Neutral Citation Number: [2024] EWCA Crim 711

Case No: 202201454 B3
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IN THE COURT OF APPEAL (CRIMINAL DIVISION)
ON APPEAL FROM THE CROWN COURT AT LEWES

Royal Courts of Justice
Strand, London, WC2A 2LL

Date: 02/07/2024

Before :

LORD JUSTICE WILLIAM DAVIS
MRS JUSTICE MCGOWAN DBE
and
MRS JUSTICE COCKERILL DBE

- -

Between :

Martin Winter **Nathan Winter**	**Appellants**
v	
Rex	**Respondent**

- -
- -

M Birnbaum KC and E Sareen (instructed by direct access) for the **Appellants**
R Matthews KC and E Sanderson (instructed by **The Criminal Appeals Unit**) for the **Respondent**

Hearing date : 11 June 2024

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Approved Judgment

This judgment was handed down remotely at 10.30am on 2 July 2024 by circulation to the parties or their representatives by e-mail and by release to the National Archives.

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LORD JUSTICE WILLIAM DAVIS:

This is the judgment of the Court, substantially prepared by Mrs Justice Cockerill.

Introduction

1. This is an appeal against conviction upon a reference by the Criminal Cases Review Commission ("the CCRC") pursuant to section 9 of the Criminal Appeal Act 1995. The relevant convictions are in respect of gross negligence manslaughter and date back to 2009.

2. The first Appellant Martin Winter was a director of Festival Fireworks (UK) Ltd which operated from Marlie Farm, Ringmer. His son, the second Appellant Nathan Winter, worked for the company. The company supplied fireworks and also conducted professional firework displays.

3. On 3rd December 2006, there was a fire at Marlie Farm which set off an explosion of fireworks which were stored in a metal shipping container ("the ISO container"). The container blew up. It is common ground that this was caused by a mass explosion of something which was inside. The explosion was huge. At trial it was estimated as equivalent to a mass of 190-300kg of trinitrotoluene (TNT). While the expert evidence before us now doubts the ability to put a precise figure on the mass, what is clear is that it was powerful enough to leave almost no part of the container recognisable. A substantial crater – big enough for a person to stand in – was created. Unsurprisingly in that context shrapnel was thrown over a wide area and a long distance.

4. Two employees of the East Sussex Fire and Rescue Services (ESFRS), who were close to the container, were killed in the explosion. They were Mr Geoffrey Wicker (Counts 2 and 4), a watch commander, and Mr Brian Wembridge (Counts 1 and 3), a civilian media officer with firefighting experience.

5. The Appellant Martin Winter was convicted of two counts of manslaughter (Counts 1 and 2) on 14 December 2009. On 16th December 2009, the Appellant Nathan Winter was convicted (by a majority of 10 to 2) of two counts of manslaughter (Counts 3 and 4).

6. Martin Winter was sentenced to 7 years' imprisonment. Nathan Winter was sentenced to 5 years' imprisonment, reduced to 4 years on appeal. Both sentences have long since been served.

7. Both appellants are represented by Michael Birnbaum KC and Ellis Sareen. Neither appeared at the trial. The prosecution are represented by Richard Matthews KC and Eleanor Sanderson, both of whom appeared at the trial.

Background and the Trial

8. The essential background to this case relates to the types of fireworks which exist and are subject to licence. Fireworks are classified and categorised according to their properties and the potential danger for a mass explosion. Hazard types (HT) categorise items which are explosive hazards whilst manufactured and stored. Hazard

divisions (HD) categorise items which are explosive hazards when packaged for transport. Thus:

i) Hazard type 1 (HT1) / hazard division 1.1 (HD 1.1): posed a mass explosion hazard;

ii) Hazard type 2 (HT2) / hazard division 1.2 (HD 1.2): had a serious projection hazard but not a mass explosion hazard;

iii) Hazard type 3 (HT3) / hazard division 1.3 (HD 1.3): had a fire hazard and either a minor blast hazard or a minor projection hazard or both, but not a mass explosion hazard;

iv) Hazard type 4 (HT4) / hazard division 1.4 (HD 1.4): had a fire or slight explosion hazard or both, with only local effect.

