

# Safe filming and recording involving vehicles

## HSE information sheet

### Entertainment Information Sheet No 22 (Revision 1)

### Introduction

In this information sheet, '**must**' denotes a legal obligation. Words such as 'do', 'should' etc are used to give advice on good practice and are not compulsory.

This information sheet is one of a series produced by HSE in consultation with the Joint Advisory Committee for Entertainment (JACE). It gives general guidance on the risks associated with filming and recording of and from vehicles and is relevant to film, television and radio. The general principles can be applied to all road vehicles.

This information sheet only deals with matters relating to health and safety. For issues relating to the Road Traffic Acts, the police should be consulted.

Activities this guidance relates to:

- Road testing or other car or motorcycle shooting on public roads.
- Filming of motorcycles from cars at normal speeds on public roads.
- Road testing and driving shots of cars and motorcycles at high(er) speeds on closed tracks.
- Recording interviews, dialogue or commentary by a driver or passenger of a moving vehicle.
- Filming or recording commentary of motor racing, from trackside or using mounted cameras.
- Recording commentary as a passenger in a motor racing car.
- Use of A-frames, low-loaders or specialist modified vehicles.
- Off-road use, including 4 x 4 vehicles.

### Legislation

The main legal requirements covering recording from vehicles are the Health and Safety at Work etc Act 1974, the Management of Health and Safety at Work Regulations 1999 as amended, (the Management Regulations) and the Road Traffic Acts of 1988 and 1991 and related legislation.

The Management Regulations require a suitable and sufficient risk assessment to be conducted. This must be carried out by employers and by the self-employed to assess the risk to themselves, their employees and others who may be affected by their activities. It should be used to identify control measures that can be implemented to control the risks identified. The opportunity should be taken during risk assessment to consider the application of any other relevant health and safety legislation, including the requirement to consider fire precautions and emergency procedures.

If a vehicle is to be used on the public highway all road traffic legislation must be complied with, including the Road Traffic Acts 1988 and 1991. The Highway Code and local by-laws, as well as health and safety legislation, will also be relevant.

Where there are concerns over compliance with road traffic legislation, the police or local authority should be consulted as appropriate. Advice should be sought from the local authority responsible for the location where the action will be filmed. Where road traffic legislation does not apply, health and safety legislation will still be relevant.

The activities of the production must not put any other road users at risk. This includes making sure warning signs for all vehicles are fully operational and visible to other road users, eg braking lights.

There are certain incidents that occur on the public highway that may be reportable to HSE as well as the police. The most likely situation in filming would be if someone who is unloading by the roadside is injured. Any incident resulting in major injury or over 3-day injury on land where the road traffic legislation does not apply is reportable to HSE. An over 3-day injury is one that is not 'major' but which results in the injured person being away from work or unable to do the full range of their normal duties for more than three days.

For the latest requirements go to [www.hse.gov.uk/riddor](http://www.hse.gov.uk/riddor).

## **Competence**

All drivers need to be competent for the activity they are to be involved in; anything that they are asked to do should be within their ability. This is of particular concern when the driver is an artiste or a member of the public. Adequate time should be allowed for rehearsal, especially if the driver is inexperienced in delivering pieces to camera etc. Competence includes being aware of the vehicle's limitations and the limitations of their own driving ability. People should not be encouraged to exceed them.

A person at the wheel should not be distracted from driving, for example by being in sole charge of recording equipment. Where specialist driving is required, for example vehicle stunts or high-speed work, the driver should have appropriate experience and, where applicable, qualifications. The vehicle should be suitable for the activity.

Unless the camera operator and bike rider are experienced in the activity, manned cameras on motorcycles should not be used.

## **Risk assessment**

Operations on, in or near vehicles involve risk and therefore a risk assessment must be carried out before any production activity. This must be reviewed as necessary if more information becomes available or if circumstances change. The risk assessment will determine what control measures are needed.

The risk assessment may require an exchange of information with other parties, eg event organisers or police. These other parties should also have carried out a risk assessment of their own activities. The producer/event organiser should liaise with these bodies to make sure that all hazards arising from the event have been identified and that everyone is aware of the risks arising from each other's activities and of the control measures that are in place.

## **What can go wrong?**

For example:

- injury to crew, presenters or other workers;
- injury to members of the public/onlookers;
- hearing damage - exposure to high levels of noise could cause hearing damage;
- inability to communicate between presenters and crews;
- accident at high speed (race speeds on motor racing circuits and maximum speed limits on public roads);

- in-car camera/recording equipment could injure passengers in vehicles;
- distracting other drivers.

## **Participation**

If the impression that a performer is participating in a race is required, you should consider whether participation is really necessary to achieve the recording or pictures that are needed. Recording the piece without pressures of participation is a good control measure. All speeds and manoeuvres must be kept to safe limits. Sufficient rehearsal time should be allowed.

