

The British Pyrotechnics Association The Explosive Industry Group.

Briefing paper – British Pyrotechnists Association

This paper follows conversations with the Scottish Government and BEIS. If we can provide any more detail we will be happy to do so.

The British Pyrotechnists Association (BPA) represents the overwhelming majority of professional display companies in the UK. It's members also, in some cases, supply fireworks to the general public – especially for Guy Fawkes night and New Year's Eve. The displays staged by BPA members range from private functions, such as weddings, to large National and International events such as London New Year's Eve.

In addition the BPA developed and administers the only accredited and recognised training course for display firers in the UK. Being an accredited firer does NOT make an individual a BPA member, and the courses are available to all professional display operators in the UK

There are, at present, two main issues relating to the use of fireworks in the UK.

- Safety issues – relating to public injuries
- Nuisance issues – relating to both persons and animals (wild and domesticated)

Actually the two issues are related and both safety and maintaining a reasonable approach to those who may be adversely affected by a fireworks display boil down to the following:-

- **The right fireworks;**
- **In the right place;**
- **At the right time;**
- **Education**

The first three are critical – it is almost always possible to fire a display at any venue if the right choice of fireworks is made AND that there are plans in place in advance to curtail or even cancel a display should the conditions dictate.

Furthermore, the education of venues, neighbours and event organisers is vital to ensure that those who wish to attend benefit and those who may be adversely affected can make suitable provisions to minimise any disruption.

The BPA estimates that over 14 million people in the UK attend professionally organised displays each year in the UK, and the UK has arguably the best safety record across the whole of Europe and as far afield as the US, Australia and the Middle East. This record is based not on licencing of displays or venues (which has been shown elsewhere to achieve little if anything), but proper training of display companies and their firers (hence the BPA Firers and Senior Firers training) and a risk based approach which factors in the performance parameters of the display fireworks used, and the effects of wind (strength and direction) – which is the biggest cause of accidents elsewhere - when debris lands where people are standing!

Countries with licencing schemes (either venue or operator) have repeatedly demonstrated that use of a "fixed-rule" type of approach in respect of display zones and "safety" distances leads to not only an increase in accidents over the UK, but significant questions (and hence liability) of those that do the licencing. In most cases such regimes simply do not account for low-frequency, high hazard events such as a shell "blind" (when a shell fails to explode and falls back to earth) but instead base their distances on low-

hazard, high frequency considerations such as ordinary debris. The UK acknowledges the need to minimise risks and to take account of all possible scenarios including, for instance, when the wind is particularly strong or from an unusual direction. The BPA (in association with other groups such as EIG) has been at the forefront of training not only firers, but enforcement officers (including TSOs and EHOs) to raise the level of awareness, and to encourage, where applicable, the critical examination of both tender documents and risk management plans that are prepared as part of an overall event licencing regime.

We also know that the nuisance effects can be minimised - most people that complain about displays (and recent legislation has restricted the firing time to sensible times) do so when they do not know as display was to be fired. Had they known then they would have either made an effort to watch, or would have made provisions to reduce any adverse effects – like closing windows, or delaying going to bed!

In terms of animals it is very clear from studies around the World (for instance Disney – where a display is fired at each venue every night) that what upsets animals – be they wild or domesticated, is the break from the comparative silence before a display starts, to the first firework fired. A lot can be done to minimise this potential impact, for instance:-

- Education – again people who are fore-warned can take appropriate action
- Choice of the right fireworks appropriate to the venue and the event – so many shows do not need to have “noise for noises sake” even if, on the contrary there are shows where this is entirely appropriate and right. As an aside the noise levels from professional displays have actually DECREASED over recent years as some of the loud firework become unavailable or are unable to be imported into the UK.
- Trying to mask the “break” – for horses in stables, for instance, playing increasingly loud music prior to the start of the display all but eliminates the problem
- For wild animals – eg water fowl – we know that the first “shot” will cause ducks to take flight – but they are soon back on the lake when the show is underway. In this respect the “break” is no different to a shotgun being fired – and with similar results.

It is also important to recognise that there are significant positive aspects to the use of fireworks in general and to professionally fireworks displays in particular. Displays create a significant “feel good” factor, they employ thousands of people in ancillary professions, raise significant amounts of money for good causes and are a source of local, national and international prestige and pride.

The following collated BPA statistics are useful:-

- £13.4 million approximate turnover on professionally fired displays – this is a raw firework cost and does not include event costs such as other attractions, infrastructure, stewards, policing etc – note this is slightly up from the previous 2 years.
- A similar sum for ancillary suppliers – such as stewards, staging, lasers, lighting and sound
- Some 5500 total displays fired in the UK by BPA members
- Approximately 190 full time employees
- Approximately 1500 part time employees in 2018 – 760 trained as BPA Firers and 356 trained as BPA Senior Firers
- Well over 3000 people in total have undergone BPA training since its inception
- Lowest overall rate of major incidents in Europe (for instance France has, on average, had 3 fatalities from firework each year for the past 20 years) and there are more hospitalised accidents in Berlin on New Year’s Eve than there are in the whole of the UK during an entire year.