



Neutral Citation Number: [2013] EWHC 2331 (QB)

Case No: HQ10X0197

IN THE HIGH COURT OF JUSTICE
QUEEN'S BENCH DIVISION

Royal Courts of Justice
Strand, London, WC2A 2LL

Date: 30/07/2013

Before:
MR JUSTICE IRWIN

Between:

(1) The "Wembridge Claimants"
(2) The "Wicker Claimants"
(3) Timothy Austin

Claimants

- and -

(1) Martin Paul Winter*

First Defendant

(2) East Sussex Fire and Rescue Service

Second Defendant

-and-

Alpha Fireworks Limited (In Liquidation)*

Austin Defendant

Martin Seaward (instructed by **Thompsons**) for the **(1) Wembridge Claimants**
Frank Burton QC, Andrew Roy & Vanessa Cashman (instructed by **Slater & Gordon**) for the **(2) Wicker Claimants**
Lawrence West QC & Adam Heppinstall (instructed by **Goldbergs**) for the **(3) Austin Claimant**
Lord Faulks QC, Muhammed Haque & James Sharpe (instructed by **Clyde & Co**) for the **Second Defendant**
*** Were not represented and did not appear**

Hearing dates: 25 February – 20 March 2013
Supplementary Submissions 20 June and 1 July 2013

Approved Judgment

I direct that pursuant to CPR PD 39A para 6.1 no official shorthand note shall be taken of this Judgment and that copies of this version as handed down may be treated as authentic.

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MR JUSTICE IRWIN

Mr Justice Irwin:

Introduction

1. The claims in this case arise from a large explosion of fireworks stored in a steel shipping container [“the ISO container”] on premises known as Marlie Farm near Lewes in East Sussex on the afternoon of 3 December 2006. Two men died in the explosion. They were Geoffrey Wicker, a firefighter, and Brian Wembridge, a video technician employed by the Second Defendant. The other Claimants pursue claims for injuries and the consequences of those injuries. They are, or were, firefighters or police officers.
2. Marlie Farm was a site with a number of buildings. A significant part of the site was occupied by the First Defendant Martin Winter, and by Festival Fireworks (UK) Limited, a company operated by Mr Winter. The First Defendant and his company operated a business storing and selling fireworks from Marlie Farm. The business, including the First Defendant and his son Nathan Winter, also mounted fireworks displays. Although the detail is to some degree uncertain, at around lunchtime on the day in question, a fire began as a consequence of some mishandling of fireworks by Nathan Winter on the site. The Claimants all attended as part of the emergency services’ response to the fire and were thus exposed to the explosion.
3. Subject to some detail and to interpretation, the great majority of the primary facts in the case are agreed. It is agreed that the First Defendant and Nathan Winter gave inadequate or misleading information to firefighters at the scene about the contents of the container, although the Claimants rely upon what was said by Nathan Winter in particular, as time progressed, as constituting sufficient warning about fireworks inside the container to found their case. I address the detail of this below. Because of the misleading or inaccurate information they gave to the emergency services, the First Defendant and his son Nathan were convicted of manslaughter by gross negligence, following a trial before Cooke J and a jury at Lewes Crown Court in December 2009. Their appeals against conviction were dismissed: *Martin Winter, Nathan Winter-v- The Crown* [2010] EWCA Crim 1474. The First Defendant’s sentence of 7 years imprisonment was undisturbed on appeal, although Nathan Winter’s sentence was reduced from 5 to 4 years imprisonment, following successful submissions that he had in fact given information to the authorities as time progressed.
4. Summary judgment has been obtained against the First Defendant, although he was granted permission to raise the issue of contributory negligence in respect of Mr Wembridge. The First Defendant did not appear at the trial. Mrs Wembridge applies for summary judgment for damages to be assessed against the First Defendant. She is entitled to such judgment. Judgment was entered against the First Defendant on behalf of Mrs Wicker on 26 July 2011. Subject to causation, any Claimant in the action who has not obtained judgment against the First Defendant would be entitled to such judgment.
5. However, the First Defendant has insufficient assets to satisfy such judgments. His insurers have refused to indemnify him in respect of his losses and liabilities arising

out of the fire and explosion. The Third Defendant has been sued only by the Claimant Tim Austin, but the Third Defendant also has no assets to satisfy judgment.

6. The Second Defendant denies liability in respect of their employees and the attending police officers, Police Sergeant Simmons and Constables Pitcher, Scott and Allcorn. The Claimants' case is based both on common law liability and on breach of statutory regulations. The Second Defendant takes issue with the legal basis of the claims. Their legal submissions are summarised in four points: firstly, that the "target duties" imposed on the fire service by the Fire and Rescue Services Act 2004 ["the 2004 Act"] are not justiciable by way of private law action; secondly, decisions made by an Incident Commander on the fireground should be immune from claim; thirdly, the statutory regulations relied on by the Claimants are either *ultra vires* or:

"cannot give rise to a justiciable obligation where they overlap the target duties in the 2004 Act; fourthly, if there is a duty of care, then the threshold for breaches established must be high and/or such that it incorporates the Bolam test in a reference to the well-known test for clinical negligence in *Bolam –v- Friern Hospital Management Committee* [1957] 1 WLR 582".

7. In addition to the issues of pure law, there are important issues of application of the law to the facts. There are a number of critical areas of fact, concerning knowledge and preparation for attending such a fire, the approach to fighting the fire, and indeed the question of whether the fire should have been fought at all. A further critical issue concerns the implementation of the decision taken by Incident Commander ["IC"] Upton at 14.29, to evacuate all personnel from the fireground. The Claimants submit this decision should have been taken earlier. They also submit that even taken when it was, had it been carried through reasonably effectively, no one would have been killed or injured. Subject perhaps to some individual issues of causation, the Second Defendant concedes that, had the fireground been evacuated to a reasonable distance, the deaths and injuries sustained would have been avoided.
8. For the reasons which I set out in the remainder of this judgment, and subject to any individual issues of causation, I have concluded that the Claimants are entitled to judgment against the Second Defendant and concedes to assessment of damages.

Objectively Available Knowledge of the Risk of Mass Explosion from Fireworks in December 2006

9. On 22 March 1989 a vehicle carrying explosives itself exploded in Peterborough. This incident was the explicit basis for the compilation and issue of "Technical Bulletin 1/1992: Explosives Guide" issued by the Home Office, which recounted in its preface that the 1989 incident:

"focused attention on the need for a reference document to provide the sort of information that fire service personnel require in order to understand the operational considerations and dangers at such incidents".

The Bulletin drew on previous documents including the “Manual of Firemanship”, on advice from the Health and Safety Executive [“HSE”] and advice from the Ministry of Defence.

10. In the introduction, the Technical Bulletin emphasises:

“Of all the commonly encountered materials which may be involved in fire, it is likely that explosives pose the greatest and most immediate danger to life and property.”

Because of the high degree of care exercised by those responsible for explosives, the Bulletin emphasised the rarity of large fires in explosives installations. It was emphasised that it was important for fire-fighters to:

“seek guidance from those responsible at an explosives installation whenever they are engaged in fire fighting at such premises, in order to avoid being exposed to any unforeseen risk from the dangerous materials present.”

However, it was also emphasised that fire services needed to have a “general understanding of explosives and of their nature” and of the approach to fire fighting in their vicinity.

11. The Technical Bulletin summarised commonly found explosives and their uses, including gunpowder/black powder/black blasting powder, defined as follows:

“These are synonyms for a mixture of charcoal, sulphur and potassium nitrate which are low explosives, very sensitive to ignition from sparks, heat and friction. They burn violently even when loose and uncompressed. They also release volumes of smoke on exploding. They are used in blasting fuse and as “black powder” forfireworks and pyrotechnic compositions.”

The Technical Bulletin noted the categorisation of fireworks as Class 7 explosives under the Explosives Act 1875, although also noting that the classes defined in that Act were outdated.

12. The Bulletin goes on to note that the more modern categorisation arising under the Classification and Labelling of Explosives Regulations 1983 defines 9 classes of dangerous goods, of which “Class 1 explosives” are further subdivided as follows:

“Division 1.1. Substances and articles which have a mass explosion hazard.

Division 1.2. Substances and articles which have a projection hazard but not a mass explosion hazard.

Division 1.3 Substances and articles which have a fire hazard and either a minor blast hazard, or a minor projection hazard, or both, but not a mass explosion hazard.

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Division 1.5. Very insensitive substances which have a mass explosion hazard.”

13. I pause to note that, even without knowledge of the mass explosion hazard associated with bulk fireworks held in containment, fireworks would be considered to fall within Division 1.2 and/or Division 1.3 of this categorisation.
14. The Technical Bulletin continues to address fire fighting as follows:

“Fire fighting – Road transport

8.1 All vehicles carrying explosives must be regarded as potentially hazardous. Division 1.1 explosives present the major hazard. The extent to which fire fighting operations or rescue might be attempted is a matter for the officer in charge to decide, having regard to the hazard and the risk to life. **The primary consideration at all incidents involving Division 1.1, 1.2, 1.3 and 1.5 explosives must be to evacuate members of the public to at least 600 metres.** [Emphasis added.]

8.2 A clear distinction should be made between a fire, or risk of fire:

- (a) on or near the vehicle NOT AFFECTING THE LOAD, nor likely to; and
- (b) an established fire WHICH INVOLVES THE LOAD or threatens to spread to the load.

For (a) every effort should be made to extinguish the fire and cool the load to prevent it being affected.

For (b) all effort must be devoted to evacuating to a safe distance.

Fire fighting should only be considered if lives would be saved by delaying a mass explosion through the application of large quantities of water. Firefighters must be protected by an earth embankment or similar substantial cover. [Emphasis added]

Note: Explosives packaging may prevent water being fully effective for cooling. It should be noted that explosives contain their own oxygen and that smothering extinguishers are not likely to be effective.”

15. The Technical Bulletin also deals with the effects of an explosion, adopting the same categorisation:

“In the event that fire reaches the explosives, the effects may be as follows:

9.1 Division 1.1

The entire load could detonate at any time without warning. The vehicle and anything else close by will be shattered, pieces flying in all directions like bullets. The blast will severely damage buildings in the surrounding area, possibly causing further injuries. The flash and firebrands thrown out may start other fires.

9.2 Division 1.2

The load is more likely to burn and explode bit by bit with increasing intensity. The main problem will be flying fragments, possibly of different sizes, and speeds, some lobbed and including firebrands, unexploded articles and self-propelled munitions. Some may explode or become armed on impact to explode if disturbed. There could be secondary fires.

9.3 Division 1.3

The entire load could burst into flames, often violently, at any time without warning. The main danger is the intense radiant heat but there could be some minor explosion effects including flying firebrands as well as flame jetting.

9.4 Division 1.4

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9.5 Division 1.5

The load could behave like Division 1.1 – Division 1.5 is more stable than Division 1.1 so an explosion is less likely but could happen as a delayed effect with very large loads.”

16. It will be seen that even without knowledge that fireworks have a capacity for mass explosion, the official guidance in 1992 was against any attempt to fight a fire which was established, which either involved a load of fireworks or threatened to spread to the load.
17. In 1998 HM Fire Service Inspectorate issued a “Guide to Operational Risk Assessment”. The Guide was structured by reference to specific generic risks including explosives. The relevant passages draw significantly on the Technical Bulletin of 1992. The key passages read as follows:

“Generic Risk Assessment 5.7

Generic Hazards – Explosives

1 SCOPE

This assessment examines the hazards, risks and controls that relate to operational incidents which involve the presence of explosive material.

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2. SIGNIFICANT HAZARDS AND RISKS

2.1 Of all the commonly encountered materials which may be involved in fire, it is likely that explosives pose the greatest and most immediate danger to life and property. The highest degree of care and precaution is exercised by those responsible for manufacturing, handling and transporting explosives and a very substantial and complex system of legal safeguards is in place to control them. For this reason it is very rare indeed for large fires to occur in explosives installations, especially in peace-time.

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Common Explosives and Their Uses

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2.3.4 Gunpowder/Black powder/Black blasting powder

These synonyms for a mixture of charcoal, sulphur and potassium nitrate which are low explosives very sensitive to ignition from sparks, heat and friction. They burn violently even when loose and uncompressed. They also release volumes of smoke on exploding. They are used in blasting fuses and as “black powder” for sporting cartridges, fireworks and pyrotechnic compositions.

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2.36 Chlorates

These are similar to Nitrates in that their purpose is to supply oxygen. They are usually the salts of sodium or potassium. They are not used in blasting explosives but have a limited use in cap and detonator compositions; their principal use is in firework compositions.

Key Control Measures

3.1 Section 1 (1) (d) Inspections

3.1.1 Brigades should consider arrangements for Section 1(1) (d) inspections of premises which manufacture, store or use

explosives and the contribution which such inspections can make to risk assessment. These inspections should take account of and record the presence of explosives and any other associated features (e.g. hazard classifications, construction of storage buildings, access points).

3.1.2 Arrangements should be made for Firefighters who are likely to attend incidents involving explosives to visit these premises for familiarisation and training purposes. Such visits should also include vehicles, aircraft and ships used to transport explosives.

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3.3 Identifying Explosives Stores

3.3.1 Fire Brigades should identify every premises in their area which manufactures or stores explosives. This can be achieved by contacting the appropriate licensing agency. Manufacture and storage by the MOD is licensed by the Secretary of State for Defence.

3.3.2 Every factory used for the manufacture of explosives (including fireworks) is licensed by the Health and Safety Executive.

Magazines which store quantities exceeding 1800 kgs are licensed by the Health and Safety Executive.

Local Authorities issue licenses for quantities up to 1800 kgs. of general explosives and 9000 kgs. of certain types of ammunition and also premises which store fireworks.

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3.5 Firefighting Plans

3.5.1 For large explosive stores, a pre-determined fire fighting plan should be established and practised. The plan should be drawn up in liaison with the site management and should contain the usual Section 1(1) (d) provisions including access, water supplies, identification of risk, anticipated fire fighting techniques, safety procedures and contact with specialist advisers.

3.7 Explosives Stores and Buildings

The pre-determined fire-fighting plan should be put into operation and advice obtained from any site specialists. The protection of adjoining buildings, stores and magazines should be given early consideration in view of the likely number of small fires, which may occur following an explosion. Specific

guidance on safe distances and suitable cover for fire-fighting personnel should be treated as a priority.

Road Transport

3.8.1 All vehicles carrying explosives must be regarded as potentially hazardous. Division 1.1 explosives present the major hazard. The extent to which fire-fighting operations or rescue might be attempted is a matter for the IC to decide having regard to the hazard and the risk to life. Written information is carried on the vehicle which details the explosives carried and the special actions necessary.

3.8.2 The primary consideration at all incidents involving Divisions 1.1, 1.2, 1.3 and 1.5 explosives must be to evacuate members of the public to at least 600 metres. The Division number is displayed on the orange diamond placards on the vehicle sides

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3.84 A clear distinction should be made between a fire, or risk of fire.

- On or near the vehicle not affecting the load, nor likely to, *every effort should be made to extinguish the fire and cool the load to prevent it being affected. Consideration should be given to early evacuation.* [Emphasis in original]
- An established fire which involves the load or threatens to spread to it, *all effort must be devoted to evacuating to a safe distance.* [Emphasis in original]

3.8.5 Firefighting should only be considered if lives would be saved by delaying a mass explosion through the application of large quantities of water. Firefighters must be protected by an earth embankment or similar substantial cover. Small buildings or vehicles offer little protection and sheltering behind brick, block or stone walls can be dangerous since they will only stop small missiles and the blast may overturn them or break them up to form more missiles.