## **Position of equipment/personnel**

The equipment and any operator must not obstruct the driver's view, distract their attention while driving or put other persons at risk. The position of personnel must be safe in all circumstances, including all foreseeable emergencies.

When working in motor racing pits, production teams should have a 'minder' with them to look out for dangerous movement of vehicles or equipment in potentially dangerous positions. These are high-risk areas and the risk assessment must clearly demonstrate the need to be present, the nature of the activities and the proposed control measures with specific reference to communications, positioning of personnel and provision of appropriate personal protective equipment.

Trackside positions should take account of the possibility of vehicles leaving the track at speed, eg beyond bends or at wet/muddy stretches. Where this risk exists, advice should be taken from competent persons, eg a racing driver, about filming positions and an assessment made which considers the use of protective barriers or locked off or remote cameras.

When filming from the passenger seats of vehicles, people should be properly seated with seat belts or in a safe and secure position. People should not crouch in a footwell. The camera can be fixed in the required position, and the picture viewed via a remote monitor.

When shooting through a side window, operators should not lean out or let the camera lens protrude beyond the plane of the vehicle. Similarly, a side-mounted camera may be a hazard to vehicles overtaking and/or pedestrians if it protrudes.

When filming 'up and passes' or 'run bys' on a public highway, the camera and equipment should be a safe distance from the edge of the road and on the inside

of any bends ('up and passes' describes the way the camera is used to film the vehicle.)

Filming by a pillion passenger facing backwards on a bike is only acceptable if the bike is properly adapted, the rider and camera operator are competent specialists and the activity complies with any road traffic legislation/local by-laws. For all work on or close to the public highway, the need for appropriate high-visibility clothing must be considered in the production risk assessment.

## **Restraints on equipment and people**

While a vehicle is being driven on a public highway drivers and passengers must be effectively restrained in accordance with road traffic legislation. Wherever possible, lightweight cameras should be used. Camera operators must not stand up and shoot through the sunroof while the vehicle is moving.

There must be effective measures to prevent equipment striking any occupant in the event of an emergency stop or collision. Steps should be taken to prevent small items of equipment from causing a hazard to the normal operation of the vehicle or striking somebody in the event of a collision.

The likelihood that convertible-type or open-backed vehicles may overturn must be considered and appropriate controls put in place. The controls should be identified as a result of the risk assessment and may include the reduction of speed, use of vehicles fitted with roll bars etc. Any film or recording equipment should either be securely mounted or independently secured by safety lanyards. An exception may be for a small, hand-held camera used in the front seat, but even then the risk to a driver in a side-impact must be considered. The effect of the deployment of airbags must also be considered as any equipment in the vicinity may be pushed violently towards occupants of the vehicle.

## **Communication**

Drivers and crews must be briefed beforehand of the shots to be attempted. There must be effective communication at all times.

When using a tracking vehicle the driver of any overtaking vehicle should decide when it is safe to pass. Only competent and authorised personnel who have appropriate training or expertise and compliant clothing may direct traffic.

## **Selection of equipment**

When it is not possible to use a full-size camera safely, for example to achieve close-up, car-to-car shots of wheels, a remote mini-camera should be used. Mini-camera equipment and mounts must be fit for purpose and should only be fitted by competent persons. Unmanned, fixed mini-cameras can be used for pieces to camera on motor vehicles. Equipment must be placed so as not to increase the likelihood of an injury in the event of an accident. When mounted on motorcycles, consideration should be given to the location so as not to adversely affect the balance of the bike.

Always use an appropriate vehicle for the planned activity. Vehicles must be fully maintained and in a roadworthy condition, complying with the road traffic and vehicle legislation that applies. They must also be used in the way they were designed to be used. If there is any modification to a vehicle, this must be subject to a full risk assessment.

## **Pieces to camera while driving**

Performers need to keep their eyes on the road and look at the camera for no longer than they would normally look away to inspect their instruments or look in the rear-view mirror. They should also try to keep both hands on the wheel when recording pieces to camera, except for the occasional gesture or for operation of controls.

## **Tracking vehicles and the use of low-loaders and 'A-frames'**

There should be a nominated competent person who will be responsible for the control of the tracking vehicle and who will work in conjunction with the driver. Tracking on public highways should only be done with the agreement of the local authority/highways agency and the local police authority. Tracking shots (car-to-car) should only be done from a specially modified tracking vehicle or one in which the structural integrity is not compromised by having doors/tailgates open. The route should be checked prior to filming to identify potential hazards such as speed bumps etc.

All the crew should be suitably restrained when the vehicle is in motion. Care should be taken to ensure no loose objects will fall out of the moving car - the camera and any other kit should be secured appropriately. The vehicle and all technical equipment should be fully secured by a competent person. Also, the lights should not create glare that may distract other motorists.

