IN THE CROWN COURT AT STAFFORD

REGINA (HSE)

V

MERLIN ATTRACTIONS OPERATIONS LIMITED

SENTENCING REMARKS

BEFORE: His Honour Judge Michael Chambers Q.C.

26th and 27th September, 2016

Introduction

On the 2nd June, 2015 members of the public visiting the Alton Towers amusement park, mainly young people, suffered life changing and serious injuries in an accident on a rollercoaster as a result of the defendant company's catastrophic failure to assess risk and have a structured system of work. Human error was not the cause, as was suggested by the defendant in an early press release. The defendant now accepts the prosecution case that the underlying fault was the absence of a structured and considered system, not that of individual engineers doing their best within a flawed system. Members of the public had been exposed to serious risk of one train colliding with another when the controlling computer system was re-set having been overridden to enable the engineers to address faults since the opening of the Smiler rollercoaster two years before in May, 2013. This was a needless and avoidable accident in which those injured were fortunate not to have been killed or to have bled to death. It was, in my judgement aggravated by the lack of proper emergency access to the accident site which meant that those injured remained trapped in great pain and distress hanging at an angle of 45 degrees some 20 feet above the ground for 4 to 5 hours before being released by the emergency services and taken to hospital.

The "thrill of the fair" is a long established tradition in which members of the public in great numbers, particularly children and young people, enjoy the excitement and illusion of danger. But it should be just that – an illusion. They do not actually expect to be injured. That is why this case has rightly received considerable public interest and concern. Those, such as this defendant, who

operate such rides for commercial gain are under a very high duty of care to ensure that their users are safe at all times. In this case, it is, of course, not suggested that this was a deliberate breach, but the defendant company fell far short of the standards that the public are entitled to expect. By its plea of guilty it has acknowledged that and is entitled to proper credit, as it is for co-operating fully with the investigation.

The Charge

This is a committal to the Crown Court for sentence following the defendant Merlin Attractions Operations Limited's plea of guilty in the Magistrates' Court to an offence contrary to section 33(1) of the Health and Safety at Work Act, 1974, namely that it on or before the 2nd June, 2015 failed to conduct its undertaking in such a way as to ensure, so far as was reasonably practicable, that the visitors to Alton Towers theme park were not exposed to material risks to their health and safety.

The offence is concerned primarily with punishing the criminality for the exposure to a material risk; the fact that actual injuries were in fact caused is simply a manifestation of that risk and an aggravating feature. Although those injured in this incident are at the forefront of everyone's mind, this sentencing exercise should not be seen as an attempt to put a monetary value on what has happened to them or on their injuries; compensation will be for the civil court. No financial penalty can put the clock back. It is for me to judge the seriousness of the offence by assessing culpability and the risk of harm.

The defendant has submitted a written basis of plea dated the 27th May, 2016 which mainly accepts the prosecution case. Where there are material differences the parties have agreed to abide by the findings of the court.

I have received very helpful and able submissions from Mr. Bernard Thorogood for the prosecution and Mr. Simon Antrobus for the defendant company for which I am grateful.

Factual Summary

The defendant company is part of a group which operates 110 attractions across the world and some of the best known visitor attractions in the United Kingdom. Its accounts disclose a turnover of £367m in 2012, £395m in 2013, £412m in 2014 and £385m in 2015. It is, therefore, a substantial and profitable company.

The Alton Towers Resort in Staffordshire is the UK's largest theme park. Over the 910 acre site are 50 rides, including 9 rollercoasters. It has attracted almost 3 million visitors a year.

The Smiler rollercoaster was opened in May 2013. It is a multi-loop steel rollercoaster with 14 inversions or loops, and is 1170 metres long. It is designed to have up to 5 trains or carriages, each with up to 16 passengers in 4 rows of 4. In accordance with the relevant standards for rollercoaster rides, the ride employed a "block zone system", enabling several trains to be in operation on the system at the same time, with an automatic intended fail safe system, governed by the ride's "Programmable Logic Controller" ("PLC"), which was designed to keep the trains separate to prevent collisions. The ride's PLC dictates to the ride's operator when trains can be dispatched from the station building in order to send them around the track. In the "normal" operating mode once the train has been dispatched from the station building it will automatically advance from block to block under the PLC's monitoring system until it has completed the "ride experience" and arrives back at the station. Should a train attempt to enter a block which is already occupied by another train the system initiates a "block stop" which halts the train behind. If the system shows a fault the operator was required to contact the engineers of whom there were two teams. They would attend and put the system into "maintenance" mode which would enable them to override the system and take control. Once the fault was rectified the engineers would send a train around the system to check that it was clear and then reset it to enable "normal" mode to resume.