9. Under the terms of the Explosives Licence granted to Festival Fireworks, the company was only licensed to store and handle HT3 and HT4 fireworks inside three buildings on the site (which did not include the ISO container). HT1 and HT2 fireworks were more dangerous and were not permitted to be stored or handled on site at all within the terms of the licence.

10. Of great significance in this appeal are rook scarers – so called because of their use. Their other name, reflecting their effect is "Bangers". Unlike fireworks they are designed for daytime use and their explosive capabilities are geared to noise rather than display. Although of different varieties in broad terms they comprise slow burning strings or ropes that ignite several small explosives (containing a few grams of flash powder) positioned at intervals along the string or rope. These were at the time categorised as HT1.4.

11. The Appellants were first interviewed immediately after the incident. There then followed an investigation. They were interviewed again under caution in 2008 and shortly thereafter charged with gross negligence manslaughter.

12. The trial lasted for some weeks, commencing on 9 November 2009, with the final verdict on 15 December 2009. Many witnesses were called. The Judge's summing up took over 5 days. We will refer to the relevant facets of the evidence further below.

13. It was the prosecution case that Martin and Nathan Winter each owed the deceased a duty to take reasonable care in the storage and handling of fireworks at Marlie Farm, including fireworks that posed a mass explosion hazard. The prosecution alleged that, in breach of that duty of care, Martin and Nathan Winter had failed to:

i) take reasonable care to store and handle explosives in accordance with the explosives licence;

ii) use appropriate measures to prevent fire or explosion;

iii) prevent the spreading of fires and the communication of explosions from one location to another;

iv) protect persons from the effects of fire or explosion.

14. The Prosecution went on to say that the breach amounted to gross negligence, and that the negligence was a substantial cause of the death of Mr. Wicker and Mr. Wembridge.

15. Martin Winter did not give evidence. Nathan Winter gave evidence, denying the presence of HT1 fireworks in the ISO Container but suggesting that there were rook scarers in there along with HT3 fireworks. The contents of the container were said to be the fireworks required for a contract for fireworks to be supplied to Oman. The fireworks were due to be used in a total of 15 shows. The jury had evidence as to the numbers of rook scarers which might be in the container, and how they might be used in this context. There was also evidence as to the extent to which rook scarers could mass ignite, if their explosive parts were packaged for transit in close proximity to each other. While the defence did not (for reasons to which we will come) call an expert, they were supported in their case by Mr Wraige. Reports produced by him were served on the prosecution. The prosecution experts were cross examined by reference to his work. Insofar as those experts accepted or adopted what was put in cross-examination, the views of Mr Wraige were before the jury for their consideration. There was also evidence as to the TNT equivalence of rook scarers.

16. The defence case also challenged the prosecution case on negligence, and gross negligence. They contended the chain of causation was broken by the negligence of the Fire Service.

17. What was not capable of challenge were critical facts as to the Appellants' involvement in this disaster. In particular:

    i) Both were involved in storage of fireworks otherwise than in compliance with their licence;

    ii) It was Nathan Winter's unsafe handling of fireworks which initiated the fire which reached the ISO container;

    iii) Martin Winter was unhelpful to the emergency responders and did not give a fall or accurate description of what was in the ISO container.

18. Both Appellants appealed both against conviction and sentence. The case was considered by the Court of Appeal in July 2010: [2010] EWCA Crim 1474. As already noted, Nathan Winter's sentence was reduced by a year. All the other appeals failed.

19. In July 2011 East Sussex Fire and Rescue published its "Significant Findings Report" into the incident. That included a detailed timeline of the events and concluded that there had been a number of failures of training, preparation and care.

20. The dependents of Mr Wembridge and Mr Wicker sued Martin Winter and East Sussex Fire and Rescue. Summary judgment was entered against Martin Winter, but the claim against the fire service came to trial in early 2013 before Irwin J. His judgment [2013] EWHC 2331 (QB) outlined the facts very fully. He concluded that the fire service was negligent in a number of respects, in particular in not recognising the risks of fireworks stored in bulk and particularly in containment. The judge took the view that the risks from inadequate knowledge and training were both foreseeable

and obvious. He rejected an allegation of contributory negligence against Mr. Wembridge.