The shock wave or blast from an explosion can cause death or major injury including lung damage and ruptured eardrums but the effect falls off with distance. It must be stressed, however, that fires should only be fought from the greatest practicable distance, using the minimum number of operational personnel and where possible, ground monitors.

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List of Considerations for Incident Commanders at Explosive Incidents

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Explosives in Storage

- Liaise with site management.
- Implement pre-determined firefighting plan.
- Consider protection of adjoining buildings, stores and magazines.
- Minimum safe distance for personnel and public is 600 metres.
- Take advantage of protective mounds or barriers.
- Use minimum number of personnel in risk area.

Explosives in Transit

- Primary consideration at all incidents involving divisions 1.1, 1.2, 1.3 and 1.5 explosives is to evacuate members of the public to at least 600 metres.
- If there is a fire or risk of fire on or near the vehicle not affecting the load nor likely to then every effort should be made to extinguish the fire.
- If there is an established fire which involves the load or threatens to spread to the load, all efforts must be devoted to evacuating to a safe distance.
- Firefighting should only be considered if lives would be saved by delaying a mass explosion through the application of large quantities of water. Firefighters must be protected by an earth embankment or similar substantial cover.
- Small buildings, vehicles and brick block or stone wall do not provide adequate cover.
- Information on explosives in transit can be ascertained from documentation held by crew of vehicle, train ship or aircraft or, in their absence, from the placards attached to the vehicle, wagons or from the packaging on the explosives.
- Use minimum number of personnel in risk area.”

18. The Guidance ends with a summary sheet encapsulating the advice given.
19. In 1998, in Australia, a complex of 8 ISO containers of fireworks were destroyed after a fire started in one store, leading to a violent explosion in one of the adjacent container stores. Debris from the explosion was found more than 2000 metres away. A further similar incident took place in Enschede in the Netherlands in 2000. A fire in a fireworks storage complex resulted in major explosions killing 22 people and injuring hundreds more. The explosion was estimated to be the equivalent to an explosion of 4/5 thousand kilos of TNT. A further similar incident took place in Perth, Australia in 2002. A fire in one area of the complex concerned resulted in the explosion of adjacent ISO containers of fireworks. This was estimated to be the equivalent of 227 – 409 kilograms of TNT. Buildings in the immediate vicinity were totally destroyed, houses within 300 metres suffered extensive structural damage and there was widespread damage to windows, doors and ceilings of buildings up to a kilometre distant.
20. These incidents led to a collaboration between the Health and Safety Authorities across Europe in what became known as the CHAF Project 2003. The project involved the experimental detonation of ISO containers filled with fireworks. The results recorded on video film (which has been made available to the court) demonstrated the consistent capacity of fireworks of different categories to produce a mass explosion similar to the three episodes which stimulated the study. According to the evidence of Dr Michael Dennett, expert called on behalf of the “Wicker” Claimants, unchallenged on this point, the CHAF Project was supported by the UK Health and Safety Laboratory and the results were available online. The results were presented at international conferences and seminars. According to the report of Mr Keith MacGillivray, expert witness called on behalf of the “Wembridge” Claimants, both the CHAF tests and the Peterborough explosion were available on line. Ironically, the Winters themselves were aware of the CHAF video, and it is very likely that this knowledge acquired at a fireworks manufacturer’s conference underpinned the extreme anxiety shown by Nathan Winter, as the fire progressed at Marlie Farm. It should be said that there is no evidence that the Health and Safety Laboratory or Health and Safety Executive positively promulgated the CHAF experiment results. However, the information was available to any who searched for it.
21. In 2005 the Health and Safety Executive published an approved Code of Practice and Guidance on the manufacture and storage of explosives, to accompany the publication of the Manufacture and Storage of Explosives Regulations 2005 [“MSER”]. The Regulations followed a consultation on draft regulations which was begun in 2002 and which elicited responses from a number of emergency services and local authorities. The Regulations cover the manufacture and storage of all explosives, including fireworks.
22. The MSER provided a new categorisation of explosives into “Hazard Types”. These are defined as:
 - “(a) HT1 – an explosive which, as a result of , or as a result of any effect of, the conditions of its storage or process of manufacture, has a mass explosion hazard;

(b) HT2 – an explosive which, as a result of, or as a result of any effect of, the conditions of its storage or process of manufacture, has a serious projectile hazard but does not have a mass explosion hazard;

(c) HT3 – an explosive which, as a result of, or as a result of any effect of, the conditions of its storage or process of manufacture, has a fire hazard and either a minor blast hazard or a minor projectile hazard, or both, but does not have a mass explosion hazard.

(d) HT4 – an explosive which, as a result of, or as a result of any effect of, the conditions of its storage or process of manufacture, has a fire hazard or slight explosion hazard, or both, with only local effect.

A ‘mass explosion’ hazard is an explosion where almost all the material in a load explodes instantaneously. The Manufacture and Storage of Explosives Regulations 2005 (“MSER”) states that a mass explosion is one in which the entire body of explosives explodes as one.”

23. It will be seen that these categories are closely approximated to the subdivisions of explosives under the 1983 Regulation set out above.
24. The Guidance contains specific guidance to fire services in the following terms:

“Fire Services may wish to consider in advance in what circumstances they would or would not fight a fire. Fire fighting action should generally be limited to preventing the fire spreading to buildings or areas containing explosives, or to fighting secondary fires after an explosion. In general the fire services should withdraw to a safe distance if the fire should spread to a building known to contain explosives or other similarly hazardous materials. *If there is any doubt about the nature or location of the explosives involved, the fire should not be fought and the fire service should withdraw to a safe distance.* [Emphasis added]. Fires that have spread to buildings or areas holding Hazard type 1, Hazard type 2 or Hazard type 3 explosives must not be fought.”
25. Four copies of the Approved Code of Practice of April 2005 were received by the Second Defendant, a fact confirmed by Assistant Chief Officer Walsh. This material was expressly intended to assist fire services to deal with such risks.
26. I turn shortly to the evidence as to how this generally available knowledge was absorbed and formulated by the Second Defendant themselves. However, before doing so, it is worth noting the extent to which this knowledge had been absorbed and promulgated within one other fire and rescue service.

27. Mr Evans, the fire expert called on behalf of the Second Defendant, spent his active fire fighting career with the Merseyside fire service. No doubt for that reason, a specific attempt was made by the Claimants to ascertain the level of knowledge on Merseyside of these issues at the relevant period. I deal below with Mr Evans's response on this point.
28. On 18 June 2004 the Merseyside Fire and Rescue Service promulgated a standard operating procedure entitled "Explosives – Fire Fighting Procedures". The SOP deals with the classification of explosives, the markings on vehicles, and risks. Much of the wording from the HSE guidance quoted above is incorporated and further advice is formulated as follows:

"Fire fighting – explosive stores in buildings (including firework storage).

For large explosive stores, a predetermined fire fighting plan should be established and practised. This plan should be drawn up in liaison with the site management and will contain the usual 7(2) (d) provisions including:

- Water supplies
- Identification of risks
- Anticipated firefighting tactics
- Safety procedures
- Contact with specialist advisers
- Safe havens

Associated Hazards

All fireworks including those for sale to the general public and manufactured items designed for professional use, contain substantial amounts of Black powder and Flash powder. These materials are low explosive, but can mirror the effects of high explosives under certain conditions.

All fireworks and pyrotechnics can cause **fatal** injuries to persons in the path of a projectile or mass explosion/fire hazard.

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Operational Considerations

Actions by Mobilising and Communications Centre (MACC)

On receipt of a call to a premises storing explosives/fireworks

- Mobilise two pumping appliances to the incident
- If known inform appliance commanders that explosives/fireworks are stored/manufactured.

Incident Commander

- Upon arrival at the incident the initial Incident Commander must conduct a Dynamic Risk Assessment and consider the following:
- Approach from upwind and liaise with onsite managers or specialists in order to determine tactics, at least 600 metres from incident.

NB this distance may be reduced after completion of initial risk assessment.

- Make up for additional resources as necessary, e.g. to augment water supplies.
- Initiate and maintain an inner cordon.
- Ensure all personnel are wearing appropriate personal protective equipment [PPE] including hearing protection.
- Personnel and appliances should be protected by suitable shielding wherever possible e.g. earth mounds.
- Appoint and brief any safety offices/sector commanders.
- Personnel should be briefed and fire fighting operations commenced the number of committed personnel must be kept to a minimum and the safe working distance for fire fighting should be at least 200 metres when operating an unshielded/unprotected surroundings.

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Incidents involving fireworks in post boxes, phone kiosks, cars etc

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- When it is suspected that fireworks are involved, it must be remembered that there is potential for an explosion, if one was not already taken place, with debris likely to be thrown a considerable distance, therefore appropriate

safety measures must be adopted to protect personnel and equipment.

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“Associated Hazards

.....These materials are low explosive, but can mirror the effects of high explosives under certain conditions.

All fireworks and pyrotechnics can cause fatal injuries to persons in the path of mass explosions/fire hazard.”

29. It follows that much of the centralised knowledge about the explosion risks arising from fireworks had been promulgated on Merseyside at an operational level by June 2004.

Knowledge within East Sussex Fire and Rescue Service [“ESFRS”] of Risks of Explosion from Stored Fireworks

30. There is a long tradition of fireworks manufacture, storage and display in East Sussex, particularly in the vicinity of Lewes. The town has been described as the “Fireworks Capital of England”. This activity is centred on the annual bonfire displays and on the bonfire societies which cluster in and around the town, but fireworks displays are mounted throughout the year and fireworks are manufactured and exported from the area to the rest of the country. The extent of this is well encapsulated by an email from Mark Marsden of the Arson Reduction Team of ESFRS, sent to Station Managers and Watch Managers of the Force on 2 November 2005, some thirteen months before the explosion. The email is intended to inform the recipients of information supplied by East Sussex and Brighton and Hove Trading Standards regarding premises that are storing fireworks. Each of the premises listed “is allowed to store up to 250 kg (powder weight) of explosives” and is “licensed to store fireworks to 2000 kg (powder weight)”. There is some evidence to suggest that the list supplied was incomplete. However, the schedule lists fifteen bonfire societies or fireworks companies within the ESFRS area, and goes on to single out the business at Marlie Farm as follows:

“In addition, the Festival Fireworks (M Winter) at Unit 1, Marlie Farm, Shortgate Lewes BN8 6PH is licensed by the HSE to store OVER 2000 KG NEQ EXPLOSIVES. He also holds a licence to sell fireworks all year round, as do the following premises.”

Four further premises are listed.

31. It is beyond doubt therefore that East Sussex had a particular risk associated with fireworks and fireworks establishments. These risks were of course far from the only risks to be borne in mind by the Second Defendant.
32. In August 2002 the Second Defendant promulgated an Aide Memoire for their firefighters. This was a large document, intended to be practical in its use, containing

short notes on how to deal with a considerable number of types of risk. The Aide Memoire was updated on 23 February 2006. The relevant text reads as follows:

“Operational Aide Memoire

Explosives

(see Bomb and Incendiary Devices)

Initial Action

If fire established and involves explosives or threatens to spread to them, evacuate to a distance of 600 m.

Contact driver as soon as possible for details of load carried.

Consider fire fighting if lives could be saved by preventing spread, but only if behind substantial cover.

Evacuate members of public to at least 600m.

Safety Issues

Substantial cover is only to be considered as earth embankment or similar.

Vehicle radios should not be used within 50m of explosives.

Use ground monitors where possible.

Minimum number of personnel to be committed.

Explosives should not be moved or handled by brigade personnel until after the fire is extinguished.

Further Considerations

Continually update dynamic risk assessment.

Consider advisability of lying charged hose lines to cover surrounding risks.

Obtain specialist advice regarding cleaning of contaminated clothing, equipment etc.”

33. As will be evident, the Aide Memoire does not address “fireworks” but “explosives”. The practical application of this Aide Memoire therefore depended on the identification of fireworks as explosives. The Aide Memoire does not explicitly make that identification. However, Marlie Farm had been identified by the Second Defendant’s internal communications as an explosives store.

34. As already indicated, I heard evidence on behalf of the Second Defendant from ACO Walsh, the Second in Command of the Defendants. He was the man responsible for the investigation into Marlie Farm after the event. His evidence was of great interest.
35. ACO Walsh joined the Second Defendant in 2003. His initial job was as Director of Community Protection, in his own words “responsible for operation procedures ...from November 2003”. He became ACO in June 2006.
36. Immediately on his arrival with the Second Defendant, ACO Walsh was briefed as to the imminent bonfire celebrations and as to the situation generally concerning fireworks in East Sussex. He was then told of the prevalence of fireworks in the area, and that there was illegal storage of fireworks.

“Q. So in terms of the bonfire societies, had it occurred to you as the director responsible for implementing locally this national guidance – did it occur to you that in East Sussex generally, in Lewes in particular, there was a substantial storage of fireworks in the build up to the autumn bonfire society celebrations?”

A. Absolutely. I joined East Sussex Fire and Rescue Service on 3 November 2003 and was immediately presented a copy of – I believe it was Operation Peel, which is the multi-agency operation in respects to the bonfire society activities in Lewes on 5 November 2003, and each year that operation is reviewed and the director, as I was, I review that each year in respects to the Bonfire Society’s activities on November 5.

Q. So you knew then that there was this build up of fireworks?

A. We knew there was activity took place in respects to the bonfire societies, yes. We had multi-agency meetings with the police that referenced that activity.

Q. Did that extend to 1(1) (d) inspections of the sites where the fireworks were being stored?

A. In respects to the sites they were stored, I couldn’t answer yes or no, that I can recall. What I can say is a number of bonfire societies wouldn’t have told us where their stores were, because they – it was alleged that they stored their fireworks illegally.

MR JUSTICE IRWIN: A number of them stored them illegally?

A. That’s what we believe, but that’s a matter of ..

MR SEAWARD: Did you believe that before Marlie Farm?

A. In terms of ..?

MR JUSTICE IRWIN: I thought you were describing a briefing you got in November 2003, that that was part of the briefing you got. Is that wrong?

A. The briefing I got was about the operational plan.

MR JUSTICE IRWIN: Yes.

A. And the use of fireworks at those events.

MR JUSTICE IRWIN: No, no, you just told us that you were told that a number of the bonfire societies stored their fireworks illegally.

