

Wessex Association of Model Railway Clubs

Guidance for undertaking a Model Railway Show risk assessment

Version 1.4 (1st Public release - 1 July 2006)

Introduction - This guide to risk assessments has been prepared by the WAMRC in order to pool knowledge, thereby reducing the implications to member clubs if a legal challenge arises following any accident and for insurance needs. If something goes wrong three key questions will be asked, possibly in a court of law or at an inquest;

1. “Were you aware it was a potential risk?”
2. “Did you take any appropriate preventive measures?”
3. **“Can you prove your answers to (1) & (2)”**

Of course it may be that in your combination of circumstances some of the risks identified in the pages following are negligible, therefore no action is required and that situation is covered below.

The recommendation from WAMRC is that you use this model, shaping it to the needs of your set of circumstances at your venue/event, looking at the topics covered here. Where a heading is not applicable to your event, or the risk is negligible at your event then annotate it as such. (The obvious example is the section on lifts if your venue does not have them installed!) The crucial point in any risk assessment is the word **assessment** combined with your documented statement of how you, as event organisers, intend to provide any necessary preventative action to minimise or prevent occurrence of the risks you have identified. The reason why you do this in advance is to avoid problems during the event, or to put it bluntly “advance thought preventing pain on the day!”

The format of the document is an opening section giving an introduction to the principle of carrying out a working a risk assessment followed by many examples of risks that can be expected at venues with suggested solutions for a typical show. After you have assessed an applicable risk then document your conclusion even if it is perceived to be a zero or low risk. After carrying out the identified actions document that too. By this means you will have your defence, even if with hindsight the combination of circumstances, which in advance you considered to be so low, did arise on the day. Equally importantly if something occurs for which you had already taken preventative action you also have your defence as you have your advance actions documented too.

Updating and feedback – As you use this document if you find a risk that is not already listed for checking, which you consider will apply to other venues/events, please feed that back to the Wessex Association so that it can be added into the model document. The more it is used and updated the more weight this model document will carry.

Assess your risks.

A common means to assess risk involves use of a matrix square comparing the severity of the event with the likelihood that it will happen.

Risk matrix

		1 (low)	3 (medium)	5 (high)
Severity	5 (high)	Plan	Reduce	
	3 (medium)	No action	(plan to) Manage	
	1 (low)			

The weighting you put on these will vary from venue to venue but that too should be documented. 3 is a break-even score.

A pair of simple worked examples follow on the next page:-

Use of a raised stage for exhibits within a hall and the risk of people or equipment falling from the exposed edge.

- Likelihood of someone falling off = high and also that of equipment falling off onto items/people below.
- Severity of that incident certainly more than low with a medium risk (broken limbs) and if unlucky a high risk score of a fatal accident from a broken neck.
- Score 5 for Likelihood + 3 for Severity at minimum, therefore = 15 for perceived risk.
- Possible courses of action to reduce that risk to a score of 3 or less: –
 - Eliminate risk to zero by avoiding use of stage
 - If elimination not possible then use barriers to stop persons falling off.
 - Additionally plan the use of the stage so that a minimum number of persons are at risk e.g. placing layouts along that edge therefore only a few operators are at risk rather than the whole attendance at the show and make sure the persons concerned are aware of the risk.
- Using Weymouth Show's real world example.
 - Hall has a bespoke stairs with barrier system for use during non-theatrical shows and this is used for stage access by the public
 - Portable crowd barriers are borrowed and used to protect other edges.
 - Severity from an accident of someone falling on the staircase remains the everyday acceptable level risk of using any staircase 3 (medium) but the likelihood falls to a 1 – therefore the risk falls becoming an acceptable rating of 3

A second example – use of kettles behind layouts

Two risks combined - overloading the electrical wiring with potential for a fire and the risk of scalding from proximity to boiling water. For the fire risk even a low likelihood has a high-risk outcome giving a risk factor = 5 and therefore such use is unacceptable. For scalding the risk and the severity are both at medium so risk is = 9.

Only one option is available therefore to get this risk down below 5 (and just common sense really) - a complete ban on kettles.