21. As part of those proceedings (i) it was accepted by the Fire Service that if the fireground had been evacuated to a reasonable distance, the deaths and injuries would have been avoided (ii) there was evidence which demonstrated the capacity of fireworks of different categories to produce a mass explosion. The Appellants say that there were 11 matters of evidence arising from these proceedings which could have significantly affected the conduct and result of the criminal trial if they had preceded it.

The Present Proceedings

22. Both Appellants appeal against conviction upon a reference by the CCRC on the basis that there is fresh evidence (a HSE letter dated 1st February 2011 and a report of an expert, Mr Wraige, dated 29th May 2012) that undermines the Crown's case that the mass explosion must have been caused by HT1 material.

23. That reference arises against the background of fairly long engagement between the Appellants and the CCRC which is outlined below.

24. On 1st February 2011 the Health and Safety Executive issued a letter concerning rook scarers and other items of a similar sort ("the HSE letter"). That letter provided in material part:

> "THE CLASSIFICATION OF EXPLOSIVES REGULATIONS 1983 (AS AMENDED) (CLER).THE CARRIAGE OF DANGEROUS GOODS AND USE OF TRANSPORTABLE PRESSUREEQUIPMENT REGULATIONS 2009 (CDG).
>
> GROUND MAROONS, BANGERS ON ROPES & BIRD SCARING ROCKETS – CLASSIFICATION CONCERNS.
>
> Recent research has highlighted that fireworks containing a high proportion of flash powder can present a mass explosion hazard when packaged for transport.
>
> ...
>
> Tests recently undertaken by HSE confirmed that articles from one manufacturer, when subjected to the United Nations (UN) Test Series 6, produced effects inconsistent with its classification of 1.4G and required reclassification. The basis for the original classification was through analogy with similar, but smaller articles and this has now been shown to be erroneous.".

25. In brief:

    i) On 1st April 2011 an application was made to the CCRC on behalf of Martin Winter. He submitted reports completed by Mr Wraige.

ii) On 17th May 2013 the Commission rejected the application.

iii) On 22nd April 2015 Mr Birnbaum applied to the CCRC on behalf of both Appellants.

iv) On 27th July 2018 the application was considered by a single Commissioner who decided not to refer the convictions.

v) Between July – August 2018 Mr Birnbaum made representations that the Commission appoint a panel of three Commissioners, which they did.

vi) On March 2019 the panel of Commissioners reached the same conclusions.

vii) In July 2019 an application was made to the High Court for Judicial Review. This was opposed by the CCRC.

viii) On 14th January 2020 the single Judge in the High Court gave permission for the application. The Commission subsequently withdrew its opposition to the application and re-considered the matter, appointing a new panel of Commissioners.

26. On 12th May 2022 the panel of Commissioners decided to refer the convictions. The referral was in respect of two inter-related grounds, the particulars of which we set out below. The CCRC refused to refer a number of other grounds raised by the appellants. The grounds rejected by the CCRC are still pursued before us. Leave to appeal is therefore sought pursuant to section 14(4B) of the Criminal Appeal Act 1995 in respect of the following additional grounds:

i) There was evidence of apparent bias in a HSE letter dated 10th September 2012;

ii) There was an obvious inequality of arms in respect of access to forensic evidence. The CCRC's reasons for rejecting this grounds were wrong in law and irrelevant;

iii) Had the jury known of matters that first came to light in the civil judgment and Marlie Farm Report, they may not have accepted the Crown's case that the chain of causation remained unbroken. The CCRC's reasons for rejecting this grounds were wrong in law/fact, illogical and irrelevant;

iv) Pre-trial, there was non-disclosure of the risk that rook scarers might mass explode, despite this being known to the HSE at the time;

v) The Crown could never have proven its case to the criminal standard that fireworks that posed, and were known to each appellant to pose, a mass explosion hazard were stored in the container;

27. There was a further very late ground added on 4 June 2024: it is contended that the Judge misdirected the jury on the evidence of one of the witnesses.