A. That's what I was told, yes. "

37. As I have noted above, the HSE's approved Code of Practice addressing the risks of explosives, including fireworks, was sent to the Second Defendant on publication in April 2005. At that stage ACO Walsh had been in charge of dissemination of such information for some 18 months. There is no evidence that the Code of Practice was ever disseminated within the ESFRS, or even fully considered centrally by Mr Walsh or others responsible for safety policy.
38. Against that background, Mr Walsh was asked if there was any evidence of consideration of the advice in the Generic Risk Assessment that arrangements should be made for section 1 (i) (d) inspections of premises concerned with explosives. He said he was not aware of any such consideration. Mr Walsh agreed that it was left to station managers to decide what familiarisation visits should be made to sites of interest in their areas. He agreed they were never told by him to focus on places where explosives were held, and he did not suggest that others had given any such direction. He agreed that the East Sussex Brigade had not identified all the premises in their area where fireworks were manufactured and stored. So far as he was aware, no-one had been tasked to contact the HSE to see where the relevant licences had been granted. He was aware of no plan being drawn up for fire fighting at Marlie Farm, even though it was licensed to store more than 2000 kilograms of explosives, and that fact was known to the Second Defendant and had been circulated by Mr Marsden in his message of 2 November 2005.
39. Mr Walsh agreed that, although station managers, to whom issues of inspection and safety were delegated, could be relied on to know their own area, they in turn had to rely on the centre for analysis and dissemination of policy, and for information about risks.
40. In August 2005 the Second Defendant issued a risk assessment concerning explosives. This was a generic risk assessment identifying hazards, the risks that flowed from the hazards, the control measures already in existence and giving a risk rating for each risk. Following the pattern initiated by the Fire Service Manual generic risk assessment, the most important passages relevant to explosives set down in the Second Defendant's risk assessment can be summarised as follows. The four

principal hazards identified were “incidents involving explosives in storage not involved in fire”, “incidents involving explosives in storage involved in fire”, “incidents involving explosives in transit, road rail, air, water not involved in fire” and “incidents involving explosives in transit road, rail, air, water involved in fire”. In each case the principal risks were described as “blast, burns, and projectiles”. In each case the “control measures already in existence” are said to be identical: full personal protective equipment [“PPE”], continuation training twice yearly, line manager supervision, NFG Practical Fire Fighting Volume 1 Part 7, OPS Aide Memoire, Guide to Operational Risk Assessment Section 5.7, 1(i) (d) Inspections and Classification and Labelling. The risk assessment gave a low likelihood of the eventuality of the risk where explosives in storage were not involved in the fire, but a higher assessment of the likelihood of risk where stored explosives were involved in the fire, and a higher estimation of risk eventuating where explosives were in transit. However, in each case the risk assessment concluded that if an incident occurred, the severity was high, with a rating of 6 out of 8. It is interesting to note that the risk assessment contains an error in relation to “incidents involving explosives in storage involved in fire” since the product of a likelihood of an incident rated at 3 and severity rated at 6 is given as “12 low”. However this does not detract from the overall impact of the risk assessment.

41. There is nothing in the Second Defendant’s risk assessment which on the face of it links the generic risks with the particular presence of fireworks in East Sussex.

Training within ESFRS in Relation to Fireworks or Explosives

42. I have summarised above the rather special prevalence of fireworks manufacture and display in East Sussex. The area covered by the Second Defendant is largely rural with fire stations based in small or medium sized towns, each at some distance from the other, save for the conurbation of Brighton and Hove in one corner of the area. The complement of personnel shows that the East Sussex Service fell somewhere about the middle of the range of rural fire brigades.
43. Training within the force was focused on delivery at the behest of, and often by, station commanders. It is agreed that many commanders, including for example Mr Upton, were keen and committed trainers. What was much less clear was the extent to which their training was directed from the centre. I heard no evidence to suggest that at any stage before the explosion at Marlie Farm, the Second Defendant centrally had identified the prevalence of firework manufacture and sale within their area as giving rise to a need for special training of any kind, nor did I hear any evidence that the Second Defendant had recognised that large quantities of stored fireworks or the ingredients for making fireworks, represented a risk so that specific training needed to be given.
44. In the course of the criminal proceedings against the Winters, admissions were made relating to members of the ESFRS, which were adopted and agreed by the Second Defendant in the proceedings before me. The admissions can be summarised as follows. The Station Managers for Hastings, Preston Circus (Brighton), Battle, the Crowborough stations, the Watch Managers for Hastings, Battle, Eastbourne, Crowborough and Preston Circus all confirmed that:

“prior to December 2006 they were not aware of the MSER of 2005 and had not received any training in the guidance to [fire services] in these regulations; and prior to December 2006, they had never taken part in any training or simulations or exercises involving fireworks or explosives, and they were not aware of ESFRS carrying out any such exercises.”

45. Similar admissions were made in respect of twelve named employed and retained ESFRS personnel who attended at the scene of Marlie Farm. In addition, the twelve individuals who attended the scene:

“did not refer to the Aide Memoire at any time either before or during the scene of the incident at Marlie Farm”.

This evidence is confirmatory of the picture painted by Mr Walsh.

46. In this context it may be helpful to note some of the remarks of Cooke J when passing sentence on the Winters:

“It was because you sought to cover up your breaches of the Explosives Regulations and site licence that the firemen were not clearly put on notice of the location or true nature of some of the fireworks you had on the site.

Whilst you might have expected firefighters to have greater knowledge of fireworks than they did, particularly in the area of Lewes, which could perhaps be regarded as the fireworks capital of the country, and have regarded them as dangerous explosives, neither of you made plain to them the enormity of the risks involved in attempting to fight a fire where there were HT1 fireworks present. Had you told them exactly where HT1 fireworks were and what the risks were, in the light of the CHAF tests that you had seen on video, they would surely have vacated the site and not sought even to set up the ground monitors in an attempt to fight the fire from a distance, the very activity in which Watch Commander Wicker was engaged when he died and which Mr Wembridge was filming.

It is right to say that the firefighters’ ignorance of their own procedures of explosives regulations and codes of practice for fire fighting and their lack of training in dealing with fireworks contributed to what happened. The vast majority of the firefighters did not regard fireworks as explosives capable of causing a large explosion. They thought only of individual fireworks detonating and causing the sort of explosions that fireworks ordinarily cause when fired. They were generally unaware of Hazard Types. It may be they should have asked more expressly and clearly what Hazard Type they were contending with and if in doubt withdrawn to a safe distance of 600 metres, but the fact remains that you were encouraging them to fight the fire and you, fully aware of the nature and

risks involved in the possession of HT1 fireworks, did not lay out the full facts before them. You, Martin Winter were accusing them of cowardice for not doing more than they did, when they had a hopelessly inadequate water supply to do anything. The firefighter's natural inclination is to attempt to put out the fire unless it is apparent that it is too dangerous to contemplate doing so. It was not so apparent to them, not just because of their own ignorance of Explosives Regulations, of their own procedures and their failings in leadership and training, but because of your unauthorised storage of HT1 fireworks and failure to tell them of this and the risk of mass explosion of which you were aware and they were not."

When he made his remarks, of course Cooke J had not had the benefit of the full range of evidence presented before me. However, in relation to any specific training focusing on fireworks and their potential for explosive risk, whether mass explosion or otherwise, the evidence I have heard carries the matter no further.

47. Some pertinent evidence on this subject was given by one of the fire-fighter witnesses, Mr Etheridge Julyan. He was asked to consider a statement he had made concerning the need to consider specific risks in specific areas. I found him a thoughtful witness, alive to the risk of being wise after the event. His evidence under cross-examination reads in part as follows:

"Q. The way this statement was taken – clearly you are very much more experienced perhaps in these sort of documents than the previous witness, for your job. You were shown a particular pleading, and you were asked presumably to comment on the way the fire might have been fought or what steps might have been taken?

A. (Witness nods.)

Q. I think you very fairly said in answer to an earlier question that it's important, isn't it, to separate out hindsight and lessons learned to what was apparent at the time?

A. Yes.

Q. Do you think really it's fair to say that quite a lot of the points you make, which are critical of the Fire Brigade, are to a considerable extent informed by what you know actually happened on the day and what you have learned about the danger of explosives since that occasion?

A. I think there is two answers to that. Yes, that's true. However, I think it's worth bearing in mind that we have accepted that Lewes is a particularly unusual hazard in that we now know there must be bulk storage of fireworks. I, and I don't believe anyone on the fireground, understood the danger that represented. However, I think it reasonable to think of a

Fire Brigade – if you looked at the entire national position, you might identify particular risks for particular brigades. And I spoke, for example, to a firefighter from the borders, and I think he was talking about the dangers of peat bogs and how quickly equipment could be lost. I don't expect to have training in the dangers of peat bogs, because it would not be apparent and I would not need that. On the other hand, you might look at East Sussex and say, okay, one of their big risk areas potentially is stored fireworks and the threat that they represent, so we should explore that and train for it in advance of an incident like this.

Q. At the time you were unaware of the danger of stored fireworks?

A. I was.

Q. Yes, but you now make the comment, which is that in view of the fact that it's Lewes, perhaps there ought to have been rather more localised or nuanced training to reflect the fact that fireworks were stored?

A. Yes

Q. That's what you are saying, isn't it?

A. Yes.

Q. Easy to be wise after the event, isn't it?

A. Of course, but then again, the fact is that Lewes was a huge centre for fireworks was – and has been for many years.”

48. All three experts who gave evidence addressed this issue, Dr Dennett and Mr MacGillivray for the Claimants, Mr Evans for the Second Defendant. Both the Claimants' experts were critical of the lack of evidence of training for this risk. Both agreed that firefighters training should have included as a minimum full knowledge of the generic risk assessment from 1998.
49. Mr Evans's opinion was that the ACTIVAT training records “suggest that personnel had received training with regard to explosives”. Mr Evans noted that the minimum frequency required by ESFRS for explosives input would be one input every two years. However, the ACTIVAT system had only been live for about 17 months before the Marlie Farm incident. Mr Evans stated that it was “reasonable to assume” those who had not had an input of training before the incident, would have received it within the next six months. He noted that Mr Upton and the late Mr Wicker had attended a joint military/police explosives day. However Mr Evans suggests that training issued by ESFRS “would likely have been terrorist-centric due to previous history in the county, such as the Brighton bombings”. Mr Evans agreed there was no indication that firefighters were aware of MSER or the guidance published with it but his view is that is understandable, since the fire service were not the regulatory

authority for the Act and “insufficient time was available to non-regulatory bodies for the Act such as ESFRS to assimilate its contents in a manner that would allow for any consideration of its impact on operational procedures and training”.

50. In short, there is no evidence that the Second Defendant, centrally or locally, concluded that the fireworks industry within their area represented a specific risk for this fire service or that members of the service required any special training in the risks which might be associated with the manufacture or storage of fireworks, or the constituents for manufacturing fireworks, whether stored in bulk or stored as finished fireworks of any Hazard Type. There is no evidence of training focussed on fireworks, or that the relatively simple message “fireworks are explosives” was conveyed to firefighters. The Aide Memoire was available, but there is no evidence it was given any particular emphasis or focus in training. The advice from the HSE was never disseminated.

The Approach to Risk

51. It is not controversial that the protection of personnel and the anticipation and assessment of risk is critical for the fire service. The expert witness for the Second Defendant Mr Evans puts the matter thus in paragraph 1.7 of his report:

“Health and safety of operational personnel is of paramount importance but so is the protecting of life and property and this has been recognised by the Health and Safety Executive in its document entitled “Striking the Balance”.....[where the authors state] HSE recognises that firefighters and managers face difficult moral dilemmas and have to make decisions in what are sometimes extremely hazardous emotionally charged and fast moving situations.”

52. The proper approach is a calibration of risk to firefighters against the potential gains from exposure to that risk. This approach is well encapsulated by a passage from the second edition of the Fire Service Manual Volume 2 published in 2002, quoted in the report of Dr Dennett at paragraph 2.4 – 2.6. The key passage reads as follows:

“The following summarises the philosophy of the fire service’s approach to risk assessment:

- Firefighters will take some risk to save saveable lives.
- Firefighters will take a little risk to save saveable property.
- Firefighters will not take any risk at all to try to save lives or property that are already lost.

The key elements of any assessment of risk are:

- Identification of the hazards.
- Assessment of the risks associated with the hazards.

- Identification of who is at risk.
- The effective application of measures that control the risk.

If the risks outweigh the benefit do NOT proceed with the tasks, but consider viable alternatives.”

53. I do not understand that philosophy to be controversial between the parties and its essence is commonsense. A very similar formulation was promulgated by the Chief and Assistant Chief Fire Officers Association in 1996. No witness suggested this approach compromised operational effectiveness.

Inspection and Risk Assessment

54. The Fire and Rescue Services Act 2004 [“the 2004 Act”] is the primary legislation that governs the Fire Service. The Act replaced the Fire and Rescue Services Act 1947. The central duties of the fire services are set out in the Act. Breaches of these general or “target” duties are not actionable in private law action, but they do set the overall legal context for fire services.

55. Section 7 of the 2004 Act covers the core functions of fire and rescue authorities:

“Section 7 Fire fighting

7.1 A fire and rescue authority must make provision for the purpose of –

- (a) extinguishing fires in its area, and
- (b) protecting life and property in the event of fire in its area

7.2 In making provision under sub section (1) a fire and rescue authority must in particular –

- (a) Secure the provision of the personnel, services and equipment necessary efficiently to meet all normal requirements.
- (b) Secure the provision of training for personnel.
- (c) Make arrangements for dealing for calls for help and for summoning the personnel.
- (d) Make arrangements for obtaining information needed for the purpose mentioned in sub section (1).
- (e) Make provision for ensuring that reasonable steps are taken to prevent or limit damage to property resulting from action taken for the purpose mentioned in sub section (1).”

56. An obligation to obtain information was set out in the earlier Act in section 1(i)(d), the direct precursor to the obligation under section 7(2)(d) in the 2004 Act. Hence the inspection of premises carrying a particular risk acquired the term of a “1 (i)(d)” or “7(2)(d) inspection”.
57. The Claimants submit that common sense, if nothing else, suggested there should be an inspection for any premises with significant stores of fireworks, or the explosive ingredients needed to make them. After the explosion at Marlie Farm, the “1(i)(d)” and “7(2)(d)” cards for the Lewes station (the relevant area for Marlie Farm) were examined. The old fashioned paper cards dating from before 1998 were 12 in total, and did not refer to Marlie Farm. There were 8 post-1998 cards. Marlie Farm was not included, although the Upper Lodge Farm, and explosives store had been inspected. Upper Lodge Farm was at all times owned by the same Mr Winter, the First Defendant. This store was less than half a mile from Marlie Farm. The risk card records the ownership and contact details for the owner and recites the relevant hazard information: “40,000 KG of manufactured fireworks, quick match and igniter cord, stored in 16 individual metal storage containers (wood lined, fully banded by earth mound around the compounds)”. The information does not define the hazard type of the fireworks stored. The details of water supply make reference to 3 ponds at corners of the field in which the store was situated, and in addition to a 100 mm hydrant. The fire appliances were to be sited at a point approximately 400 metres from the fireworks store and the fire fighting instruction was:
- “If no life risk, consider use of monitors and withdraw personnel to a safe distance as soon as possible.”
58. There is some evidence to suggest that the late Mr Wells did visit Marlie Farm perhaps in association with the visit to Upper Lodge Farm. However no 1(i)(d)/7(2)(d) Card was prepared. There was therefore no recorded assessment by ESFRS of the Marlie Farm site and its hazards, of the available water supply or of the appropriate approach to the fighting of any fire.
59. There was an inspection of Marlie Farm, alongside Upper Lodge Farm, by an officer of the HSE, accompanied by a Sussex Police Explosives Officer, on 11 October 2006. No mention is made in the documentation produced of the container which exploded two months later. At one stage, Lord Faulks QC for the Second Defendants submitted that the proper inference was that the container was not present. However a Google Earth image attached to the post fire investigation report suggests that it was present, and in the identical position, in June 2006. Evidence shows that the container arrived at Marlie Farm in September 2003. The likelihood is that the container was there. No report of this inspection appears to have been passed to the Second Defendant.
60. I have set out above the warning which came to the Lewes Station Commander on 2 November 2005, 13 months before the incident, that Marlie Farm was licensed to store over 2000 kilos of explosives. According to the findings of the investigation into the Marlie Farm explosion, which were admitted into evidence by agreement, notification was received from Trading Standards of HM Customs on 1 November 2005 of very large deliveries of fireworks “to the site”. However, it is not clear to me on close analysis that this relates to Marlie Farm as opposed to Upper Lodge Farm.