The prosecution expert, Mr Stephen Flanagan, states "Whereas the public perception of the hazards associated with rollercoasters may be focused on the danger of a train parting company with the track, in reality, the bigger, and more difficult to resolve issue has always been the hazard of trains colliding on the track." He goes on to state that however well a rollercoaster may be designed with the benefit of current technology, significant human intervention will be required, and it is vital that this is considered, planned and managed in accordance with safe systems of work. That is the crux of this case. It is the prosecution case that the defendant's management of the "human intervention" with the rollercoaster technology, particularly by its ride engineers, fell far short of the required standard.

At the middle of the day on the 2nd June, 2015 four trains were being operated when a fault occurred on the Smiler ride which required the intervention of the engineers. They took over the system manually, rectified the fault but took the opportunity to add

a fifth train. The second team of engineers came to help. A first empty train was sent round to check the track, but it failed to clear the track section between the first and second lifts (the clear inference is that was due to headwind) and had to be moved manually by the engineers. When a second empty train was sent round to check the system it failed to complete a loop on the “Cobra Roll” again due to head wind and rolled back into a valley. The passengers who were subsequently injured were allowed to proceed in a train. That train was automatically stopped before entering the block containing the “valleyed” empty train. The engineers overrode the block stop and allowed the operator to permit the passenger train to proceed because they believed this related to the earlier fault which had been rectified, the track was clear and the empty train had returned to the station, not appreciating that there were in fact now 5 trains not simply the 4 they could see in the station. The passenger train collided with the empty train at speed. An expert has assessed the kinetic energy as being equivalent to a family car of one and a half tons colliding at 90mph. Some of the passengers state that they experienced the horror of seeing what was about to happen. Most of the track was covered by CCTV cameras which displayed in the control room; had they checked the engineers would have seen the “valleyed” stationary train.

I have viewed a compilation of the CCTV recordings. I was struck by the fact that it was obviously very windy (confirmed by the witnesses) and that the two trains did not simply collide, but pendulumed backwards and forwards emeshed together some 12 times until eventually coming to a stop. The leg room in the front row of the train was limited. Those sitting in the front row bore the brunt of the collision and had their legs crushed by the tangled steel of the two trains. All16 in the train were trapped and injured to various degrees, hanging at an angle of 45 degrees some 20 feet above the ground. The injured passengers state that there appeared to be a delay before those members of staff on the ground appreciated the enormity and severity of what had happened. It then took time for some sort of scaffolding platform to be erected. It was 17 minutes before a 999 call was made. It was between 4 and 5 hours before all could be released and rescued. During that time they endured great pain and distress. There was significant delay before they were even reached by paramedics. Victoria Balch and Leah Washington suffered significant blood loss and the medical evidence is that their lives were at risk.

The detailed chronology of what occurred minute by minute is set out in the prosecution opening and in the timeline prepared by HSE Inspector Lyn Mizen with helpful colour diagrams at page 1210 of the exhibits. The obvious shambles of what occurred involving lack

of communication and double checking, could and should easily have been avoided by a written system of working to cover this crucial period of human intervention including a single overall supervisor and a structured approach to ensuring the track was safe for passengers before authorising a re-set and return to normal mode.

The Injuries

I have read carefully the medical evidence and the victim impact statements. Most, if not all, of the 16 passengers suffered physical and psychological injuries. Those persons occupying the front rows of the train suffered very serious injuries which have changed their lives. By illustration, two young women in the front row, Victoria Balch and Leah Washington required partial leg amputations. Joe Pugh and Daniel Thorpe suffered serious leg fractures which have impaired their mobility and independence. In the second row Mrs Chandaben Chauhan and her two grown up daughters suffered internal injuries and rib fractures. Whip lash injuries and post traumatic stress disorder are common to most. They all describe how their lives and plans for the future have been turned upside down. Most moving are the statements from family members who not only have had the distress of experiencing their loved ones suffer great trauma, but have had their own lives changed fundamentally, for example by having to give up work to provide care or move from the family home. All those injured and their families have shown great courage and fortitude. This is not meant to be a comprehensive list of the injuries or the residual effects, but some indication of the enormity of the consequences when a train on a rollercoaster is caused or permitted to collide with another one. It contained, as is always likely to be the case, mainly young people, four of whom were aged under 20.