28. The Appellants also sought leave pursuant to section 23 of the Criminal Appeal Act 1968 to introduce fresh evidence from Mr Wraige relating to the hazard type of

fireworks stored in the container and in response to further HSE documentation. Ultimately however both sides were content to rely on the contents of the Joint Report of the experts Nathan Flood (HSE), Stephen Graham (HSE), Martyn Sime (HSE) and John Wraige dated 12 February 2024.

Permission to Appeal: Additional Grounds

29. Before dealing with the grounds on which the CCRC referred the case to this court we will deal with the additional grounds on which leave was sought. As was made clear at the hearing, we unhesitatingly reject the application in respect of all of these grounds. We gave our reasons for doing so in summary form in the course of the hearing. We now set out those reasons in a little more detail.

30. **Ground 2** is that a letter sent by Mr Bale of the HSE to the CCRC on 10 September 2012 demonstrates apparent bias. This ground can be dealt with briefly in the light of the fact that during oral argument Mr Birnbaum said that this this was a ground he could "afford to lose". That concession was well made, as the point is hopeless. The legal test for apparent bias is as defined in *Porter v Magill* [2001] UKHL 67, i.e. whether "a fair minded and informed observer, having considered the facts, would conclude that there was a real possibility that the tribunal was biased". Mr Bale was not a relevant decisionmaker or tribunal. He was the investigation lead for the HSE. His letter was a response to a request by the CCRC for comments on a report from John Wraige which the CCRC were considering. He set out his view of certain aspects of the evidence which, as he made clear, he had gleaned from other members of the HSE team. Even assuming that what he said was open to criticism or contradiction, there was and is no evidence that could lead a fair minded observer to conclude that he might be biased. In any event the letter is an ex post facto piece of evidence. In the light of the convictions the author of the letter cannot be impugned for reflecting the result of the trial.

31. **Ground 3** relates to what is said to be inequality of arms regarding the scientific evidence.

32. It was an inherent part of the case that issues which involved a technical and/or expert element would be the subject of expert evidence called by the prosecution. Legal aid was granted for a report by an identified expert for the Appellants in Spring 2009. The trial date was moved to accommodate this. The trial was then scheduled to begin in November 2009. The defence expert produced a report dated 9 October 2009.

33. It was not satisfactory; counsel who appeared for the appellants at trial later described it as "completely useless". In fact it was so profoundly unsatisfactory that the Judge reported the expert to the Legal Services Commission, saying:

> 'Not only did [the expert] not adhere to the timetable I set but he appears to have completely disregarded the need to tailor his work and the time taken to the funding available and the time allowed. Moreover, when ultimately he produced a report, several weeks late, it was not, in truth, recognisable as an expert report at all. … I would like to make it plain that I do not consider that he is an expert who should ever receive public funding in the future because of his utter disregard of court

requirements and his inability to produce reports, quite apart from any question as to his relevant expertise.'

34. The Appellants did manage to find another expert, John Wraige. This is the witness whose reports lie at the heart of this appeal. As the trial judge noted, Mr Wraige plainly does have the relevant expertise. Mr Wraige hit the ground running and in the space of a few weeks, produced material which was relevant and appropriate. He met constructively with the experts who were to appear for the prosecution. He provided material to the defence team to enable them to understand and interrogate the evidence being deployed by the prosecution.

35. There were limitations to what Mr Wraige could do in the time. As the CCRC noted:

    i) He was working entirely pro bono - he had to fit his work on this case into the schedule of other work he had already undertaken;

    ii) He had no funds to pay for experiments or for the space within which to do them;

    iii) The experiments he was able to do after the appeal required time, not only because he needed to acquire hardware and to find a suitable site, but also because some experiments can only be done at certain seasons of the year.

36. At the start of trial the trial judge sought confirmation from the defence team of their ability to proceed. That confirmation was given.