61. The Claimants submit that a visit to Marlie Farm would have identified, amongst other things, the poor availability of large volumes of water, the quantity, type and location of the fireworks permitted by the licensing authorities and a proper understanding of the site including the layout of the buildings. An outline fire-fighting plan should have been prepared. I accept those submissions. The fire service would have discovered that there were residential buildings as well as other business buildings on the site. There was a fabrication works involving welding activities, and using oxyacetylene cylinders. As I have said, the restricted water supply would likely have been discovered, although also it is likely the survey would have revealed the presence of a swimming pool. The witnesses Upton and Cox agreed that a risk card would have been of assistance. The Second Defendant's expert Mr Evans appears to concede there should have been such an assessment, and a risk card prepared given the known quantities of explosives on site. However, in the light of the behaviour of the First Defendant and his son Nathan Winter later on, it seems to me highly unlikely that any assessment followed by the preparation of a risk card, would have revealed two crucial facts: firstly, that there were HT1 and HT2 fireworks present at Marlie Farm and secondly, that the container at Marlie Farm was being used as a storage facility for fireworks. Indeed, the reverse seems to me likely. It is likely that the deception mounted by the First Defendant even in the face of an active fire, would have been maintained by him, and fully maintained by his son Nathan Winter, at a time when there was no present risk. It is therefore likely that a risk card would have been of assistance on many fronts, but misleading as to those two important facts.

The Origins of the fire and events before the arrival of Firefighters at the scene

62. On Sunday 3 December 2006 Festival Fireworks was due to mount a firework display in Eastbourne, at 4.30pm. It seems clear that Nathan Winter collected fireworks from Upper Lodge Farm and took them to Marlie Farm, in order to assemble them for the Eastbourne display. He parked a transit van in the site and began assembling the fireworks. If his statements to police officers at the time are correct, he was putting a detonator or alternatively an igniter in a firework when it ignited. His reaction was to drop it and run away. By working on fireworks outside the fusing shed, Nathan Winter was in breach of the relevant licensing conditions. Following ignition of the initial fireworks, fire or burning debris spread to the van which was parked with its rear doors open containing additional fireworks for the display. The report concluded that:

“These fireworks then activated violently. The prop shaft of the van was severed and flattened through impact with the ground.”

It does not seem the subject of real challenge that there was a significant explosion in this van, consistent with the early reports of major explosions and explaining the impact damage to the prop shaft of the van.

63. The Second Defendant has accepted vicarious liability for their Mobilising and Communications Centre [“M&CC”]. The first call to the M&CC was at 13.49 on 3 December reporting “a large explosion at the firework factory at the end of the Broyle..... we live 400 yards away there has been a huge explosion”. The second call followed very swiftly. From its context the lady caller lived at Marlie Farm and was highly agitated, asking for “loads of fire engines”. The third caller recounted that

they lived on the Broyle opposite the fireworks factory, and that fireworks were hitting their house.

64. Calls came thick and fast. Very shortly a caller recounted that there was an incident at the “fireworks shop.....about a quarter of a mile from our house and the whole lot has just gone up, huge explosion”. The next caller reported that “the firework shop it’s just exploded”. Caller 13, again very shortly after the first call, reported “Hi, I’ve got a fireworks store going up.....there’s a big explosion and it’s still going on.” There were many further calls within a short period, a large number of which reported explosions or “large” explosions in such phrases as “there’s big explosions and the doors are shaking” (caller 37) and “it was an almighty bang it was, massive amountsounded like machine guns going off” (caller 38).
65. An interesting call is call 46. This was a response to M&CC paging a gentleman named Derek Masson, a duty Health and Safety Officer, to inform him of what was happening. The speaker from M&CC reported “.....the explosions, you could hear them onover the phone....a lot of panicked people ringing in.” Hence this gives the reaction of M&CC staff to what was heard.
66. The picture of more than one significant explosion before fire crews attended the rescue is supported by the findings of the scientific team who investigated events. The team was led by Mr S G Myatt, whose report was included in the material before me. He concluded there were three large explosions in addition to the container explosions, two of them occurring before the general fire.
67. The Claimants’ submission, supported by their expert witnesses, is that the M&CC had an obligation to report the fact of significant explosions, in whatever appropriate language, to the fire crews who were attending so as to prepare them for the risks they might face. There does not appear to have been any alert to the fire crews attending as to reports of explosions, much less “large” or “huge” explosions. I consider this later in the judgment.
68. It is worth recording the view of a senior witness, Mr Peter Cox, on the potential impact of a warning about previous explosions. Mr Cox said this:

“I think had I been aware that there had already been a large explosion on the site, I would have been asking the question: what are we still doing on the site in the first place?”

He also emphasised that in his view such information should have been passed to an incident commander.

Events at the Scene: The First Phase

69. Marlie Farm was a mixed site of residential and commercial premises. Entry was from the B2192 “The Broyle”, running northeast from Ringmer in the direction of the villages of Shortgate and Halland. I had a clear picture of the site both from the plans and photographs, and from the video footage shot by the late Mr Wembridge, which showed extensive sequences from the fire, including footage of the ISO container up to and including the moment of explosion. Entering the site off the Broyle, the central roadway ran directly through the site. To the left were two significant buildings

belonging to “Builders Beams”. Eventually, this became Sector 2 of the fireground. Straight ahead on either side of the roadway were offices, the fireworks shop, and tube and box stores. Approximately 50 metres from the site entrance on the right-hand side sat the ISO container projecting roughly half way across the line of the rear of various buildings dotted along the roadway on the right. The roadway area became Sector 1 in due course. To the right of the roadway, anyone entering the site first encountered the driveway to the Winters’ house. That driveway curved around to the right beyond garages to the house itself. Beyond that, farther into the site, lay the swimming pool and a tennis court. This area eventually became Sector 4.

70. The container therefore straddled the line between what became Sector 1 and what became Sector 4.
71. In understanding the site, it is important to record that a bird’s eye view of the site is misleading, in the sense that many of the buildings and features of the site would not be obvious to a firefighter arriving on foot or in a vehicle. Perhaps most importantly, walls concealed the house and the swimming pool area from sight. Hence it was some time before the swimming pool was discovered and considered as a source of water.
72. An informative description of the site was given by a witness I have already quoted Mr Etheridge Julyan, one of the fire-fighters at the scene. He visited the site some time before the incident and described it in a statement which he adopted in evidence:

“Q. Then you were asked about your experience as a retained firefighter and the public visiting the shop, and you gave an answer to that:

“It’s always astonished me, the whole concept has always astonished me to be honest, it’s pretty haphazard. We’ve got lots of fireworks stored, we’ve got Builders Beams fabricating, cutting and welding beam steels which is pretty hazardous, lots of sparks and so on going around. We’ve got all sorts of old engineering materials lying around. It’s always struck me as pretty ramshackle to be honest.”

Then you developed concerns. Is it right that just as a member of the public using also your retained firefighting experience, you had formed a view as to the ostensible safety of Marlie Farm being something which concerned you?

A. Yes, I think safety in all respects, the safety of storing fireworks in that way was obviously a bit foolish. But not only that, the whole site was poorly constructed, poorly maintained, there was broken machinery; it was an unsafe area anyway, irrespective of anything else.

Q. Pausing there, when did you last visit the shop before the fire?

A. I think it was probably about six, seven months, something like that. I am not absolutely sure: I went to the shop or I went to Marlie Farm for two reasons: one to buy chickens – I keep chickens and they sold chickens, live chickens. And the other was to buy fireworks.”

73. As I have already indicated, a detailed investigation of events was conducted after the explosion by the Second Defendant. This led to the creation of a “time line”, tracking as closely as possible what happened. Almost all the detail in this time line is agreed. I need not incorporate all of the detail in this judgment. The experts agree that the fire began between 13.40 and 13.47 on Sunday 3 December. The first 999 telephone call to the M&CC came at 13.49. The ISO container exploded at 14.42.54.
74. Once the alarm was raised, multiple firefighters from different centres were alerted and set off for the scene. At 13.51 the late Temporary Watch Commander Wells was on his way, and within a minute or so Station Commander Jeremy Upton had been notified and decided to attend. By 13.56 Station Commander Meik of Lewes was on his way.
75. Just after 13.59 Mr Wells had arrived and became the first to assume the role of Incident Commander. In his statement he described the scene:

“I was confronted by what looked like a serious fire at the far end. I had problems making an initial assessment of what was on fire. The smoke was extremely acrid, heavy and dense, there were fireworks going off in all directions.”

The van on the drive was well alight and projectiles were discharging from the buildings on the right hand side as Mr Wells looked into the site. Mr Wells called for further assistance. The police had also been alerted.

76. If the statements and evidence in the criminal proceedings of the late Mr Wells are correct, both Martin Winter and Nathan Winter were drawing attention to the ISO container from early on after the fire service had arrived on the site. It is common ground the two men were obstreperous and difficult with the police, and at various stages Martin Winter in particular was abusive. But the fact of a focus on the container from very early on appears to be well supported. Mr Wells records himself speaking to “a smaller man of slight build” who clearly was Nathan Winter. He asked Nathan Winter what was in the buildings, received an explanation, and then Nathan Winter made it clear to Mr Wells that “he was extremely concerned that we stop the fire spreading to a smaller metal container”. He told Mr Wells that if the fire got to that container, he should “run like fuck”. The man was then interrupted by a second male, who turned out to be Martin Winter and who was accompanied by two police officers. Mr Wells records Martin Winter as saying, in reference to his son, “he doesn’t know what he is talking about, that’s full of wood”. When Mr Wells pressed Martin Winter he repeated more than once that the container was “full of bulk timber”. Mr Wells decided to act on the indication of risk surrounding the container from Nathan Winter and very shortly after his arrival he instructed the crew to direct fire fighting jets to cool the shipping container. On his account, that was before Mr Upton arrived.

77. Mr Upton arrived at around 14.05. He noted the container, which he recalled was “old and rusting and appeared to be part of the fabric of the site. No hazard markings were on it”. Jets of water were directed at the container.
78. Mr Upton tasked firefighters with finding the water hydrant located near the Wok Inn some 200 metres or so to the northeast of the entrance to the site. As Mr Upton later confirmed in evidence, he had no prior knowledge of this site and, as has already been established, there was no index card or 7(2)(d) report. He had not had passed on to him any reports of prior explosions on the site. Within seconds, additional appliances including two water tenders and a water carrier had been asked to attend, although it is significant that in each case they would have a sizeable journey time to the site.
79. Mr Upton was right to be concerned about water supply. The hydrant at the Wok Inn proved not to be effective. The amount of water carried by the fire tender vehicles was insufficient to maintain constant jets of water on the container (or to fight an extensive fire). The requested water carriers could not be anticipated for some time. At the early part of the episode, Mr Upton was unaware of the presence of the swimming pool.
80. According to his account, Mr Wells had realised that he would have insufficient water supply to maintain two jets of water and so at about 14.07 had formed the view they should withdraw from the site. However this was effectively pre-empted by the handover of command to Upton.

Withdrawal and Evacuation

81. The distinction between “withdrawal” and “evacuation” is of great importance. Withdrawal may be temporary, with a view to going back onto a site. It is normal practice to withdraw from part of a site but not necessarily from the whole of a fireground. A withdrawal is a relatively frequent event for firefighters and may simply represent an opportunity to assess how to proceed.
82. On the other hand, an evacuation is a formalised procedure, whereby all firefighters leave the fireground and undergo a roll call. The distinction between the two is clear and not controversial. The standardised procedure for an evacuation is that once the Incident Commander has made the decision to evacuate, an emergency evacuation signal will be given. According to the Second Defendant’s formalised written procedure, which is consistent with general fire service practice, the signal consists of “repeated short bursts on a shrill whistle or whistles”. This signal will not be used for any purpose other than to initiate an emergency evacuation. The distinction between withdrawal and evacuation was completely familiar to a great number of the witnesses in the case who were asked about it. A good example was Assistant Divisional Officer Cox, who was a Group Commander at the time of the incident. His evidence on the point was as follows:

“MR WEST: Mr Cox can we first of all try to work out what the correct difference between a withdrawal and an evacuation is? You have heard various questions being asked about this. Can you agree with me that a withdrawal is simply a tactical procedure to allow for forces to be redirected or to give time to consider whether forces should be redirected in anyway?”

A. That is my understanding yes. “Withdrawal” doesn’t indicate an emergency situation requiring immediate evacuation, as would be deemed by the evacuation signal being given.

Q. So we can agree evacuation is an entirely different animal: it is an emergency reaction to a danger perceived to people on the fireground?

A. Yeah, an immediate danger that needs to be immediately reacted to.”

83. The Second Defendant’s standardised procedure, applying at the time, also sets out what is required to be done in the event that the evacuation signal is heard:

“1.3 Other rank holders and ECOs, on hearing the emergency evacuation signal, will also sound the signal on their own whistles in order to ensure that the signal is clearly audible throughout the area at risk. ECOs will also inform all BA wearers with radio communications that the emergency evacuation signal has been sounded and confirm that each crew is evacuating.

EMERGENCY EVACUATION PROCEDURES

1.4 On hearing the emergency evacuation signal, it will be the immediate duty of all members of the Brigade to achieve rapid evacuation of all personnel (including members of the public and other emergency services personnel) from the risk to a place of safety.”

Following which, the protocol stipulated that all Brigade personnel should immediately proceed to the emergency roll call assembly point.

84. The protocol goes on as follows:

“EMERGENCY ROLL CALL PROCEDURES

1.8 Whenever an emergency evacuation signal is sounded, the IC will ensure that:

A roll call of all personnel is implemented.

All personnel are accounted for.”

The Assumption of Command by SC Upton

85. After the arrival of Mr Upton at around 14.05 there was a period of handover of control as Incident Commander from Mr Wells to Mr Upton. It is perhaps not material how long this took, although there is some limited conflict about the point. What is significant is that there is a direct conflict between the account of the late Mr Wells and the evidence of Mr Upton, as to whether Wells warned Upton of the

concern about the container. Wells gave evidence to the Inquiry and at the criminal trial but has since died. His evidence was to the effect that, although he received conflicting information from the Winters about the container, he took seriously the warnings from Nathan Winter. He stated:

“You didn’t need to be Einstein to know something nasty was in the ISO container.”

His account was clear that he warned Upton about the risk of the container. Upton’s evidence was that “at no time did Mr Wells indicate that his concern was the ISO container”, although as I have noted he had seen the container and seen that efforts were being made to cool it.

86. The conflict here is direct and the choice rather stark. One possibility is that Wells omitted to say anything to Upton on this point, and invented this detail later when the awful consequence had come about. Sadly, Mr Wells is not alive to deal with the matter and I find no evidence to support such an interpretation. The other possibility is that Mr Wells did raise the point and Mr Upton mentally brushed it aside and has, no doubt subconsciously, suppressed it since.
87. I have come to the conclusion that it is probable Mr Wells did raise this point with Mr Upton during his handover. I so find for a number of reasons. Firstly, the only significant action Mr Wells had taken during his brief period as Incident Commander was to try ineffectually to cool the exterior of the container. Given the complicated scene, with strongly burning fires elsewhere, and fireworks detonating and exploding in various directions, it would be natural to discuss in handover why Mr Wells had chosen to commit limited water resources on and around a container that was not yet on fire.
88. The second reason derives from the continuing behaviour of the Winters. This was truly unusual behaviour for those whose property was on fire. The evidence of PC Scott is that around 14.06 he saw firefighters talking to Martin Winter. He could see there was a heated argument with fire officers. He went up to Martin Winter and told him to get back and let the firemen do their job. On PC Scott’s account, Martin Winter replied “Fuck off, they don’t know what they are doing”. Mr Scott had to threaten to arrest Martin Winter, and try and bundle him away from the fireground. PC Paul Coleman told the Inquiry that Martin Winter was arguing with PC Scott and saying “You lot do not know what you are doing. I know what’s in there”. This was all very unusual and difficult behaviour, and it was focussed on the ISO container. It would be remarkable if Mr Wells did not pass on that concern in the course of handing over command.
89. Another reason for this conclusion is my reading of Mr Upton’s character. He is clearly a decent and honourable man. He is truly appalled at what happened to his comrades on that day. He is clearly highly professional and committed to his occupation. A considerable number of witnesses praised him for his energy, his commitment to training and his personal support to those under his command. However, he appeared to me to be a man capable of being hasty. He has energy and drive, and is evidently a very active man, who likes to be in control. A good example of this trait is that, within minutes of arriving on the fireground and in the course of a reconnaissance of the site, it came to his attention that oxyacetylene cylinders had

been discovered in one of the premises in Builders Beams. He made the decision they should be removed farther away from the active fire. This was a good decision, but instead of leaving it to others to carry out the instruction, Mr Upton joined in with his own hands. The video taken by Mr Wembridge shows him doing so.