Care should be taken when shooting cars mounted on low-loaders or A-frames. If a passenger is to be carried on the back, you must consult with the local police force. Anyone filming or recording should be securely harnessed to appropriate anchor points and no one should be permitted to sit on the handrails.

Safety rails on low-loaders and A-frames must not be altered for any filming purpose unless full approval is given by the equipment supplier and the work is carried out by experienced and qualified vehicle technicians.

The maximum weight and limit on numbers of persons for low-loaders and A-frames must not be exceeded. Information regarding the maximum weights permitted can be found on a plate located either in the cab of the vehicle or on the nearside of the trailer. Further information may be obtained from the 'plating certificate' issued to the vehicle operator/owner.

If you are intending to use a low-loader with an extension platform fitted and the vehicle exceeds the legal road width, you should consult the local authority/highways agency.

All unit crew personnel working on or around a low-loader or A-frame must be fully briefed in the safety measures.

Consideration should be given to extra front/rear 'buffer' vehicles to give advance warning of unforeseen hazards ahead and to create a safe area behind the moving scene.

## **Noise**

The Control of Noise at Work Regulations 2005 requires employers to take specific action at certain action values. These relate to levels of exposure of noise to employees calculated over a working day or week and the maximum noise (peak sound pressure) to which employees are exposed in a working day.

Employers are required to carry out a noise assessment if their employees are likely to have a daily or weekly exposure of 80 dB (A weighted) or to be exposed to a peak sound pressure of 135 dB (C weighted). Employees are not to be exposed to noise above the exposure limit (137 dB (C weighted)). The peak sound pressure level of 135 dB could be exceeded by acts such as starting up performance vehicles and motorbikes. There are further requirements placed on employers by the Regulations to:

- Take action to reduce the exposure to the noise producing risk.

- Provide employees with suitable hearing protection if you cannot reduce the noise exposure enough by using other methods.
- Make sure the noise exposure limits are not exceeded.
- Provide employees with information, instruction and training.
- Carry out health surveillance where your risk assessment shows there is a risk to health.

Vehicle noise levels are a particular problem at motoring events, as talkback may have to be at high levels for operators to hear it clearly. The consequent risk of hearing damage can be reduced by wearing sound-excluding headphones to reduce the effect of vehicle noise or allowing loud talkback through ordinary headphones, but wearing earplugs to reduce the noise levels reaching the ear.

## Further reading

*Health and safety in audio-visual production: Your legal duties* Leaflet INDG360 HSE Books 2002 (priced packs of 5 ISBN 978 0 7176 2551 2) [www.hse.gov.uk/pubns/indg360.pdf](http://www.hse.gov.uk/pubns/indg360.pdf)

*Management of health and safety at work. Management of Health and Safety at Work Regulations 1999. Approved Code of Practice and guidance L21* (Second edition) HSE Books 2000 ISBN 978 0 7176 2488 1 [www.hse.gov.uk/pubns/books/l21.htm](http://www.hse.gov.uk/pubns/books/l21.htm)

*Controlling noise at work. The Control of Noise at Work Regulations 2005. Guidance on Regulations L108* (Second edition) HSE Books 2005 ISBN 978 0 7176 6164 0 [www.hse.gov.uk/pubns/books/l108.htm](http://www.hse.gov.uk/pubns/books/l108.htm)

*Health and safety at motor sport events: A guide for employers and organisers* HSG112 HSE Books 1999 ISBN 978 0 7176 0705 1 [www.hse.gov.uk/pubns/books/hsg112.htm](http://www.hse.gov.uk/pubns/books/hsg112.htm)

*Road Traffic Acts 1988 (c.52), 1991 (c.40)*  
The Stationery Office

*The Official Highway Code: Revised 2007 edition*  
The Stationery Office 2007 ISBN 978 0 11 552814 9

[www.hse.gov.uk/risk](http://www.hse.gov.uk/risk)

## Further information

For information about health and safety, or to report inconsistencies or inaccuracies in this guidance, visit [www.hse.gov.uk/](http://www.hse.gov.uk/). You can view HSE guidance online and order priced publications from the website. HSE priced publications are also available from bookshops.

The Stationery Office publications are available from The Stationery Office, PO Box 29, Norwich NR3 1GN Tel: 0870 600 5522 Fax: 0870 600 5533 email: [customer.services@tso.co.uk](mailto:customer.services@tso.co.uk) Website: [www.tsoshop.co.uk/](http://www.tsoshop.co.uk/) (They are also available from bookshops.) Statutory Instruments can be viewed free of charge at [www.legislation.gov.uk/](http://www.legislation.gov.uk/).

**This document contains notes on good practice which are not compulsory but which you may find helpful in considering what you need to do.**

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