37. We are quite satisfied that there was no inequality of arms in the true sense. Leading counsel at trial specifically acknowledged that the defence could conduct the case in an appropriate fashion. Further it is clear from the materials we have seen such as excerpts of leading counsel's cross-examination of prosecution experts and the Judge's summing up (which we have read in full) that the expert evidence adduced for the prosecution was appropriately tested. The Appellants had "a reasonable opportunity of presenting his case to the court under conditions which do not place him at a substantial disadvantage vis-à-vis his opponent": *Kaufman v Belgium* (1986) 50 D.R. 98 at 115.

38. **Ground 4** concerns the civil trial and issues of causation. It is said that the jury might not have accepted the Crown case that the chain of causation remained unbroken had they known of the eleven matters referred to above which first came to light in the civil judgment and/or the Marlie Farm Report, both of which focussed on the sub-optimal performance of the fire service. In particular it is said that matters that emerged in civil trial regarding the negligence of the fire service could well have provided more material as to whether any negligence of appellants made a significant contribution to the deaths of the two victims.

39. We have read the judgment of Irwin J in the civil trial. We have considered the relevant principles as set out in *R v Cheshire* [1991] 1 WLR 844. Where it is alleged that a defendant caused a death, it is not necessary for the prosecution to prove that the defendant's acts were the sole or main cause. Rather, the question is whether they were a substantial cause of the death i.e. more than a minimal cause. Was there any material which emerged in the course of the civil trial which affords any ground for

arguing that the Winters' acts of negligence were not a substantial cause of the deaths which resulted from the mass explosion. We conclude they would not. The inadequacy of the Fire Service's handling of the incident was not a new fact. It was accepted by the prosecution at the trial. The jury were informed of the position from the outset. An opening statement was made on behalf of the appellants which raised the issue. Evidence was called from the relevant Fire Service witnesses. They were cross-examined on the issue. The judge carefully directed the jury on the defence case that the actions of the fire service broke the chain of causation. There is no point sought to be relied on arising out of the civil trial or Marlie Farm report which is different in effect or in quality to the evidence which the jury had. The points may be specific, but they go to the same question – the negligence of the fire service. Critically none of the eleven items relied upon goes to lessening the Winters' own contribution to the creation of the incident. Without that, their substantial contribution remains. As a matter of law they caused the deaths. The contribution of the Fire Service cannot alter that. This ground is not arguable.

40. **Ground 5** is that there was serious and relevant non-disclosure at trial in that it was not disclosed that bangers on ropes and/or rook scarers might explode. In our judgment this argument has no substance. The non-disclosure alleged is the content of an HSE circular dated 1 February 2011. In the circular it was acknowledged that bird scarers containing a significant proportion of flash powder could present a mass explosion hazard. But the relevant content of the circular relating to the possibility of mass explosion from bird scarers was disclosed. Prior to the trial the prosecution disclosed the results of research which established this possibility. The research was traversed in the course of the evidence. The circular was substantially based on the research which was disclosed in the trial. What came afterwards was more formal testing to comply with applicable standards, and thereafter consideration of the extent to which publication of the research was required and drafting of the circular. This was not a simple process. We heard evidence from Mr Sime, a senior official of the HSE. He explained that a view had to be taken about exactly how cautious to be. Further consultations had to take place. The point is therefore unarguable.

41. **Ground 6** to some extent parasitic upon Ground 1 (in respect of which the appellants have leave). To the extent that it has any independent life the submission is that the case could never have been proved to the criminal standard at trial. That appears to equate to a case that there was on analysis no case to answer. That proposition is clearly unarguable. There was a wealth of material to surmount that hurdle. To the extent that this point hinges on an argument about the mechanics of the ignition of the mass explosion that is covered by Ground 1.