90. On this point, and on others I address later in this judgment, I find that Mr Upton's terrible shock and regret at what has happened has meant he has come to believe Mr Wells did not warn him, when in fact Mr Wells had done so. I am convinced that Mr Upton is honest in all the evidence he has given, but in this respect he is mistaken.
91. Mr Upton set down his own first account of events in a manuscript note which he wrote on Wednesday 6 December 2006. On his account, a man who is clearly Nathan Winter spoke to him soon after he began his conversation with Mr Wells. Even on this account Nathan Winter was focussing attention on the container, although suggesting the container held wood.
92. Very shortly after, and before Upton and Wells began their reconnoitre of the site, Station Commander Meik arrived and took on the role of Command Support.
93. It is of note that Mr Upton recorded in his notebook "the incident was extremely dynamic and I realised that I had a severe lack of information of the site". At about this point a scuffle broke out between a police officer and Martin Winter, who had to be bundled away. Whether this is the same incident described by PC Scott or part of a running episode is not possible to say.
94. Mr Upton records in his note a request he says he made to police, to create a cordon at 600 metres from the site. Police officers had in fact created a cordon at around 200 metres away, at the Wok Inn to the northeast and at a similar distance to the southwest: simply in effect preventing traffic other than emergency services entering the road. However, no police officer has been found in the course of the Inquiry or the evidence given to me, who can confirm Mr Upton's request for a cordon at 600 metres.
95. Both father and son Winter went on behaving in an obstreperous and difficult way. However, it is clear that Nathan Winter became extremely agitated and concerned about the prospect of fire getting to the ISO container. It is not possible to be confident of the timing of any specific "warning" from Nathan Winter, although estimates of timing are given in statements and in the enquiry time line. Mr Upton concedes that in due course he came to consider the container an explosion risk and gave an order to evacuate the site as a consequence. The exact times of Nathan Winter's warnings may not be critical, but it is clear this agitated behaviour was taking place from early on.
96. It is worth noting that some warnings were overheard by others, which focused ever more concern on the container. Watch Manager Austin overheard what was probably Nathan Winter saying of the container "if that goes bang it'll be the biggest bang you will ever see". He described the speaker as the younger man of the two and as being "quite emotional". His concern was aroused because of the conflict between that remark and Martin Winter's statement that the container contained wood.

97. Firefighter Lazenby, at a point “later in the incident” according to his statement, heard:

“One of the Winter family say something along the lines of “if you don’t get water on that now, it’s best you all get a long, long way from here, because if that one goes up you don’t want to be around.””

Lazenby’s evidence is that he relayed that evidence to Station Manager Meik. Mr Lazenby adds that at that stage there were no longer any members of the public on the fireground. Firefighter Sweetman records that Nathan Winter had directed him too to the container, although he was telling him at that stage it held wood. Mr Sweetman directed him towards one of the Commanders.

SC Upton in Charge

98. By 14.15, Mr Upton had formally completed taking over command of the incident from Mr Wells. Problems of water supply were acute, and at that stage the time line records Station Commander Meik, as Command Support, ordering “personnel in the main drive to withdraw towards the site entrance due to water supply issues”: in other words he had formed the same view as Wells. At the same time Mr Coppard returned from the hydrant near the Wok and suggested to Upton that a request should be made for water carriers. Upton responded by asking Mr Coppard to send a priority message requesting a further water carrier. However, as the Inquiry identified, this would not solve the problem rapidly, given travel time of the appliances.
99. The analysis in the time line, and the video footage from Mr Wembridge through this central part of the incident, show that the poor water supply meant a very ineffective delivery of jets of water onto the tube stores, the container, and the area around the container. The water was intermittent, pulsing and of very limited quantity. Meanwhile, the fire was spreading along the range of buildings and approaching towards the container.
100. According to the time line, at 14.21 – 14.23 approximately, Mr Upton had two further conversations with Nathan Winter. These conversations are set out in Mr Upton’s manuscript note.
101. According to that account, Mr Upton had decided to withdraw the appliance that was deployed to the Builders Beams area. On walking back down the road, he was approached again by Nathan Winter who according to his own note was:

“Clearly agitated and very vocal, repeating “we must get those doors open” I then said “what doors?” He pointed to the metal freight container. At this point I thought I was convinced that this individual was holding back information about the contents of the freight container. I then asked firmly “what is in there?” to which he replied “fireworks” I then said “what sort and how many?” he said “some larger fireworks” then I said “what class?” then he replied “dunno” I still felt at this stage he was being very vague and couldn’t give me specifics at how many, what class of explosives.”

102. Mr Upton records himself as walking back to the entrance of the site and seeing 4 to 5 members of the public around the mouth of the entrance. He concluded that the police had not successfully implemented a “600m cordon”. He was then met with a request by another man to remove a computer from the bungalow on the site in close proximity to the entrance. Mr Upton permitted him to do so, accompanied by a firefighter.
103. The next thing in Mr Upton’s note is that he records himself instructing Mr Wicker to go round towards the right hand side of the site, to Sector 4, and to set up a ground monitor to cover the metal freight container as “I have been told there are fireworks in there”. The note continues:

“I said [to Wicker] as soon as you have done it get yourselves out of there”. At this point I wanted to protect the metal freight container from being involved in a fire and thus prevent incident from escalating. I then spoke to the slim male who I spoke to first, who was now very agitated and distressed. He could not stand still and with a raised voice said “we don’t want to be anywhere near here now”. I now became very concerned and I was completely convinced that he was not providing me with all that he knew. I asked him “what exactly have you got in there?” “I got some larger 1.2 size fireworks”. I said “1.2 what? KG” “yeah I think so”. I was then about to initiate total evacuation when the largest of the males [from earlier] then wrestles with a firefighter and pushes him out of the way and then runs into the bungalow. I heard somebody say that “his mother is in there”. I then spoke to a police officer and explained what had just happened. I went on to say that I was initiating evacuation and could he remove the large male from the bungalow.”
104. The agreed timing in the time line gives a slightly different picture. The two conversations between Mr Upton and Nathan Winter took place between 14.21 and 14.23. So also did the request by the older Mr Winter to go back into the house. The significance is that these distractions were completed rather earlier than Mr Upton has suggested.
105. According to the time line, it was at 14.25 Mr Wicker informed Mr Upton of the availability of the swimming pool as a potential water supply. The sequence then is that Mr Wicker was designated Sector Commander for Sector 4, and told to take water from the swimming pool to supply a new monitor to cover the container “as there are fireworks in there”. It is important to recall that this area was to a large extent out of sight to anyone standing at the entrance to Marlie Farm, or indeed standing a fair distance up into the roadway through the middle of the site.
106. It must follow that, on the agreed timing and taking all the evidence into account, Mr Upton’s initial response to the realisation that there were large fireworks in the container was not a decision to evacuate. His initial response was to send Mr Wicker to try and cool the container.

107. There is strong corroboration for the content of this instruction to Mr Wicker. Firefighter Skeffington was a relatively junior member of Mr Wicker's crew. She was in Sector 4 and in close proximity to the container up until the explosion. She had helped him set up the monitor (a stabilised hose) and her evidence as to the ensuing conversation is as follows:

“Q. As you have said, you set up the monitor and it came to a stage where you were waiting for water to come on?

A. That's right.

Q. You say in your witness statement as well that you did have a discussion with Geoff about what the container actually held. Do you recall that?

A. Yeah. There was ..the fire was well developed behind the container, and I could see white smoke coming out of the bottom of it, and I was really concerned about what was in the container. No one seemed to be talking about what was in the container. So I said to Geoff “Geoff, what is in, do we know what's in the container?” And he said to me “That's where the really big ones are, Julie”, with a smile on his face. I was immediately concerned, thinking: what is he talking about, why are we here? But then I thought, no he is joking, he must be joking because we wouldn't be here if the really big ones were in that container. So I had to just carry on. I sort of go on his experience. I knew that he had been in 30 years, so it had to be safe, but it certainly didn't feel it.

Q. So the position at the time was that you trusted Geoff to carry out his own risk assessment, essentially, and that he ..

A. Yeah, I had to do what I was told to do, despite my own personal thoughts.

Q. If he regarded it as being safe then you were happy to trust him?

A. Yes.

Q. The conversation you had with Geoff, you say you thought he was joking. Now, you won't know this but other people have given and will give evidence about different things that Geoff or Pup [the nickname for Upton] may have been told about what the container contained. When he said “this contains a big one”, did you challenge him on that or did you just ask him “What do you mean”?

A. No, because it wasn't my role to challenge anyone on the fireground, certainly not someone more senior than me, I had to do as I was told.

Q. And you saw him smile after that as well?

A. Yeah. Yeah, he said it in a very sort of joking way, so I had that sort of dilemma in my head: is he joking, does he mean it?"

108. There is no reason to think Mr Wicker understood the nature of the risk he and his crew were running. There is ample evidence that he was a highly regarded leader, held in great respect and affection by his colleagues. However, it seems highly probable he had been told of what was believed to be in the ISO container: the large fireworks. Upton had just been told that, and had then instructed Wicker and his crew to cool the container and get out quickly: it is unlikely that Wicker's remark to Skeffington was a guess, or pure coincidence. It is probable Upton had told him of what was in the ISO container.
109. The use of the swimming pool as a source of supply for water to cool the container required the use of a mobile pump, a "light portable pump" or LPP. A pump was on hand and the firefighters working with Mr Wicker were in the process of setting it up. There was a debate between the experts in the case as to whether that was an effective *modus operandi*, given the capacity of the pump. But even if it was adequate, it would in any event have taken a little time to be set up.

The Decision to Evacuate the Fireground

110. At 14.29 Mr Upton's own evidence is that he took the decision to evacuate the fireground of all personnel, and he did so by reason of the risk of explosion of the ISO container. This was not a withdrawal. In evidence Mr Upton was clear that his decision was for a formal evacuation.
111. The reason for the decision to evacuate by Mr Upton was explicitly the explosion risk of the container. He made that clear in his own evidence. Upton did not expect a mass explosion such as actually happened, since he had not been trained to expect that. But he was aware of the aide memoire about explosives. He concluded that the aide memoire applied, and there was a need to evacuate for the safety of the crew.

"MR BURTON: But what you do at this stage, when he [Nathan Winter] has drip fed you this last bit of information, is you decide to evacuate. It's about 14.29 or so when you get this information. It was a minute or so before. I don't want to be too precise. Let's say 14.27, 14.28. But very soon after that you decide to evacuate. So it has registered in your mind at this stage that we are in Generic Risk Assessment 5.7 area or aide memoire area; it's registered?"

A. Yes

Q. Thank you. You mention the aide memoire, and to be fair to you I think that's where you got the 600 metres from. I think that's what you are saying. That's also in the bundle 1, please, at 290.

I don't think it's in dispute that you didn't call this down on the day, but you told my Lord that this was the sort of thing you had in mind when you associated fireworks with explosives.

At 292 we see what the aide memoire would have told you, if it had – I think it was on MODAS, wasn't it, but it wasn't called down that day:

“If fire establishes or involves explosives, or threatens to spread to them, evacuate to a distance of 600 metres.”

Pausing there, that evacuation applies both to personnel, doesn't it, as well as members of the public?

A. That would be correct.

Q. Number 3 says:

“Consider firefighting if lives could be saved by preventing spread, but only if behind substantial cover.”

Then it talks about members of the public to 600 metres.

Just could you look to the next page, please, 293?

In the middle of the page, it says:

“Safety issues:

“Substantial cover is only to be considered as earth embankment or similar.”

It says:

“Use ground monitors where possible.”

This was February 2006.

So if I understand your evidence correctly, what you had in mind, certainly at 14.29 or thereabouts, was the aide memoire and the need to only fight this fire if our crew essentially could be protected by earth embankments and there was a possibility of essentially saving life: would that be fair to say?

A. Yes.”

112. As far as the contemporaneous record is concerned, there is no doubt as to the fact and timing of the decision to evacuate. Confirmation of the decision to evacuate was sent to the M&CC at 14.29.34. Firefighter Watson sent the message:

“From SC Upton fire spreading rapidly. Crews evacuating area. Crews in Transitional Mode.”

113. Yet, despite his own evidence, and the undoubted fact of the order to evacuate at 14.29, there did seem to be some doubt or ambiguity in Upton's mind. In cross-examination, he was tested as to what evacuation meant. It is worth recording the exchange:

“Q. When you do call what you say is an evacuation, in the normal sense, it's timed at, I think, 14.29. That's at 2924 in the same bundle. Do you see that, in the middle of the page, M&CC Incident Log from SC Upton:

“Fire spreading rapidly. Crews evacuating area. Crews in transitional mode.”

Again, I don't understand this, because if you evacuate, you evacuate all sectors, don't you?

A. There was various interpretations of the transitional mode at the time. And it meant two things, essentially two things, that it applied to the whole of the fireground, so – and it was either going – you were going from offensive mode to defensive, or defensive to offensive,. Or you had two sectors: one in offensive mode and one sector that, if you like, was in defensive. So one in Oscar, one defensive, which meant it was transitional. My interpretation of that was we were – at that time we were going from offensive, backing off to defensive.

Q. Mr Upton, I'm totally confused about this. You're an Incident 2 Commander, I think you've got Incident 3 Commander status at the time, and you don't seem to have any simple grasp of the basic concept of evacuation. First of all, have you ever done an evacuation before?

A. Could you define “evacuation”, please?

Q. An evacuation is an immediate withdrawal from offensive firefighting because of danger, and the crews are required to muster at a safe point away from danger, and all crews are to come out; an immediate withdrawal because of [the risk of] death. That, I thought everyone accepted.

A. Yes, I have been involved in several evacuations, my Lord.

Q. And how did you do it on those occasions?

A. On those occasions, through the sounding of the Acme Thunderer whistle, and repeated over the fireground radio, my Lord.

Q. So repeated bursts of the Acme Thunderer?

A. Repeated bursts of the Acme Thunderer.

Q. And what did you do then?

A. All crews deployed into the fireground, as – would make their way back out to a designated muster point or the incident Command Unit, or Command Support Point, where the nominal roll boards would be kept. Each junior officer in charge of their particular crews would then ask for their own nominal roll board and actually do a head count, and check that everyone is there.

Q. So you had a roll call? So evacuation, it was an immediate withdrawal because of danger, to a safe point where you have a roll call, yes?