Your risk assessment document therefore comprises a list of items based on the above type of analysis. As every hall and venue differs we cannot give you an “off the shelf” solution but the guide above and the following table of risk items already identified at various show venues used for model railway show events, combined with suggested actions you can take to avoid or reduce that risk's severity, will considerably ease your own task..

The **risk assessment** will therefore generate **an action plan** document for what you need to do when setting up your show.

Item potentially causing a risk	Persons at risk	Notes & possible actions that can be taken to reduce or eliminate the risk
Note – potential, specifically identified, risks precede the general advice section added as the last item to form the summary section.		
The choice of venue	All in building	1. Although this is basic and fundamental – ensure the venue you pick for your show is suitable for a model railway show.
Electricity	All in building	<ol style="list-style-type: none"> 2. Leads to be as short as possible 3. Use nearest sockets 4. Only use “in-line” type extension leads 5. a) Minimum -All show cables to be installed & checked by certificated electricians and checked before first use by exhibitors on set up day. (b) Additional - If access to equipment makes it practical to do so undertake a PAT (Portable Appliance Regulations) test on equipment. 6. Designate a show electrician who should have full knowledge of venue’s electrical supplies etc 7. No multiple feeds from sockets if they can be eliminated 8. Any faults to be rectified by the Show electrician 9. Any cables crossing open areas in both the public and exhibitor sections of the show must be safely secured and either covered or taped down. 10. All connections from show wiring to fixed wiring and from exhibitors kit to a loom <u>must</u> be through an RCD. 11. If cables are “droppers” ensure all are securely fixed and safely routed. 12. Ensure all drapes, stored clothing etc is clear of all electrical equipment including storage heaters etc. (Fire risks) 13. Again due to fire risk – all cable reels to be fully extended.

School rooms – specific educational hazards – science room gas taps etc.		<ol style="list-style-type: none"> 1. If using a school facility work with the school before hand to ensure that educational hazards such as science room gas outlets, are made safe. (See also (5) following)
Gas fittings and other pipe work including piped and bottled gas	All in building	<ol style="list-style-type: none"> 1. Ensure any pipe work is left untouched. Do not use to hang wiring looms etc. 2. Do not cover any vents in rooms with gas fires, cookers etc. 3. Do not assume any pipe work is inert/ safe. It may contain gas, electrical wiring, water, refrigerant etc.
Equipment, barriers, chairs etc	All in building	<ol style="list-style-type: none"> 1. When moving, have nominated teams with designated leader 2. Basic advance instruction for all in the team 3. Barriers – Avoid use of metal crowd barriers indoors. Eliminates one risk from cross contact with electricity. Make sure barriers are safe as inevitably someone will lean on them. 4. If any specialised equipment is needed, e.g. to move racked seating, only trained personnel to move. If in doubt check with venue management. 5. All the obvious – such as making sure chair stacks are safe (facing into the wall), venue specific items¹ are inaccessible or stewarded etc.
Low ceiling mounted fittings, low beams etc	All in building	<ol style="list-style-type: none"> 1. Preferred option will always be to barrier off 2. If (1) is impractical, mark with hazard tape, add foam padding etc