42. Finally we address the very recent ground of appeal, **Ground 7,** relating to an alleged misdirection by the trial judge in relation to the evidence of a particular witness, David Chapman, principal scientist at the Explosive Safety Unit of the HSE at Buxton. The judge summed up his evidence on one issue in summary form. He said that the witness's evidence had been that certain fireworks had been ejected from the container. The complaint is that the judge ought to have said that the witness had said that it was highly likely that they had been so ejected. We can see no merit in this argument. The judge summed up the case at length. The transcript covers some 250 pages. In relation to Mr Chapman the judge was summarising the witness's opinion. Let us suppose for the sake of this argument that the summary was not in accordance

with the witness's evidence. In the context of the case as a whole, the inaccuracy would not conceivably have affected the outcome of the trial or the safety of the convictions. In any event, counsel at trial did not see fit to correct the judge. This appeal does not involve any criticism of leading counsel at trial. Had the point been of any significance, the judge would have been invited to correct what he had said. No such invitation was extended.

43. The appeal therefore is confined to the two matters referred by CCRC.

THE APPEAL

44. At the centre of the appeal are two issues. Were there HT1 fireworks in the ISO container? Did the rook scarers which were in the container have the capacity to cause a mass explosion?

45. It is submitted that there is now evidence tending to undermine the Crown case that there were HT1 fireworks in the container, namely the report of Mr Wraige dated 29 May 2012 coupled with the HSE circular dated 1 February 2011 which contained a strong warning about the mass explosive capability of rook scarers and their ilk. What is said is that, in combination, that evidence is sufficient to contradict the assertion central to the prosecution case that the mass explosion must have been caused by HT1 material. It is said that the circular alone directly contradicts the evidence of Mr Myatt at the trial that *"no comparison could be made with the rook scarers which in any event were 1.4 fireworks"*. In consequence it is said that the inference that HT1 fireworks were in the container was unsafe.

46. At trial prosecution counsel was entitled on the evidence then available to say in closing the case that *"it was not the rook scarers"*. In the light of the evidence as it now stands that submission would not have been open to the prosecution. It was submitted that the Joint Experts Report (JER), shows that *"nothing can be deduced with certainty about the causation of the mass explosion of the container beyond the fact that it was caused by the explosion of fireworks within it"*. Taking these points together it was submitted that accordingly the conviction is unsafe.

Discussion

47. We have read the entirety of the substantial materials put before us. We have considered the materials in the light of the written and oral submissions made by Mr Birnbaum with skill and force. We conclude that this appeal is misconceived and must be dismissed. That conclusion remains whether one looks at the matter as the prosecution urged, from a standpoint of standing back and taking all the evidence in the round, or whether one pursues the particular points of analysis on which focus was placed by the Appellants.

48. At its core the appeal is based on the view now taken of the mass explosion risk posed by rook scarers. The high water mark of that view is the HSE circular to which we have referred supplemented by Mr Wraige's evidence. Of this, it is said that *"Wraige's very detailed experimental and analytical work raises grave doubts as to the accuracy of the Crown theory of causation. His very cannily designed experiment of February 2011 demonstrated convincingly the capacity of a large quantity of scarers to mass explode."*

49. This argument focuses only on what is new. It fails to take into account what evidence there was before the jury at trial. The prosecution case at trial hinged on proving that HT1 fireworks were a substantial cause of the explosion. At trial the jury had evidence as to the mass explosive capacity of rook scarers. This came inter alia from the material disclosed before trial by the HSE. They also had a large body of evidence about the presence of admittedly highly explosive HT1 fireworks at the Appellants' premises and as the likelihood of such fireworks being in the ISO container.

50. The experimental evidence which underpinned the HSE circular was adduced and cross examined upon at trial. Mr Myatt said that *"The [rook scarers] round the container, that type, if you put them side by side they mass explode, the one transmits to the other"*. He gave evidence which broadly confirmed that he regarded rook scarers as a mass explosion hazard. While his evidence was that he did not think that they had caused this explosion, the effect of his evidence was that they might pose a mass explosion hazard. That possibility could not be excluded. The new evidence regarding rook scarers is not properly to be regarded as fresh evidence. It is in reality more of the same, offering no more than a slight shift of emphasis.

51. Against this possibility the jury had what Mr Matthews referred to in oral argument as "an arc of evidence" supporting the contentions that (i) HT1 fireworks were present on site and (ii) that they were in the ISO container.