A. Yes.

Q. You've ordered an evacuation at 14.29. I don't think that's any longer in issue. Everyone agrees with that, yes?

A. Yes.

MR JUSTICE IRWIN: And by "the area", you meant the fireground?

A. Yes

MR JUSTICE IRWIN: Not part of it, not a sector?

A. No, no, the whole fireground, my Lord."

The Execution of the Order to Evacuate

114. In his statements provided to the Inquiry, Mr Meik the Support Commander suggests he too had decided, or concurred with the decision, that there should be an evacuation. His account is that he blew his whistle a number of times. Mr Meik was not called by any party before me. There is no evidence of anyone else blowing a whistle.

115. The evidence of Crew Manager Liszka was that he was instructed to send the evacuation message to those on the fireground by radio, and did so. He had been in the vicinity for ten minutes or so, arriving at about 14.19 or 14.20. His evidence was that he was just coming off the Broyle towards the site, and was close to Mr Upton and Mr Meik. He said he was warned by Meik of the danger in the container. In evidence Mr Liszka paraphrased Mr Meik's warning as follows:

"I don't know what's in it, but all I know is if it goes bang, we are in trouble."

116. The evacuation was never carried through to conclusion. Those firefighters who heard a whistle, or by other means received the instruction to evacuate, did not leave the fireground completely, or at least not all of them did so. There were clearly some personnel remaining near the entrance to the site, close to the little group of

commanders, the latter comprising at least Mr Upton and Mr Meik. The evidence is clear there was no repeated or continuous whistling.

117. Tragically, the message to evacuate never reached Mr Wicker and those with him in Sector 4. This is difficult to understand. It is perfectly understandable that a few blasts on the single whistle by Mr Meik might not have reached the ears of those out of sight and behind the wall screening Section 4 from the roadway of the site on a noisy fireground. However a radio instruction to evacuate such as that given by Mr Liszka should have reached Mr Wicker. After the explosion the late Mr Wicker's radio was found to be switched to channel 3. However, there was no sensible reason for Mr Wicker to switch the radio to channel 3. It is accepted that a switch of channels can be a consequence of blast.
118. Moreover, there was unchallenged evidence from Watch Manager Austin that he spoke to Mr Wicker on channel 1 between 3 – 5 minutes before the explosion, and thus many minutes after the evacuation message. I therefore conclude that Mr Wicker's radio was on at the relevant period, operating in the normal channel, and yet he was never informed of the decision to evacuate.
119. It seems to be the case that Mr Upton took no effective step, and did not ensure that anyone else took an effective step, to communicate the evacuation to those who were out of sight in Sector 4.
120. Moreover, the evacuation was not communicated effectively to a number of others. Mr Austin never heard the signal to evacuate. Mr Coppard did hear a whistle at 14.29 whilst at the entrance, but there was no roll call – or preparation for a roll call – of which he was aware. He was puzzled by what happened:

“Q. How did you learn of [the evacuation]?”

A. I had already seen the Heathfield crews and their attendance as marshalling officers, and due to my location when they had the brief to set into the water supply and the swimming pool they parked their appliance across the entrance to the driveway allowing ease of access to equipment. And on just hearing their work it was easy for me to see what they were doing.

Q. Did you see them going round?

A. Yes.

Q. After the evacuation whistle was heard, obviously you didn't see them come back again?

A. No.

Q. So what did you do when you heard the evacuation whistle?

A. Initially, I was looking to seek clarification if it was an evacuation whistle, but by virtue that the evacuation whistle stopped, and given due consideration, I questioned myself

whether indeed I thought it was an evacuation whistle and continued with my role as marshalling officer.

Q. Right. So in your mind there was doubt?

A. I don't doubt what I heard. I questioned why it stopped in my mind.

Q. Your doubt was whether it was really intended; is that it? Have I misunderstood? You heard it?

A. I definitely heard it. I didn't understand why the whistle had stopped.

Q. Right. You didn't see anybody else reacting in the way that you would expect with an evacuation?

A. Not at that time.

Q. So that's why I say: in your mind there was doubt?

A. It could be said there was doubt as to whether it was an evacuation whistle due to the virtue that it had been – stopping blowing. Our policy was very clear that once it started to be blown, it will continue to do so.”

121. Firefighter Ross was a short distance away from the Incident Commander. He did not hear any whistle and received no signal on his radio. His evidence was as follows:

“Q. Did anybody in that incident command group react physically or behave in the way that you would expect them to behave if an evacuation had just been ordered, i.e. was their move to the roadside urgent?

A. No sir.

MR JUSTICE IRWIN: What I have written down: there was no behaviour that you would expect if there had been a general evacuation order; is that right?

A. Correct sir.”

122. Firefighter Wark was in Sector 4 with the Heathfield Crew. He heard no signal or instruction to evacuate. His evidence was that if he had, they could all have got out in under one minute. Mr Sweetman was also present in Sector 4 and heard nothing either by whistle or by radio.

123. ADO Cox gave evidence that he arrived at the scene somewhere about 14.25. His specific concern was to supervise the safety of the operation and audit the fire and the firefighting approach. On his account he arrived at the scene, changed into protective clothing and then had to wait a few minutes before being able to speak to Mr Upton. He was certainly at the scene before 14.29 and on his account his conversation with

Mr Upton would have been around 14.30. Mr Upton's evidence is that he informed Mr Cox of the decision to evacuate the site. There is a direct contradiction between them on the point:

“Q. We will look at that in a moment. Could I ask you please to look at another red bundle, which is volume 8, page 2933. This is a log from the step-by-step account of the Service's investigation, and it's at 14.30 which I wanted to direct your attention to. We have heard you arrived at 14.25. This is 14.30:

“From the site entrance Group Commander Cox observed a single storey building to be well alight – spoke to Station Commander Upton and informed him he had been mobilised to carry out a quality assessment audit (QA), but ask SC Upton if he required him to carry out other duties instead. GC Cox stated that GC Upton told him to proceed with the QA audit. SC Upton states that he told GC Cox not to worry about that as he was initiating an evacuation.”

Did Mr Upton say that to you?

A. (Cox) I have no recollection of that at all, no.

Q. It's a fundamentally crucial bit of information, isn't it? If you were arriving there as a senior officer and the Incident Commander says “Don't worry about your job, we are evacuating”, that's not something you could have forgotten, is it?

A. Absolutely not, and I certainly wouldn't have carried on with my duties, had I been told that.

Q. So it is your evidence that it wasn't said?

A. I have no recollection of that being said, I believe it – that's all I can say.

Q. There's no possibility, if it was said, that you would have forgotten it?

A. Absolutely not.”

124. Mr Cox made a note of events on the ensuing day, 4 December, which is consistent with his evidence. There is no mention in his note of an evacuation, or of him being informed that an evacuation was in progress.
125. Finally, I bear in mind some further evidence of Mr Liszka. It will be recalled that he heard a whistle shortly after arriving on to the fireground. He concluded that an evacuation had been ordered and states that he sent a message to that effect out on the

radio. As I have already pointed out, he states that he was given a warning by Mr Meik of the danger of the container including that it might “go bang”. Yet, after that, he says he was asked by Mr Meik to go back onto the site and set up a monitor in order to play water on the container.

126. The layout of the site is important in understanding this part of Mr Liszka’s evidence. As I have indicated above, one end of the container projected into the roadway past the end of a building. Liszka’s evidence is that he set up a monitor on the roadway by the corner of the building. Had he gone a few feet farther, or looked round the corner of the building, he should have been able to see Mr Wicker, Mr Wembridge and the others with them. He did not do so, and so did not know they were there.
127. Mr Liszka’s evidence was that he was, in effect, confused by what was happening. He knew there had been an order to evacuate, but no one was behaving as if an evacuation was in progress.
128. In an important exchange, Mr Upton was pressed as to why the evacuation he had ordered was not followed through. I incorporate a sequence of his answers, which convey not merely the content of his evidence, but the flavour:

“MR BURTON: But in any event, four minutes after you sent them in, you evacuate. What steps did you take to make sure they heard the evacuation procedure?”

A. As I said, I initiated an evacuation, handheld radio, I now know --

Q. That’s not the question. The question is: what steps did you take to get Sector 4 out?

A. I believed at the time, after I had initiated that evacuation, that that was already in place, and --

Q. Is your answer that you delegated it to others?

A. I wouldn’t necessarily have seen – well, I said “delegated to others” – we have a command process in so much as – with that communications, the radio message, the whistle; I believed that was in process. I didn’t know that Sector 4 hadn’t come out from another – you know, from another area and reported. I didn’t know they weren’t out at that point.

Q. Let’s be clear about this. These are the only firefighters in the frontline who you sent in before the evacuation and four minutes later you’ve left them there. The question is very simple: what steps did you take to get them out?

A. Other than – I would have repeated the evacuation message. As I said, the timing, the things that were going on. I would have been pulled away --

Q. Just stop there.

A. Okay, no, I didn't take any steps, did I? No, I didn't .

Q. There was no radio, there was no second radio?

A. No.

Q. There was no search team, there was no roll call. The sad reality is, there's nothing. Do you know why you didn't have a roll call?

A. I don't know, my Lord. I don't know why that –

Q. Because you did, after the other experiences, you have told my Lord, where you have evacuated, and that's absolutely standard practice, isn't it?

MR JUSTICE IRWIN: Is that right?

A. Yes, but it will take – obviously take time to – for firefighters to filter through. And then I would have expected command support ordinarily would say, "We've got Sector 1 cleared." That information didn't come through, my Lord.

MR BURTON: But you've only got one active crew in Sector 4 on the frontline, and I can see that a roll call of 50 officers might take time, but a roll call, bearing in mind you've just sent them in four minutes, it wouldn't have taken very long to realise that none of them were there. It's the obvious thing, isn't it? Where's Sector 4, where's Wicker?

(A pause)

MR JUSTICE IRWIN: I think, I'm sorry, we need to press you for an answer on this.

A. Yes

MR JUSTICE IRWIN: The risk that caused you to evacuate was the risk of explosion?

A. Right.

MR JUSTICE IRWIN: The risk associated with the container?

A. And again –

MR JUSTICE IRWIN: Not the explosion that happened, but it was the risk associated with the container.

A. There was a risk associated with the container, but as I said, I did not expect –

MR JUSTICE IRWIN: We understand.

A. – what happened.

MR JUSTICE IRWIN: Of course you didn't. We understand that. But it's the container that causes the decision to leave the fireground. And it's not merely that Sector 4 is the only active frontline crew, they are the people who are close to the container. You would never have left them there deliberately knowing that they were there.

A. No. No, my Lord. Never.

MR JUSTICE IRWIN: What did you do, if anything, to find that they had come out?

A. I have to say, given what was going on where I was stood in the road, ie man going in the house, trying to speak to the police officer – and I spoke to a police officer and said, "Why have we still got public here?" "Because we haven't got the resources." "Well, we need to get them". I'm being distracted from, if you like, my overall role there. I know I've made the initiation for the evacuation. I'm being distracted. There's a whole host of other things going on that are distracting me from that. I've got – you know, we are part of a team. And yes, I take the responsibility for that as the IC. I've never shirked that responsibility. And I would have – once – the first I would have realised, I would have obviously put things in place to try to ensure they were evacuated from that Sector 4."

129. Later in cross-examination, Mr Upton was pressed as to why he ordered, or permitted, crew to be re-committed to the site shortly after he had ordered an evacuation. He denied that he did so. His own notes of events were put to him, in particular the sequence of notes which record his handover briefing: firstly, "I have initiated a full evacuation" and subsequently, "I have two ground monitors working both sides of the metal freight container in an effort to prevent it being involved in fire." Mr Upton firmly denied that he re-committed any firefighters to the fireground after he ordered evacuation.
130. However important that issue may be, it is perhaps of less significance than the central fact that Mr Upton knew – and records himself as telling Mr Ashley at handover – that after the evacuation and just before the explosion, he had two monitors either side of the container. Mr Ashley arrived at the scene at around 14.33. Mr Ashley's notes record him as meeting SC White at 14.36/37. Mr Ashley and Mr Upton time their discussion as beginning at 14.38/39, some 10 minutes after the evacuation was ordered. Ashley did not know evacuation had been ordered.

The Explosion

131. There had been considerable problems in extracting and pumping water from the swimming pool to feed the monitor, which it was intended should cool the container.

Problems priming the pump are recorded at 14.41. At 14.42 the jets supplied by the pump from the pool were still inadequate “like a garden hose”. That can easily be seen from the video. At 14.42, water was just about to be pumped from a dam, which had been set up near the entrance to the site, to the monitors which had been set up in the roadway. The video records a jet of water consistent with coming from one of these.

132. However, at 14.42.53, the container exploded. The explosion was extremely violent. Mr Wicker and Mr Wembridge were killed instantly. Debris and blast caused the injuries to others. There was widespread damage and destruction to the buildings on the site. The explosion left a considerable crater in the ground. There was damage to property hundreds of metres away. The explosion was later estimated to be the equivalent of 190/300 kilograms of TNT. A number of the survivors are lucky to be alive.

Expert Evidence

133. Three experts gave evidence in the case, Dr Michael Dennett for the “Wicker” Claimants, Mr MacGillivray MBE for the “Wembridge” Claimants and, as already mentioned, Mr S W Evans for the Second Defendant. All are senior retired members of the fire service, with distinguished careers behind them. Dr Dennett rose from being a firefighter to being Deputy Chief Fire Officer, and since retiring from that post in 1994 has completed a doctorate and acted as a consultant investigator and expert witness. Mr MacGillivray spent a career in the fire service until 2009, having been successively Assistant Chief Fire Officer for Strathclyde, HM Assistant Inspector of the Fire Service 2006/2007 and Chief Fire Adviser to the Scottish Government 2007 – 2009. Mr Evans joined the Merseyside Fire and Rescue Service in 1975 and ended his career, after eight years as Assistant Chief Officer, as the Temporary Deputy Chief Fire Officer of the Merseyside Service in 2010. All three of the experts are highly qualified to offer opinion evidence on the subject matter of this case.
134. I must record as a generalisation that I did not find the expert evidence as useful as it might have been. There was a strong tendency on the part of the experts appearing for the Claimants to be critical on all fronts, and it appeared to me a parallel tendency on the part of Mr Evans to try to be protective. In all three instances, I have no doubt that the positions taken were honestly held, but they were not as nuanced or as accepting of the realities as they might have been. There is of course an active legal debate between the parties, which may have led to insufficient focus on the standard to be applied by the experts when giving their views. I have attempted to draw from their evidence, and particularly from the areas of consensus, some help as to what were the reasonable expectations of the ESFRS and of its officers, allowing for contemporaneous knowledge and for the exigencies of dealing with an emergency fire on this scale.

The Key Issues

135. Having reviewed the evidence in the case, it appears to me that there are six key issues. They are as follows. First, should the Second Defendant have had a greater knowledge of the risks associated with fireworks and specifically the risk of explosion from fireworks; should that have translated into better training for operational

firefighters? Second, should there have been closer institutional knowledge of this site acquired in a “7(2)(d)” inspection, so that the layout, water supply and risks of the site were captured and available to those attending the scene? Third, were there any relevant equipment problems: specifically, should ground monitors have been available avoiding the need for lashed branches? Was the light portable pump (LPP) unsuitable for the task in hand? Fourth, should the M&CC have passed on warnings of significant explosions on the site, in whatever suitable language, as firefighters travelled to the scene? Fifth, should different decisions have been made on the ground: critically, to fight the fire or not, given the poor water supply? Last, was there a failure in the conduct of the evacuation and its follow through? I turn to these questions in order.