<p>All Interior and exterior areas especially during the set up & break down period</p>	<p>Exhibitors & stewards</p>	<ol style="list-style-type: none"> 1. Will vary from hall to hall. Show Manager to check safe routes to/from building for loading etc. If vehicle access limited arrange some form of marshalling to coordinate arrival/departure at the loading point. 2. Public and exhibitor car parking at some venues may require use of car park marshals throughout the event. 3. If building use for a model railway show is outside the normal use of the building check access is suitable for set up& breakdown. <ol style="list-style-type: none"> a. such as lighting if building in use after dark, is there any, is it adequate etc? b. Width of doorways for loading c. Steepness of stairs d. Etc, etc, etc.
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<p>Exhibitor & Public refreshments etc - risks include very hot water, slips from wet floors, food poisoning, etc</p>	<p>As relevant to specific exhibition.</p>	<ol style="list-style-type: none"> 1. No kettles/hot drink making facilities at individual layouts 2. If practical, provide designated refreshment area for exhibitors, and encourage its use 3. If providing disposable polystyrene or plastic cups, forbid use of boiling water, and use jugs or teapots – ideally provide lids for polystyrene cups 4. On a related subject any tea urns and water boilers must not be moved when full of hot water, must be stable etc. 5. Provide trays or empty margarine tubs for carrying cups to minimise spills 6. In some larger venues not all water supplies are potable quality (drinking water) & a check should be made on suitability of water outlets. If doubt exists mark all taps as not drinking water where not known to be a drinking water supply. 7. If supplying food to the general public ensure all food legislation is complied with and consumption is within a designated area.
<p>ADDENDUM TO ABOVE - If the Model Railway Club is undertaking the provision of food “in-house”.</p>	<p>Customers</p>	<ol style="list-style-type: none"> 1. Observe all basic food handling techniques and all food regulations 2. Obtain advice from local Council Environmental Health Department if uncertain
<p>Crime, assault etc.</p>	<p>Traders & organising club</p>	<ol style="list-style-type: none"> 1. Although reports of this are low theft of items at shows does occur. All exhibitors, organisers and stewards to be vigilant and take obvious precautions to either hide the cash or place it out of casual reach. Consider width of your pay desks, avoid neckties etc, etc. 2. Consider numbers at the pay desk and avoid single staffing. Obviously risk increases proportionally to the exhibition size and the larger volumes of cash on the premises at larger shows. Remove surplus cash to safe place regularly 3. Steward’s radios and/or mobile phone use will assist monitoring.

Overcrowding	All in building	<ol style="list-style-type: none"> 1. At busy times, monitor, and if necessary, restrict admissions 2. Check Fire Limit for Hall in advance 3. Ensure gangways are adequate in width. 4. Consider stewarding /controlling access to specific areas where overcrowding most likely.
Working exhibits	All	<ol style="list-style-type: none"> 1. Barrier where possible, particularly if large attendance expected 2. Ensure exhibits such as ride-on railways are adequately separated by barriers 3. If ride on layouts are in use ensure the Health & Safety Executive guidelines are followed. The exhibitors should produce their own specific risk assessment and public liability insurance certificates. (PL cover £2M minimum.) 4. If “compressed air or live steam” is being operated ensure the exhibitor in question has all currently valid safety certificates and insurances required and must produce them. NB Gauge O probably exempt G1 and above likely to be covered by these regulations. 5. Consider safety of the stored fuels and suitable fire extinguisher. 6. See also outdoor section following.
Evacuation procedures etc	All	<ol style="list-style-type: none"> 1. Show Manager to agree procedures in advance, and ensure all stewards and exhibitors are made aware of these procedures <u>with a briefing session.</u> 2. Ensure all fire exits are adequately signed, have clear access and unlocked 3. Check on fire extinguisher locations, appropriateness of type, and that stewards are aware of how to use them.

Use of stairs/disabled ramps etc	All	<ol style="list-style-type: none"> 1. Check for overcrowding around any stairs. 2. Ensure that all stewards are aware of disabled access/egress routes 3. Also note that as the DDA is being implemented in stages requirements need to be checked and appropriate steps implemented by Show Organisers. What was OK at your last show may not be so at your next one and a legal challenge by a disabled person is a potential, but avoidable, risk. 4. Ensure adequate signing for disabled routes and facilities etc.
Lifts (Enclosed and open stair lifts too)	All	<ol style="list-style-type: none"> 1. If the venue has these, than a steward should be designated to regularly check they are functioning and no one is trapped/stuck.
Qualified First Aid	All	<ol style="list-style-type: none"> 1. WAMRC understanding is that this is not mandatory unless included within Hall hire agreements. However if it can be organised clearly it is a desirable option; becoming more so as size of event increases 2. Any First Aiders should be qualified.
Soldering and other hobby related hazards	Exhibitors	<ol style="list-style-type: none"> 1. Due to the nature of the hobby it is probable that soldering and other “risky” activities will be undertaken during the event. All users to ensure they work safely and potentially hazardous tools are not left unattended.
Layout curtaining	Exhibitors	<ol style="list-style-type: none"> 1. All layout curtains to be off the floor – recommendation – a minimum of 50mm.(2 inches)