52. As to presence on site there was (at least) the following evidence:

    i) Invoices showing that HT1 fireworks had been imported by the appellants from Spain in the months before the explosion;

    ii) Lists for customers showing HT1 fireworks being offered for sale;

    iii) Delivery notes showing HT1 fireworks (250mm shells) in substantial quantities being delivered to customers, on various occasions;

    iv) HT1 fireworks included in the Appellants' company's firework display "firing lists" e.g. "3 Titanium Maroons will splinter the night's silence"

    v) The presence of HT1 fireworks on site. This went beyond LMB/32 – a report shell found near the explosion crater. Whether the finding of that shell demonstrated that it was associated with the container is of no consequence for these purposes. It was the type of firework which the appellants ought not to have had at their premises.

53. As for evidence of HT1 fireworks within the container that contention was supported by (at least):

    i) The fact that the Winters said that the container contained fireworks for shipment to Oman for firework displays. Both the tender documentation for Oman and the evidence of Mr Morley, a witness called by the appellants indicated that this order included HT1 fireworks

    ii) The Appellant Nathan Winter's communication to the emergency services before the explosion: "If it ever gets to that container run like fuck" "You need

to get a cordon of at least 300 metres on now" "some larger fireworks" "I've got some larger 1.2 size fireworks".

iii) The appellant Martin Winter's communication on the day: *"if that container goes up we're all too close."*

iv) The evidence of witnesses as to what Nathan Winter had said at the time:

a) Nathan Winter had told Mr Wells that "he was extremely concerned that we stop the fire spreading to [the ISO] container"

b) Messrs Pratt, Upton, and Lazenby heard "If that one goes up you don't want to be anywhere near it"

c) Mr Austin recalled: 'If that container goes bang there will be the biggest bang you'll ever see'.

d) PC Coleman 'You don't know what's in there, everyone has to go". 'Someone will get hurt".

v) The changing accounts of the Appellants:

a) Mr Martin Winter originally veered between the cautionary approach indicated above, and an assertion that the container was full of wood. In interview he said that the container contained fireworks to go to Oman – but not HT1 fireworks

b) Nathan Winter contemporaneously regarded the container as a mass explosion hazard. In interview while confirming that he had said that the contents included material rated higher than HT3 he also indicated the contents were fireworks;

c) Neither mentioned the possibility of rook scarers until interviewed over a year later under caution;

vi) The inconsistent nature of Nathan Winter's account: he accepted that he had said that there were "serious explosives" in the container and *"didn't want to be anywhere near it"*; and yet he said that he was unaware of the risks of rook scarers;

vii) The unconvincing account of how the rook scarers could have been part of the Oman firework display.

54. Looking at the matter overall we conclude that neither Mr Wraige's reports nor the HSE circular could have had any appreciable impact on the cumulative effect of this evidence. It was this combination of facts and circumstances which underpinned the jury's conclusion that the Appellants' breaches of duty had caused the explosion and hence the deaths. The circumstantial evidence proved that the container contained HT1 fireworks. HT1 fireworks created a serious risk of mass explosion. The circumstantial evidence further proved the necessary knowledge and foresight of the appellants.

55. That is sufficient to dispose of the appeal. For completeness we shall deal with the particular and discrete points raised on behalf of the Appellants.

56. A number of submissions have been made both in writing and orally about the mechanism of the mass explosion. Mr Birnbaum sought to persuade us that it was not possible to prove that an HT1 firework had been causative of the explosion which occurred. His argument in essence was that, unless the prosecution were able to prove that the initiating detonation in the container came from an HT1 firework, the case failed. The suggestion was that both rook scarers and HT1 could have been within the container, but that the detonation could have come only or come first from the rook scarers. Mr Birnbaum relied on the conclusion of the Joint Expert report that nothing could be deduced with certainty as to the initiating cause of the explosion. The consequence of that was that causation could not be proved.

57. Mr Matthews urged us not to *"disappear down the rabbit hole of causation"*. However, causation was an important factor in the Appellants' argument. It is necessary for us to explain why this argument does not have the force submitted by Mr Birnbaum.