136. The parties are at odds about the law applicable to this case. I address those questions later in this judgment, rather than interpose the debate here. In the ensuing sections of this judgment “fault” or “failure” is used as shorthand for breach of statutory duty, and/or for common law breach of duty.

Knowledge of the Risks of Explosion from Fireworks

137. I have already set out much of the material which bears on this issue. Both the Claimants’ experts agreed that there was a failure of knowledge centrally and a failure to devolve that knowledge. Each appeared to me to suggest that all fire services should have been alive to significant risks of explosion from fireworks, drawn from the documentation up to and including the advice to fire services given by the Health and Safety Executive in 2005. Each agreed with the added emphasis to this obligation given by the special position of East Sussex in relation to the manufacture and storage of fireworks.
138. Mr Evans by contrast took the position that there was very little or any knowledge of these risks within fire services nationally. He was clear that the CHAF experiments were not promulgated or publicised in time to affect knowledge on the ground before this explosion. As I have recited above, his assumption was that the continuing programme of training which was in process at the time would have educated all the firefighters in East Sussex sufficiently over the ensuing months after Marlie Farm.
139. On this issue I have concluded that the correct position is nearer to that of the Claimants’ experts than that of Mr Evans. He appeared to me to be considerably discomfited when confronted by the material produced by his own Merseyside Service well before the Marlie Farm explosion.
140. Of course, the fact that one other force had promulgated reasonably full knowledge of the risks of explosions to be feared from fireworks does not itself establish the standard. In my judgment, the critical point here is the special position of fireworks, and the fireworks business, in East Sussex. Any thorough-going general assessment of the risks faced by firefighters in East Sussex should have taken on board the considerable presence of fireworks in the area. The analogy drawn by Firefighter Julyan with the risks of boggy ground holds good. I was not convinced that anyone centrally had made a rational assessment of the special risks associated with this service. As I have outlined already in this judgment, there was sufficient information available for a proper practical warning and instruction to be given to firefighters in East Sussex. This does not mean that all of the firefighters in East Sussex should have

been aware of the CHAF experiments or have a clear knowledge of the risk of mass explosion although that would have been desirable. It does mean they should have been aware in general terms that there were risks of significant explosion with fireworks held in bulk.

141. It is of note that Mr Upton did have some such awareness, although perhaps not very sharply focused. Had the information and teaching provided to him centrally been even a little more developed, a conscientious officer such as Mr Upton, who was keen on training, would have been likely to have a much more healthy respect for the risks he faced at Marlie Farm.

Inspection and Knowledge of Marlie Farm

142. As I have already recorded, Marlie Farm appears in fact to have been inspected by Mr Wells as an adjunct to the inspection of Upper Lodge Farm. A “risk card” was prepared for the latter, not the former.
143. Both the Claimants’ experts take the view that this site should have been inspected and a risk card prepared to which firefighters could have had quick access. Mr Evans disagrees with this on the basis that “ESFRS were not aware of the extent of storage at the site The site did not conform to ESFRS criteria for 7(2) (d) inspection”.
144. Here too it seems to me that the position adopted by the Claimants’ experts is to be preferred. It was known in general terms that the water supply in that area was poor. For the reasons I have already summarised, the Second Defendant was aware of significant storage of fireworks at Marlie Farm. Even without any crisper formulation of the risks of explosion from fireworks, the site represented an obvious collection of hazards if fire broke out. It is hardly a defence to a failure to inspect a site such as this, that the Second Defendants historically conducted few inspections and historically made few records of hazards or “risk cards”. Yet this is effectively the argument advanced by Mr Evans. Had there been a sufficient focus on the risks of fireworks on the part of the Second Defendants, the obligation to conduct inspections and record the relevant risks, and an outline firefighting plan, would have become ever sharper.
145. Mr Upton himself noted that he had “a severe lack of information” about the site.
146. I have recorded above my conclusions as to what would have been likely to emerge had a timely inspection and a 7(2)(d) record been made. There would have been an accurate, or relatively accurate, estimate made of the water available, so as to inform decisions on the ground. It is likely, for example, that the existence of the swimming pool would have been known from the start. It would have been known that the local hydrants were of limited capacity. This would have engendered a more cautious approach to firefighting. It would have enabled an early decision as to whether or not the swimming pool was full, what its capacity might be in outline terms, and whether this source of water could and should be tapped quickly. It seems possible, although I make no finding on the point, that forewarning of the existence of the swimming pool would have meant a much earlier decision to put a pump in place and attempt to cool the ISO container by that means.

147. No advance inspection would probably have altered the firefighters' information as to the contents of the ISO container.

Equipment

148. The essential criticisms levelled by the Claimants here are two-fold. Firstly, there is a strong suggestion that there was an obligation to have ground monitors available on site. A ground monitor is in effect a prepared, mobile standing frame for a fire-hose, which enables the firefighter to attach the hose, place the ground monitor where it is needed, and retire. The alternative is a "lashed branch" or "branch monitor", which means that a fire-hose is lashed to a structure, such as a post or railing, in such a position that the jet of water falls where it is desired, enabling the firefighter to move away. The claimed advantage is that ground monitors can be put in position much more quickly, hoses being run out as the water is supplied, and the monitor itself being placed rapidly, allowing firefighters to retire more quickly, minimising their exposure to risk.
149. Mr Evans's view is, in effect, this is a counsel of perfection. On this issue, I prefer his analysis. Much of the anecdotal evidence from firefighters was to the effect that lashing hoses to structures could be done rapidly with practised hands. Moreover, Mr Evans makes the commonsensical point that, particularly in the situation where the water pressure is variable, ground monitors as well as lashed branches require adjustment to be effective, meaning that firefighters must either stay with the monitor to keep it adjusted or at the very least return to it periodically, to ensure that the relevant jet of water strikes the desired target.
150. Whilst I accept that ground monitors might have had an advantage in the event, I did not find sufficient basis for concluding that it was obligatory that such monitors should be carried at all times so as to be available for use if need be. Moreover, I have not concluded that, in the event, the outcome would have been altered, had such equipment been carried. The problem which led to the deaths and injuries in this case was an explosion whilst firefighters were still close to the container. There is no satisfactory evidence that ground monitors would have enabled the effective application of water to the container any earlier, since the essential delay was the lack of water supply to the hoses, however mounted.
151. The important criticism of the Claimants' experts centred around the LPP is not criticism of the equipment itself, but rather the use of it. There is a suggestion that the pump was of poor quality and difficult to get going, but I did not find this convincing. In essence, the suggestion is that the capacity of this pump was too limited for the use to which it was put, and that it would require attendance by firefighters to prime the pump in the first place and then ensure that it kept functioning properly, as it drew water from the swimming pool. It is therefore the reliance upon that pump as the mechanism for drawing from a pool of water so close to the hazard which is the real question.
152. Had the pool been known to Mr Upton or Mr Wells earlier, then the pump might have been deployed earlier and there might have been the prospect of a period of adequate supply of water from the pool to play on the container or indeed the fire as it advanced through the tube store towards the container. Even if it was predictable that the pump might require attention thereafter, a decision to evacuate would still have

been possible with a prospect of the monitors continuing to prevent the spread of fire and/or cool the container.

153. I form no conclusion that this would have been the outcome, since in my view I do not have any proper basis for a conclusion on the point. The issue of the pump therefore becomes tangential. The real issue is the decision to fight the fire and remain on the fireground.

Should the warnings of explosions have been passed on by the M&CC to those attending the scene?

154. On this issue at least there is some apparent consensus. The Claimants' experts are clear that these messages were relevant and that those attending the scene should have been told of significant explosions, in whatever language. Mr Evans appeared in his answers noted during the pre-trial expert discussion to agree that this information should have been passed on, but to qualify his answer by saying:

“There were 4 call handlers working that day. Each call was answered and listened to and in some cases fire safety advice given by the M&CC operator. On this basis I am of the opinion that the M&CC staff passed on as much information to crews as they possibly could given the prevailing circumstances.”

155. On this point, I roundly reject Mr Evans's view. The reports of explosions were graphic, repeated, and had alarmed the callers. At least one call should have been realised to be from an occupier of Marlie Farm. As I have identified above, one of the M&CC staff commented to a safety officer that the explosions were clearly audible through the communications network, the terms of his comment demonstrating that they had impressed those in the call centre. It seems to me that this was an obvious piece of information to be passed on to firefighters attending a scene which was known to contain fireworks. Of course, the language would have been more neutral than that employed by members of the public, and I fully accept that firefighters would have made mental allowance for the different perception of explosions by members of the public. Nevertheless, this information was obviously relevant, and, amongst others, Mr Upton agreed that it would have been useful to him.

The Decisions on the Ground: should the fire have been fought?

156. Everyone sensible will recognise the high degree of pressure on any Incident Commander in charge of fighting a major fire. All the experts emphasised, and anyone applying thought to the matter, would also recognise the number of variables which must be considered when decision-making in such a context. In my judgment, there may often be a range of reasonable responses when taking the decision to begin to fight a fire or to continue doing so. The essence of such a decision is the calibration of risk against gain; as the rather pithy formulation I have quoted in paragraph 52 above encapsulates.
157. Of course, the difficulties inherent in such decision-making are deployed by the Second Defendant here to argue in favour of immunity from suit. I will turn to the legal debate shortly. I remind myself that it would be unreasonable to expect perfect

judgements at all times, and illogical and anachronistic to allow the tragic outcome to affect the judgment on what was done.

158. Any judgement about whether it was proper to begin to fight the fire, or continue to fight the fire, must depend on what was known and, if appropriate, what should have been known. I must therefore draw together some of the conclusions I have already reached.
159. Marlie Farm was a mixed site. There was residential property as well as commercial property and to start with there were civilians on site. Of course, the first priority of those in charge was to try and clear members of the public away. Despite all of the difficulties with the Winters, that was achieved. I fully accept that Martin Winter and Nathan Winter were persistent in their presence but they were not out of sight or out of mind: indeed their presence was all too evident. However large a nuisance they were from time to time, this was not a situation where there were thought to be unknown civilians or members of the public somewhere on the fireground. Although the cordon was not 600 metres away and although there were too few officers to police a completely reliable perimeter, neither was there any evidence of members of the public who were on the fireground and at risk of death or injury from fire (as opposed to explosion).
160. Thus the incentive to fight the fire was to save property. This is of course not a trivial incentive and if the Incident Commanders needed reminding of it, the Winters were there to insist that these premises were their livelihood. However, the substantial point is that saving property does not justify significant risk to firefighters' lives.
161. In broad terms there were four risks to be considered from fighting this fire. There was a risk from the burning buildings and structures themselves, the risks of the individual igniting fireworks and the projectiles that came from them, the risk of explosion associated with the oxyacetylene cylinders which were discovered on the site, and the risk of significant explosion from bulk fireworks.
162. None of the buildings on the site were high-rise and there is no evidence that at any stage it was contemplated firefighters had to go inside a building to try and fight the fires. In this sense, I accept the remarks of Dr Dennett that this was not a particularly complex fire. There is no evidence which suggests that the risk from the fire running through these buildings would itself be so high as to prevent any attempt to contain the blaze.
163. It seems to me that the same can be said in respect of the individual burning fireworks and any projectiles resulting from them. Of course this factor meant that a firefighter not wearing full personal protective equipment would be at risk, but all had such equipment available to them. It seems that there were some individual instances where the full equipment, for example flash hoods, were not worn, but that could not influence the overall decision whether to fight the fire. The projectiles from individual fireworks were no doubt a nuisance, and were of course capable of igniting further fires where they landed on combustible material not yet alight. There were real risks associated with this, however, that must be to some degree the case on any major fireground where burning debris may fall from one structure to another or even be carried on the wind. Thus it does not appear to me that the simple presence of

fireworks going off even in some quantity should have compelled a decision to withdraw.

164. The same can be said in respect of the risk from the oxyacetylene cylinders. As I have already observed, these were spotted and removed from the immediate source of fire. It does not appear that any specific test was used to establish whether or not the cylinders were already heated: there was in practice a judgment that they were not sufficiently heated to prevent them being moved away.
165. The critical risk on this fireground was the risk of significant explosion from bulk fireworks.
166. As I have already found, those attending this fire should have known more than they did. They should have known that there was a significant risk of explosion from fireworks held in bulk. I repeat, for the avoidance of doubt, I do not find that they should have known of the detail of the CHAF experiments or indeed that the risk was as severe as in truth it was. In simple terms the aide memoire and the advice from the Health and Safety Executive should have been communicated to firefighters in this area, conveying the straightforward proposition that fireworks in bulk could represent a risk of significant explosion. There should have been an earlier inspection of this site and a risk card, meaning that on the way to the scene firefighters were forewarned of the significant quantity of fireworks licensed to be on the site. They should have been informed by the M&CC of the reports of significant explosion or explosions before firecrews arrived. Finally, they should have been alerted by the risk card to the poor water supply in the area, although also alerted to the swimming pool as a potential supply of water.
167. Armed with that knowledge, any Incident Commander attending this scene would have been very concerned by the level of anxiety shown and the contradictory messages emerging from the Winters focused on this container. This was the evidence of the late Mr Wells as to his response, as matters stood. His anxiety focused on the container, as matters stood. Mr Wells was on the point of concluding he could not fight this fire, as I have set out in paragraph 80 above. I do not find that at that stage that was the only reasonable response, or that it would have been wrong or unreasonable to consider fighting the fire and in particular preventing its approach to the container, provided there was a realistic prospect of delivering sufficient water to do so.
168. The supply of water was crucial. As Dr Dennett emphasised throughout his written and oral evidence, without a sufficient water supply, the fire could not be fought. As matters were, I find that without an effective use of the water in the swimming pool there was no sufficient water supply to give a prospect of fighting this fire, unless and until the water carriers arrived. Had the swimming pool been known as a source of water from the moment of arrival, the first step would have been to check that it had not been drained for the winter and the second to consider whether to move rapidly to use this water. As matters were, that did not arise: there are merely hypothetical questions as to whether this source of water could have been deployed earlier and if so, whether it might have affected the outcome.
169. As matters stood, the fire had progressed too far. By the time the swimming pool was discovered, given the progress of the fire to that point, the judgement should have

been that given the time that it would have taken to get into the pool, combined with the proximity of the pool to the container which was the source of the concern, that the only proper course at around 14.20 was to evacuate the site.

Was there a failure in the conduct of the Evacuation and its follow-through?

170. As I have just found, there should have been a somewhat earlier decision to evacuate this fireground. However, Mr Upton did reach the right decision at 14.29. His evidence is quite unambiguous that his decision was to evacuate, not merely to mount a tactical withdrawal. That decision was correct, but was not followed through. I have set out in considerable detail the facts surrounding this part of the story and I need repeat none of that.
171. It is worth recording that there was considerable doubt in the Second Defendant's pleaded case about this issue. It is rare that pleading points are of much value in considering evidence. However, here it may well be of significance that the evacuation order was firstly described in the Defence as a decision to withdraw. Six years after the explosion, the Amended Defence described it as an evacuation, but averred that the decision to recommit firecrew was acceptable, a position which was amended again in the Second Defendant's written opening note, where the Second Defendant said they no longer sought to defend the decision to recommit firecrew after 14.29.
172. Mr Evans was asked for his views on this aspect of the case, in the course of cross-examination. He had not been critical of Mr Upton's conduct of the evacuation in the course of his report or in pre-trial discussion with the Claimants' experts. However, having heard the evidence and having been tested in cross-examination, he changed his position. He confirmed that it was not acceptable for a Commander to do nothing more than Mr Upton did. He said "I can't defend the roll call and the evacuation not being successful".
173. There was in my judgment a fatal ambiguity in Mr Upton's mind. He did not carry through the evacuation. He did not ensure that those around him signalled the evacuation thoroughly. He allowed others to behave in a way which communicated ambiguity about the order to evacuate. The likely explanation of events is that he in fact vacillated between an evacuation and a continuing attempt to try to cool the container, in the hope that water could be delivered to cool the container and that nothing would happen before firefighters could in the end withdraw. He was a little belated, but correct, in the decision he took to evacuate. There was a clear failure to ensure that the order was carried out.
174. That failure was heavily influenced by the fact that Mr Upton had not been trained clearly enough as to the hazards arising from bulk fireworks. The system failures of the Second Defendant to focus on the special risks they faced, and to inform their firefighters clearly about the hazards of fireworks held in bulk, converged with a serious failure by Mr Upton to execute a very well established procedure he himself had ordered.
175. The deaths and injuries in this case resulted from those convergent failures.