Doing the best I can, I understand that the train was occupied as follows, with their age at the date of the incident:

Row A (front):

Daniel Thorpe 27 Victoria Balch 19 Leah Washington 17 Joe Pugh 18

Row B

Oliver Tinkler 36 Meera Chauhan 26 Chandaben Chauhan 49 Vanisha Singh 29

Row C

Jody Walker 19 Louis Surtees 18 Tiffany Wells 21 Ben Moore 22

Row D

Benjamin Spencer 22 Kesey Hall 24 Lauren Hall 26 Jamie Beattie 23

Expert Findings

The principal findings of the prosecution expert Mr Stephen Flanagan were that members of the public were exposed to risks to their health and safety from failings of the defendant which included:

- To conduct a suitable and sufficient risk assessment;
- To devise, implement and properly manage a structured and effective safe system of work to deal with faults on the ride, including the resetting of the rollercoaster after a stoppage;
- To devise, implement and properly manage the effective provision to its staff of health and safety information, training and supervision concerning the safe operation of the ride including the procedures to be followed when dealing with a "zone stop" fault; and
- To devise, implement and properly manage an effective system to deal with the potential impact of wind speed on the operation of the ride.

It was his opinion that the defendant fell far short of the standards expected. There was no task analysis. There were factors present at the time of the incident which were easily avoidable had there been a proper written system of working. Those failures are set out at page 23 of his report. His conclusions are summarised at paragraph 93 onwards of the prosecution opening and are not disputed.

Sentencing Guidelines

I am required to follow the guidance of the Sentencing Council on Health and Safety Offences which came into force on the 1st February, 2016. Under section 125(3)(a) of the Coroners and Justice Act, 2009 the court is required to sentence within the offence range. Section 125(3)(b) requires the court to identify a category of offence to fix the starting point for sentence. The court can move outside the category range within the offence range where there are powerful aggravating or mitigating factors. The court can sentence outside the offence range if the interests of justice dictate or in the case of the present offence, where the

turnover of the defendant company "very greatly exceeds the threshold for large organisations", namely £50 million.

Step One Determining the Offence Category

Culpability

The prosecution submit that culpability is "high". The defence submit that it is borderline high/medium because of the presence of factors listed under "low".

I am not satisfied that significant efforts were made to address the specific risk in question. There is no evidence that there was any specific assessment of the task centred on block resetting. To simply rely on initial training by the manufacturer and then hope that it would be "cascaded" down to other engineers was woefully inadequate. Although the defendant did ask for training on block resetting it is unclear whether that went beyond merely explaining how it worked or whether any training was actually given or validated. As Mr. Flanagan observed, the responsibility to provide the training and to establish a safe system of work was that of the operator, namely the defendant. Further, the fact that fortunately there had been no such collision before does not equate with there being "no warning/circumstance indicating a risk to health and safety". I agree with the prosecution that this incident was foreseeable

Based on the evidence of Mr. Flanagan, which I accept, I am satisfied that "The offender fell far short of the appropriate standard" by firstly, "failing to put in place measures that are recognised standards in the industry", and secondly, "allowing breaches to subsist over a long period of time". Therefore, I conclude that culpability was "high".

Harm

I remind myself that the offence is in creating a risk of harm. I need to use the table provided to identify an initial harm category of the risk of harm created by the offence. The assessment of harm requires a consideration of the seriousness of the harm risked (it is common ground that is Level A – death or serious physical impairment with lifelong dependency on others); and the likelihood of that harm arising. The prosecution submit that likelihood was high, the defence say low.

The guideline makes a distinction between consequence (the seriousness of the harm risked) and the likelihood (the chance of

that harm actually arising). By illustration, I have been referred to the meaning of that test as held by the Court of Appeal in *R v Board of Trustees of the Science Museum* [1993] 1 WLR 1171, per Steyn LJ p1177D. It is simply the risk that something may happen.

It is submitted that the resetting in such circumstances was rare and the combination of the events in this case which led to a decision to override the indication of the system on the false assumption it was clear, another train having been added and to reset with a train already on the track that contained passengers was exceptional. I consider this to be too narrow a view of the risk that was created. It relies on the incomplete passing remarks in witness statements of some of the engineers. The risk is created by the absence of a proper system of work when there is block resetting following a train coming to a standstill. In his addendum expert report Mr.Flanagan concludes "the assertion that block resetting was a rare and unusual event, appears difficult to sustain to me". The clear inference from the weather conditions is that on two occasions on the day in question two trains came to a halt and had insufficient momentum to engage with the lifts due to gusts of head wind notwithstanding the measured wind speed at a nearby ride may have been still below the manufacture's recommended level for the safety of the ride as a whole. This cannot have been a rare event. Mr. Flanagan lists a number of other possible reaons which may cause a train to fail to exit a block. Indeed other rides were fitted with a device to monitor if a train has not completed a block (as is now installed on the Smiler). No data has been provided by the defendant to provide a full history and analysis of the reason for each and every block resetting. In conclusion, I am satisfied that there was a high likelihood of harm. Therefore, on the table the harm category is 1.

