

Health and Safety at Community Events

*Presentation by Ron Stretton, Principal H & S Advisor,
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Ron is the Principal Health and Safety Advisor to the Housing and Constituencies Directorate of Birmingham City Council. He has worked for the City in a variety of roles for 32 years and is now involved in the planning of Major and Small community events for an amazingly wide range of interests. These include the Arts Fest at five or six locations across the City the renowned Frankfurt Market attracting over 7 million visitors annually.



Ron Stretton



Frankfurt Market

requiring up to 45 formal funfair inspections and consultations, involving much consultation with other parties like the Police and Fire Services. Ron commented that, with the size of the Police presence needed at some of these events, it begged the question “What happens to the crime rate during these events?”

Ron went on to say that one of the most significant risks that he had to tackle at nearly all events, big or small, was that of electrical injury. Although it was not surprising, given the crucial use of electricity at these events, the factor that had highlighted this recently was the introduction of the **17th Edition of the IET wiring Regulations (BS: 7671 Requirements for Electrical Installation)**.

These updated Regulations now called for more stringent standards of system installations and inspection, even for temporary situations like community events! The most noticeable impact was on the cable systems linking mobile generators and appliances, plant, or equipment. Under the new Regulations, these cables had to be

He also has a role in the Christmas lights event which, some years ago, had to be moved from Centenary Square to Millennium Point when it became too big for its original venue. Ron showed us several of these events, which demonstrated the scale of the events and the range undertaken.

He went on to describe the City Funfairs Programme, which comprises over 30 Standalone Funfair ‘Visits’,



City Funfairs Programme

inspected *each time they were connected*, regardless of whether the system layout was the same each time. This is because it is crucial to maintain high standards of design for electrical ratings and component specifications in order to prevent accidents.

For a typical Funfair Visit, or even for a funfair with in an event, an inspection is carried out in advance, with invitation to a range of other interested parties, such as the Fire Service, Police, HSE, Area Parks Manager, City Urban Design (Electrical Section) and Senior EHO. The inspection details are reported on a “Safety Officer’s Report of Funfair”, to record the name of the operator, siting of the fair and living caravans with regard to ease of access, emergency services access, space between caravans and electrical hazards. Other items covered are Toilets, Car Parking, Hazards to the Public, including ground underfoot, access to individual rides and access to and from the site. In addition, the Urban Design Engineer inspects Distribution and Use of Electricity, Guards on Machinery, Ride Logbooks and General aspects of the funfare safety. The reports from the Safety Officer and UD Engineer are then précised onto another form called an “Inspection Summary For Operator”, together with contributions from the Environmental Services, on food units, and the West Midlands Fire Service. any corrective actions noted must be carried out before the fair is operated.

Circus visits are dealt with in a similar fashion, except they are agreed by application form. The city usually allows 13 weeks between visits, unless a following circus company agrees a shorter period. Each Company may visit three sites for a week and each visit normally occurs once each in Spring, Summer and Autumn. As the City has more requests than can take place, they are arranged on a “first-come-first-served” basis, with a deposit taken. Organisations that are new to the City are asked to send in specifications and risk assessments, prior to the visit, for examination by Officers. Ron added that circuses are usually very well organised and meticulous with documents and consideration of safety!

Passing on to Community and Other Events, Ron commented that attendances can vary from several hundred for a craft fair to 80,000+ for larger events. With any of these, the Arrival and Departure periods can be the most problematical. Where a funfair is involved, these may be allowed more operating days to make them more financially viable. So the main event may be on a Sunday, but the funfair may run from Thursday to Sunday.

The genral rules for Community Events are that: -

- Organisers need to fill in an “Event Application Form”
- They need to show proof of Public Liability Insurance (£5million)
- They are expected to accept guidance on risk assessment and control measures.
- They must be prepared to act on any changes or improvements to the event, when asked to do so by the City officers.
- They must understand that any non-compliance may jeopardise a repeat event or,even, the application by the City for a licence in its own right.
- They must produce financial accounts, if subsidies are involved

As in so many activities, Ron went on, planning is a vital ingredient for success: -

- Initial consultation is essential to decide if it can happen
- Advice and consultation with others must take place. This could include the Fire Service, Police, West Midlands Ambulance Service or St.Johns Ambulance
- The value of any subsidy must be agreed
- There will be visits by Officers before and after the event
- There will be a formal inspection of a funfair, if there are adult rides operated
- There will be visits by Officers during the event

Ron mentioned a very important procedure for funfairs that is rather like an MOT test for rides. This is the Amusement Devices Inspection Scheme (ADIPs), which issues a Certificate that is valid for 12 months. Major Events could also involve contracts or Licenses with the Organiser and/or the funfair and all events will require some sort of approval with a landowner or Local Authority. One of the strangest licences ever required, is one with the Civil Aviation authority (CAA), where the release of more than 4,999 balloons is involved within the flight path to an airfield. In such cases, Air Traffic control must be notified in advance.

Ron went on to describe several different types of hazard and control measures that typically cropped on his day-to-day work, starting with Quad bikes that are a common attraction at very many modern events.



Quad Bike Safety Measures

Here we can see some very good, portable inflatable barriers between bikes and the public, that also protect the riders from runaway machines. Their very portability is a guarantee that the ride operators will be more prepared to use them.

What is not quite so obvious in this photograph, Ron added, is the fact that the Quads were originally fitted with the wrong tyres, whose hard ribs tore up the grass and restricted the speed! It is much better to fit proper “Grassland” tyres, he said.