58. The essential problem for the Appellants is that there was a mass explosion of multiple devices. It was not a unitary event caused by a single device. The HSE experts agree (and Mr Wraige does not disagree) that the video evidence recovered from the scene indicated that the explosion appears to have proceeded in at least two parts i.e. an initial event followed by a more substantial blast. In those circumstances it matters not by what the initial event was caused. All that had to be proved was that an HT1 firework was **a substantial cause** of the mass explosion: either by being the cause of that initiating event or the later part or parts of the explosion.

59. That substantial cause would exist whether the HT1 firework was the first or the second to light. So long as it was a material part of the mass explosion, it was such a cause. That is because of the integrally high explosive nature of HT1 devices and because of their tendency to cause spontaneous combustion in other fireworks nearby. That reflects Mr Myatt's evidence at trial. If HD 1.1 fireworks were stored with HD 1.2, 1.3 and 1.4, the entire consignment had to be treated as being as dangerous as HD 1.1 (the most dangerous article in it). Ground 6 in the Amended Grounds of Appeal reads: "*If scarers had a capacity to mass explode and were in the container together with HT1 fireworks it would be impossible to tell whether the HT1 had caused the scarers to explode or vice versa*". For the reasons we have given, this does not matter so long as HT1 was involved at some point.

60. Unless the conclusion that there were HT1 fireworks in the ISO Container could be said to be unsafe it matters not what the precise mechanism of ignition was. The evidence adduced for the purposes of the appeal does not render that conclusion unsafe. That evidence does not bear at all on the cumulative body of evidence as we have already outlined which supports the conclusion that there were HT1 fireworks in the container. Given the evidence as to the presence of HT1 fireworks on site and in the container and the paucity of remains of unexploded HT1 fireworks the jury's verdicts would not have been affected by the new material.

61. Issue is taken with the fact that the evidence at trial suggested that the explosion equated to the explosive power of at least 130,000 rook scarers. This was a number

which far exceeded the number of rook scarers which the Appellants ever said were in the container. The conclusion of the Joint Experts' Report is that the number needed to produce the explosion cannot be calculated owing to uncertainties in a number of the inputs. The other evidence means any imprecision here cannot be said to render the conviction unsafe. The 130,000 figure was mentioned only briefly in the summing up. It was not flagged by the judge as a telling point so as to give it a greater weight than that passing reference might suggest. Further, even as it stands, the evidence is that a very large number of rook scarers indeed would be needed to produce the explosive effect which occurred on the day in question. The evidence as to the number of rook scarers and the purpose thereof as given on behalf of the appellants at trial was confused. It did not support the proposition that a very large number of rook scarers were in the container.

62. Much time and effort was put into analysing the significance or otherwise of the HT1 firework known as LMB/32. Was it ejected from the ISO container, or did it come from a soak tank where it had been placed as a firework which had been detonated at a display but which had not exploded? In those circumstances it would have presented a particular explosion risk. However, those two possibilities were both live at trial. It is not the case that at trial it was accepted that LMB/32 came from the container. The new analysis merely adds more depth to the evidence at trial that it might have come from either. In addition, as the above analysis makes clear, there was a wealth of evidence which did not involve LMB/32. It was not a key part of the evidence. We can understand that, with hindsight and under the forensic microscope now being applied to the trial, it might seem to have been an issue of particular significance. In our view, having analysed the entirety of the evidence as set out in the summing up and elsewhere, the prominence now given to the issue is misplaced.

63. For the reasons we have given the evidence of Mr Wraige and the HSE circular do not affect the safety of the convictions. The discrete matters raised by Mr Birnbaum do not affect the position. Therefore, the appellants' appeal is dismissed.

64. The CCRC only referred the case to this court after repeated submissions had been made to them. They correctly rejected the majority of the proposed grounds of appeal. We can understand why the evidence of Mr Wraige might have led the CCRC to consider that the convictions were unsafe. We do not suggest that it was wrong to refer the case. Equally, we are satisfied that proper analysis of all of the evidence demonstrates that Mr Wraige's evidence does not have the effect which the CCRC thought that it might.