<p>Child Protection if children are allowed into the event.</p>	<p>Children present</p>	<ol style="list-style-type: none"> 1. Arrange a designated “lost children” procedure. 2. Ensure the steward who will be looking after any such lost children, or is running any specific event in the show targeted at children and young persons, has been formally CRB checked by the Police in advance. (NB Although these checks are “one-offs” the current national guidance is for the checks to be repeated at three yearly intervals.) 3. If a number of children and young persons are part of the club and assisting at the event then the requirements of relevant legislation such as the Children’s Act should be checked and observed. 4. If exhibitors have small children accompanying them the children must be kept out of the working area at set/up break down and remain the responsibility of parents or guardians at all times.
<p>Smoking/Fire Risk</p>	<p>All</p>	<ol style="list-style-type: none"> 1. If the event venue is not already designated as a no smoking venue organisers may wish to consider making it so.
<p>Uneven floors, wet floors, trip hazards etc especially with consideration to outdoor arenas and marquees</p>	<p>All the foregoing applies equally to indoor and outdoor events. Clearly however the risk of uneven ground, trips from ropes, dew/rainfall creating slippery conditions etc is higher at outdoor events and will require additional consideration..</p>	<ol style="list-style-type: none"> 1. Pre-inspect and ensure anything that can be prevented is. 2. Regular floor walking by stewards to ensure no new trips arise from dropped baggage etc 3. This trip hazard factor applies to all exhibitors during set up and break down too. 4. If potential for wet floors exist ensure it is minimised with “slippery floor” signing if possible. 5. Check barrier feet do not. create a trip hazard. 6. Ensure adequate lighting exists for any late finishing or early starting events.

Set up/break down	Exhibitors and stewards	<ol style="list-style-type: none"> 1. Ensure no members of the public are in the Hall before opening time and that all members of the public are cleared from the building immediately the show closes. 2. Ensure the intended access route from the loading/unloading points for exhibitors is safe and does not, for example, require the carrying of heavy and/or bulky layout boards up narrow or steep staircases to upper floor or basement rooms. This may not eliminate use of a space it merely requires consideration of which exhibitors are to use it. 3. Issue a safety briefing pack to all exhibitors and traders before they unload. 4. Any vehicles entering a hall must be preceded by a person walking. See earlier section re access to site by vehicles. 5. Show Manager to have received safety OK before doors are opened to the public.
All stands trade, layouts, catering etc	All in building	<ol style="list-style-type: none"> 1. The stands must be safe. Obvious but we have all seen layouts on rickety legs, overloaded paste tables, projecting lighting rigs, awnings that protrude etc. 2. Sharp protrusions – examine and eliminate.

Summary section

Conditions imposed by the venue and/or the insurance policy		<ol style="list-style-type: none"> 1. Ensure that all documentation issued in advance to you as organisers is read. 2. Any restrictions imposed on you as organisers are complied with.
General Health & Safety	All staff, exhibitors & stewards	<ol style="list-style-type: none"> 1. In addition to the specific risks identified above, there will be many issues arising that are specific to individual venues/events² and all organisers of events have a general duty of care. 2. There should be a designated officer responsible for doing a regular floor walk during the time the building is open 3. The designated safety officer/floor manager should do a last-minute check before the show opens to the public each day. The admissions team should not open the front door until the safety officer/floor manager has notified them that all is well. 4. Stewards to be briefed adequately. 5. Stewards to be identifiable to the attendees as stewards. Consider T-shirts, tabards, badges etc. 6. First Aiders to also be identified where present.

Publisher information

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Issue history and end notes.

Version	Issued	Notes
1.3 (Draft)	Revised to 20 May 2006	Withdrawn (Working draft following review at the WAMRC Business Meeting in June 2005 and subsequent sub-group meetings.)
1.4	1 July 2006	1 st Public release of document following approval at WAMRC Business meeting held 1 Jul 2006.

Acknowledgement of assistance from other, non-WAMRC, organisations

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Mark Lancaster and John New DMS MCIM

Chair and V Chair - WAMRC 1 July 2006.

Endnotes follow.

¹ Include items like wall bars, climbing walls and ropes should you be using a sports centre hall etc.