be fabricated.*

*C5.1.8 Steering drop arms and track and steering rods and associate steering track rod arms do not form part of the suspension system which is defined as all other parts of the sprung elements of the axles including stub axles, roll bars, shock absorbers, Panhard rods, bump stops, radius arms, road springs/coils, air suspension parts, and associated u-bolts, shackles, bushes, mountings and parts capable of moving under suspension loadings.*

*C5.1.9 All suspension and steering nuts must be fastened properly so as to be tightened to a minimum of the manufacturer's appropriate torque settings*

**CHIEF SCRUTINEER - SIMON COOPER**