The next stage is that the court must consider if the following two factors apply: firstly, whether the offence exposed a number of workers or members of the public to the risk of harm. It did to many thousands of mostly young people going back to May 2013. Secondly, whether the offence was a significant cause of actual harm. It was. If one or both these factors apply the court must consider either moving up a harm category or substantially moving up within the category range. Therefore, in my judgement given the presence of these two aggravating factors, when considering the next step I have as a result moved substantially up the category range.

Step Two – Starting Point and Category Range

Having found high culpability and harm category 1, I identify on the

table that for a company with a turnover of £50 million and over the starting point is a fine of £2,400,000 with a category range of £1,500,000 - £6,000,000. At this step the court is required to focus on the company's annual turnover. It is certainly arguable that this company's turnover at around £400 million is one that would justify moving outside the suggested offence range pursuant to what was said by the Court of Appeal in *R v Ineos Chlorvinyls Limited* [2016] EWCA Crim 607. However, in my judgement a "proportionate sentence" can be achieved within the offence range.

Aggravating Factors.

The defendant company's relatively recent conviction in 2012 for a similar offence involving a fatality at Warwick Castle is relevant. Although the precise circumstances are different, it involved a failure to carry out a risk assessment. On appeal against the sentence in December, 2012 Mr Justice Sweeney said at paragraph 54(2) " The appellant fell seriously short of the applicable standard – it failed over a period of many years to carry out the necessary mandatory risk assessment of … (the bridge in question)" (*R v Merlin Attractions Operations Ltd* [2012] EWCA Crim 2670). Those words should have been ringing in the ears of the defendant when it opened the Smiler rollercoaster only 6 months later.

In my judgement there is another serious aggravating factor. That is the failure to provide proper access to the site of the collision for the emergency services to be able to release and attend to the injured quickly. This was woefully absent and it was foreseeable that it might be necessary. The scaffolding platform that took time to erect was aimed a more leisured evacuation of passengers. Following the incident. the defendant has introduced measures to enable there to be emergency access to this area known as the "amphitheatre", namely a new mobile elevating work platform and new access stairs

Mitigating Factors

It is accepted that the defendant has taken full and extensive steps to remedy the problem. It is accepted that there has been an exceptional level of co-operation with the investigation. It is accepted that generally the defendant does have a good health and safety record and procedures in place, particularly given its size. Submissions have properly been made as to the positive attributes of the company and its reputation, however in assessing what weight should be attached to "character" I have to balance it against the serious breach of the high duty of care and the public opprobrium in an incident such as this putting at risk as it did the

safety of thousands of children and young people. Whilst the defendant should have full credit for the plea of guilty the earlier acceptance of responsibility was tainted by the willingness to blame its employees when the fundamental fault was that of the company.

It has been submitted that I should take into account as some additional mitigation the economic impact of this incident on the company. As a matter of principle, I am not satisfied that is well founded. In any event having perused the accounts and turn over figures I am not persuaded it has had a substantial or lasting impact; it remains a prosperous company and it has not prevented the directors of the parent company being awarded generous share options.

Step Three

I have to check that the proposed fine based on turnover is proportionate to the overall means of the defendant. The fine must also be sufficiently substantial to have a real economic impact which will bring home to both management and shareholders the need to comply with health and safety legislation. Deterrence generally beyond this company is a relevant sentencing principle, pursuant to section 142 of the Criminal Justice Act, 2003.

I have stepped back and reviewed the proposed sentence in the light of all the general principles set out in the guideline. Whilst having proper regard to the mitigating factors, I find that there are powerful aggravating factors in a case involving a serious breach of a high duty of care which put thousands at risk of death or serious injury over a long period of time and which has caused devastating injuries to a significant number of people. I, therefore, move beyond the category range and up the offence range. In my judgement had there been a trial the appropriate fine would have been £7,500,000. I reduce that by one third to reflect the plea of guilty at the first reasonable opportunity to £5,000,000.

Prosecution Costs

The defendant will pay the prosecution (the HSE) costs in the agreed sum of £69,955.40