On the subject of inflatable equipment, Ron commented on the recent fatality when one structure recently blew away in the north of the country. He also referred to the hazards of ‘bouncy castles’ that had become so immensely popular for children’s entertainment. He warned that structures with steep slopes were very prone to causing friction burns on the skin and that one solution was for the operator to provide baggy clothes to cover exposed areas of the body. Another hazard was that of allowing too many people on at the same time, thereby increasing the risk of broken bones. Good supervision was the answer here, with a minimum of two persons to allow for rest breaks.

Another factor that must be considered for risk assessments, is the effect of bad weather. Here, the ground under the running track was so soft that the fully loaded rolling stock was starting to subside, to the obvious alarm of some of the passengers! The same soft ground can also be a severe disadvantage in access routes, particularly in display arenas and carparks, when everyone tries to make a sharp getaway at the end!



Miniature rolling stock – “rolling over” on soft ground

Ron also showed a series of electrical installations, which illustrated the all-too-common abuse of potentially sound equipment used inappropriately, usually domestic plug and socket combinations in outside situations. He quoted one instance where the wrong voltage outlet was used for a PA system, despite the fact that the operator had the correct design of cable on his vehicle! In another example, he showed this generator at a small community event, being run with no earth spike in the ground and no cage round a very hot exhaust to prevent burns to the



Un-earthed and un-guarded generator!

public!

On the bright side, he also had several example of good practice, as on this food stall, where the food was served from relatively cool warming pans at the front of the area. In contrast, at the rear of the stand and out of the way of the public, more food was cooked by trained staff who were well aware of the hazards and risks to which they were exposed.



Well-organised Food Stall!



Cost-effective impromptu pallet stands to raise height

As a simple example of how existing equipment could be raised to a safe working height, Ron gave us this other solution that was developed at a recent Sikh Vaisakhi Festival in Handsworth Park. The wooden pallets were easily sourced and were just the right height to make the work safer and more comfortable for a long nine-hour shift!

Sometimes, though, safety measures can have a hazardous side-effect! In order to raise the tap on this urn of molten chocolate to a convenient height, an upstand had been placed above the camping gas burner. As an additional safety feature, a metal shroud had been fitted around the flame but, unfortunately, nobody had realised that these



Molten chocolate hazard!

modifications had reduced the stability of the assembly. The molten chocolate in the urn presented a significant risk of serious burns!

Ron went on to comment about a Cookies and Doughnut stand inspection in Centenary Square recently, which presented a significant fire risk because of an excessive number of LPG cylinders stored nearby, out-of-date gas pipes and inadequate fire extinguishers. There were also no Food Handling Certificates, so there were problems with food safety as well!

On the matter of crowd control, Ron commented on the design of modern pop concert stages that were better than the scaffolding structures of years ago. Experience had taught him that curved barriers on flat surfaces were the best and Security Industry (SIA) licensed stewards in the orchestra pit gave good control. Ron reflected that, originally, licenses were intended for premises but now their use had been extended to events. He went on to give an insight into some curious facets of licensing law, whereby a licence was needed for entertainers marching on the road, but not on a moving vehicle. That inevitably led to the need to ensure the people on the back of the truck didn't fall off! Also, when applying for the licence, the numbers were influenced by the fact that only a proportion of the crowd total could see a band at any

one time. Another factor in Birmingham was that the West Midlands Police did not operate “Rolling Road” closures because they are more expensive!

As far as written guidance was concerned, Ron said he thought that the HSG196 The Event Safety Guide was a little too complicated. The main measures were: -

❖ **Planning & Management**

- Venue and site design
- Fire Safety
- Emergency Planning
- Communication
- Traffic Management Structures
- Barriers
- Electrical Installation and Lighting
- Facilities for people with special needs
- Medical Ambulance and First Aid
- Performers
- Health and safety Responsibilities

❖ **Production Manual – sets out: -**

- Safety procedures
- Risk Assessment – event organisers and others
- Control Measures
- Emergency procedures

Ron said that the Production Manual be quite complex but, for big annual events, the standards developed from year to year and were very good. For small events, however, the production manual might only be 2/3 pages but a lot more help was needed. To help here Birmingham had developed its own “Guide for Event Organisers”, some years ago in partnership with West Midlands Police, Ambulance and Fire Service. This publication had just been updated, was about to be printed and would be available on-line.

Members' Questions

Mark Hoare of Birmingham University asked what were the requirements for events such as Farmers’ Markets. Ron said that Birmingham City Council provided a “Safe Supply” point and the various stalls just plugged their equipment into that.

Bob Cole of Morgan EST asked what the policy was to reporting RIDDOR accidents at these events. Ron replied that the City reported any it was aware of.

Mark Hoare asked if events were banned outright. Ron answered by saying “No” but that his attitude was “convince me the activity is safe”. Inherent in this process was a

willingness to compromise in the spirit of encouraging people to make good entertainment.

At this point **Francis Quinn**, who was an ex-colleague of Ron's, said that he had a wealth of experience with community events and there was no one better qualified to offer help and advice. Unfortunately there had been some bad press publicity in the past for city events. Ron agreed by commenting on the case of the T mobile Screen collapse in Millennium Point. Fortunately, there were no injuries, the emergency procedures worked well and the backstage area was evacuated smoothly. Ron went on to say that two companies were involved in the erection of the biggest screen in Europe and they were fined £45,000 each. Ron was relieved to conclude that Birmingham City Council was completely exonerated!

Warwick Adams of Interserve Project Services asked how Ron dealt with stallholders who turned up at the last minute on the day of the event. Ron said that there was always flexibility built into the plan to accommodate this eventuality. He added that he had even had to deal with street artists who moved around during their performances. He quoted a case of fire jugglers who moved to the bottom and top of a stairway in the city centre and the pedestrians were forced to dodge the flying fire – but not for long before the performance was brought to a rapid halt.

As there were no more questions Bob Cole thanked Ron for an excellent presentation and the Members showed their appreciation with a rousing round of applause