The Law

176. The claims in this case are framed both in breach of statutory duty and at common law. The Claimants rely on four sets of regulations which they say give rise to statutory causes of action at the suit of firefighters, and three of which they say give rise to causes of action at the suit of police officer claimants. The regulations in question are the Provision and Use of Work Equipment Regulations 1998 [“The Equipment Regulations”]; the Control of Substances Hazardous to Health Regulations 2002 [“The Hazardous Substances Regulations”]; The Dangerous Substances and Explosive Atmospheres Regulations 2002 [“The Dangerous Substances Regulations”] and the Management of Health and Safety at Work Regulations 1999 [“The Management Regulations”].
177. The Second Defendant claims that the regulations pleaded do not apply to firefighters. They also claim immunity from suit if the regulations do apply, and at common law, where the alleged failures took place on the fireground: in effect a “fireground immunity”.

The Ambit of the Workplace Regulations

178. The starting point for the Second Defendant is the nature of the duties imposed on the Second Defendant by way of the Fire and Rescue Services Act 2004. The Second Defendant submits that the obligations placed by Parliament on fire services under the Act were not intended to give rise to civil liability for breach. The Second Defendant relies upon the well known authority *Capital and Counties Ltd –v- Hampshire County Council Digital Equipment and Others* [1997] QB 1004 “*Capco*” for the proposition that such duties are “target duties” only and do not give rise to civil liability. It is common ground that the relevant target duties under the 2004 Act are a re-enactment of the pre-existing statutory duties, under Section 1 of the Fire Services Act 1947.
179. The Second Defendant submits that, if the obligations set out in the primary Act were intended by Parliament to be target duties only, not capable of giving rise to civil liability, then it would be illogical and should be unlawful for civil liability to arise, either at common law or pursuant to regulation, where such obligations overlap with the duties set out in the primary statute.
180. The Claimants reject these submissions. They rely upon the relevant regulations as having their origins in primary legislation, contained in the Health and Safety at Work Act 1974, which by section 47(2) provides that:

“Breach of a duty imposed by Health and Safety Regulations shall, so far as it causes damage, be actionable, except in so far as the regulations provide otherwise.”

They submit that if the wording of a given regulation catches a Defendant such as this, then a duty is imposed, just as it would be on any other employer or entity. The Claimants rely upon the Court’s obligations to adopt an approach to interpretation of statute compliant with the European Convention of Human Rights and thus, whether Article 6, article 13, or article 2 are engaged, they argue only an unambiguous statutory provision can exclude a claimant from the protection of the relevant statutory regulations.

181. In their opening submissions, the Second Defendant sought in addition to contend that the pleaded regulations are not applicable to the fire service, submitting that they are in effect *ultra vires* when applied to firefighters, because the Fire and Rescue Services Act 2004 is omitted from schedule 1 of the Health and Safety at Work Act 1974. The Second Defendant's reasoning appears to be that the pleaded regulations are made under section 15(3) which only permits the promulgation of regulations to repeal or amend existing statutory provisions, which are defined pursuant to section 53(1) as those listed in schedule 1.

182. In my judgment, the Second Defendant's submissions on this point fail. The Health and Safety at Work Act 1974 contains definitions critical to understanding the scheme of the Act and relevant to making amendment of regulations in the field. By section 15(1):

“(1) Subject to the provisions of section 50, the Secretary of State [...] shall have power to make regulations under this section for any of the general purposes of this Part (and regulations so made are in this Part referred to as “health and safety regulations”).”

183. The power is, on the face of it a general power, a characteristic underscored by the wording of section 15(2):

“(2) Without prejudice to the generality of the preceding subsection, health and safety regulations may for any of the general purposes of this Part make provision for any of the purposes mentioned in Schedule 3.”

184. Section 15(3) introduces two concepts subsequently defined in Section 53: “the existing statutory provisions” and “the relevant statutory provisions:” [emphasis added]

“(3) Health and safety regulations-

(a) may repeal or modify any of the existing statutory provisions;

(b) may exclude or modify in relation to any specified class of case any of the provisions of sections 2 to 9 or any of the existing statutory provisions;

(c) may make a specified authority or class of authorities responsible, to such extent as may be specified, for the enforcement of any of the relevant statutory provisions.”

185. By Section 53 the following definitions are given:

“‘the existing statutory provisions’ means the following provisions while and to the extent that they remain in force, namely the provisions of the Acts mentioned in Schedule 1 which are specified in the third column of that Schedule and of

the regulations, orders or other instruments of a legislative character made or having effect under any provision so specified;

.....

‘the relevant statutory provisions’ means-

(a) the provisions of this Part and of any health and safety regulations [...]; and

(b) the existing statutory provisions.”

The distinction between “existing” and “relevant” statutory provisions is maintained throughout Part One of the Act. Section 50 is not said to affect the power to make Health and Safety Regulations.

186. Section 47 of the Act addresses civil liability. Once again, the distinction between “existing” and “relevant” statutory provisions is maintained, the latter including the former:

“(1) Nothing in this Part shall be construed-

(a) as conferring a right of acting in any civil proceedings in respect of any failure to comply with any duty imposed by sections 2 to 7 or any contravention of section 8; or

(b) as affecting the extent (if any) to which breach of a duty imposed by any of the existing statutory provisions is actionable;...”

187. Section 47 (2) provides that breach of Health and Safety Regulations is actionable except so far as expressly provided.

188. It appears to me that the proper conclusion from these provisions is that “Health and Safety Regulations” can amend a duty under “existing” statutory provisions (section 15(3)(a)(b)), and thus breach of Health and Safety Regulations will be actionable, save where the contrary is expressly provided (section 47 (2)). Fire and Rescue Services were not expressly excluded from the Health and Safety at Work Act 1974. It is of interest that the police service were so excluded by section 50A.

189. It is also worth noting that some explicit, narrow exceptions have been made under the Health and Safety Regulations in respect of the fire service, for example from the Working at Height Regulations 2005, which impose an obligation on employers to ensure that work at height is carried out only when the weather conditions do not jeopardise health or safety. That obligation is expressly dis-applied by Regulation 4(4), “where members of the police, fire, ambulance or other emergency service are acting in an emergency.” This provision would be redundant if the regulations did not otherwise apply to the fire service. Section 51A makes specific reference to the provision applying to the police. If the Act was intended to exclude a group of workers such as firefighters, it is in the highest degree unlikely that this would not have been made explicit, given the explicit reference to the police service.

190. The Second Defendant also appears to suggest that the provisions of Article 2, paragraph 2 of the Framework Directive 89/3914/EEC has the effect of excluding the application to firefighters of the domestic health and safety legislation. However, article 1 (3) provides:

“This Directive shall be without prejudice to existing or future national and Community provisions which are more favourable to the protection of the safety and health of workers at work.”

As the Court of Appeal found in *Stark –v- Post Office* [2000] ICR 1013, it is open to a member state to enact requirements beyond those stipulated by the Directive.

191. In the light of that conclusion, I also reject the argument that, because the primary statute contains “target duties” only, there is a necessary implication that no civil liability arises either at common law or by the imposition of regulation. This seems to me to run counter not only to the provision I have just analysed, but to the authorities from *Capco* on where common law liability has been established. I deal with some of the leading cases elsewhere in this judgment.
192. For all these reasons I reject the submissions of the Second Defendants that it was not the intention of Parliament that the workplace regulations should apply to the fire service.
193. I turn below to the detailed application of the regulations to the facts as I have found them to be. However, I should place on record some concern about that process. First, the language and the structure of many of the regulations do not easily lend themselves to these facts. They presuppose that the employer is (or should be) in control of the workplace: that the workplace is occupied and controlled by the employer. Whereas in the case of the fire service, the workplace, in the sense of a fireground, is not occupied or controlled by the employer until there is a fire. As such, the occupation is in an emergency, and the control necessarily limited.
194. This concern particularly arises in respect of the Hazardous Substances and Dangerous Substances Regulations. Whilst I accept the argument that they apply, it appears to me they are sometimes difficult of application.
195. The concern does not arise in respect of the Management Regulations or the Equipment Regulations, both of which are easier of application. The management obligations and the obligations to provide suitable equipment are not complicated by the exigencies of the fireground.
196. My second reservation is that the application of the regulations was not argued as relating to the detailed facts as I have found them. The case involved a very great quantity of evidence and was tried with admirable speed and economy during the hearing. I pay tribute to the care shown by counsel. However, the Second Defendant in particular concentrated its fire on the submissions that the regulations did not apply. The Claimants complained that a detailed position on how the regulations applied, if they did, was never pleaded. And of course before my findings were available, the parties could not seek to apply them. Thus in this respect I have a concern that the submissions were not, and perhaps simply could not have been, as focussed as elsewhere.

197. I should also observe that for much of the matter in hand, and particularly the sometimes nice questions of what can be expected of decisions on the fireground, the relative inflexibility of the regulations seem to me to be less apt to do justice than the suppleness of the common law.
198. I must deal with one specific argument as to the application of the Hazardous Substances Regulations. The Second Defendant has argued (but not pleaded) that regulations 6 to 13 do not apply to this case because of the provisions of regulation 5(1)(b), which exclude from the ambit of the regulations a substance which “is hazardous to health solely by virtue of its ...explosive or flammable properties...”. The Claimants meet this by saying that fireworks are not hazardous solely by reason of their explosive or flammable properties; or at least they are much more hazardous when stored (1) in bulk and (2) in containment.
199. It seems to me there is force in this argument. The nature and degree of the hazard changes radically when fireworks are stored in bulk, and even more when in bulk and in containment. I would therefore hold that the Hazardous Substances Regulations do apply. However, as Mr Burton observed in his written submissions, the point may be academic, since the provisions of these regulations mirror those of the Dangerous Substances Regulations, which undoubtedly do apply to explosives.

The Common Law

200. I turn to the common law. In February 2013 the Supreme Court heard the case of *Smith and Others –v- The Ministry of Defence* [2013] UKSC 41. The parties addressed the judgment of the Court of Appeal in this case during initial submissions. Following the Supreme Court’s judgment on 19 June 2013, by agreement, they made supplementary written submissions responding to that decision. The Smith cases arose from the death and injuries sustained by soldiers in Iraq. Appeals and cross-appeals were before the Supreme Court, following the grant or refusal of strike out applications made by the Ministry of Defence. The first limb of the case concerned the application of Article 1 of the European Convention of Human Rights and the question of the jurisdiction of the member states, which jurisdiction carries with it the obligation to secure the rights and freedoms defined under the Convention. Clearly, the jurisdiction/obligation question is not a live issue in the case before me.
201. However, the Court went on to consider the doctrine of “combat immunity” and the principles which underpin such claimed immunity. In so doing, the Court also considered the authorities relating to the law of negligence as applied to the emergency services, and in particular to claims by employees.
202. The Supreme Court divided in its approach, with Lord Hope (Lord Walker, Lady Hale and Lord Kerr concurring) giving the majority judgment. In the course of this judgment, Lord Hope dealt with “combat immunity” at paragraphs 82 – 96. Lord Hope reviewed the history of the doctrine of combat immunity, including what he described as the “extension of the immunity to the planning of and preparation for the operations in which injury was sustained”, which he found to be part of the *ratio* of Owen J in *Multiple Claimants –v- The Ministry of Defence* [2003] EWHC 1134 (QB). Lord Hope expressed respectful disapproval of that extension in paragraph 89, stating that, as so formulated, the immunity:

“could include steps taken far away in place and time from those operations themselves, to which the application of the doctrine as a particular application of what is just, fair and reasonable would be at the very least questionable”

Lord Hope quoted with approval the judgment of Elias J, as he then was, in *Bici –v- Ministry of Defence* [2004] EWHC 786 (QB). Lord Hope noted that it was the opinion of Elias J that the scope of the immunity should be construed narrowly, and Lord Hope concluded “that approach seems to me to be amply justified by the authorities.”

203. In the MOD’s submissions to the Supreme Court, it is clear that “battle immunity” and the underlying principle first enunciated in *Caparo Industries PLC –v- Dickman* [1990] 2 AC 605 (that a duty of care at common law should only be imposed where it was “fair, just and reasonable” so to do) were treated as separate but complementary principles of law. However, in the judgments of Lord Mance (Lord Wilson concurring) and Lord Carnwath, the proposition was advanced that “combat immunity” should be regarded:

“not so much as an entirely separate principle as the result of a general conclusion that it is not fair, just or reasonable to regard the Crown or its officers, soldiers or agents as under a duty of care to avoid injury or death in their acts or omissions in the conduct of an active military operation or act of war.”

See Lord Mance at paragraph 114 and Lord Carnwath at paragraphs 163/164 and 185/186. In fact, there may be little difference with the approach by Lord Hope quoted above.

204. All three judgments in the Supreme Court emphasised the caution which must be shown in imposing immunity, even in the case of service personnel in the theatre of war. There was also considerable emphasis on the need for specific findings of fact, as governing the application of any immunity. There is no support here for the extensions of immunity from the battlefield to the fireground.
205. The judgments of Hale LJ and Buxton LJ in *Sussex Ambulance NHS Trust –v- King* [2002] EWCA Civ 953 were singled out by Lord Carnwath in his judgment in *Smith –v- MOD* as containing: “an authoritative exposition of the relevant principles” concerning the duties owed by employees to their staff in the context of the delivery of emergency services: see paragraph 171.
206. As Hale LJ observed in *Sussex –v- King*:

“The starting point is that an Ambulance Service owes the same duty of care towards its employees as does any other employer. There is no special rule in English law qualifying the obligations of others towards firefighters, or presumably police officers, ambulance technicians and others whose occupations in the public service are inherently dangerous: see *Ogwu –v- Taylor* [1988] 1 AC 431. Such public servants accept the risks which are inherent in their work, but not the risks which the

exercise of reasonable care on the part of those who owe them a duty of care could avoid. An employer owes his employees a duty to take reasonable care to provide safe equipment and a safe system of work, which includes assessing the tasks to be undertaken, training and how to perform those tasks as safely as possible, and supervision in performing them.”

207. Hale LJ went on to cite the classic statement of the standard by which an employers’ care is to be judged, from *Stokes –v- Guest, Keen Nettlefold (Nuts and Bolts) Ltd* [1968] 1 WLR 1776, at 1783 C-F:

“.....the overall test is still the conduct of the reasonable and prudent employer, taking positive thought for the safety of his workers in the light of what he knows or ought to know;.....where there is developing knowledge, he must keep reasonably abreast of it and not be slow to apply it;he must weigh up the risk in terms of the likelihood of injury occurring and the potential consequences if it does; and he must balance against this the probable effectiveness of the precautions which can be taken to meet it and the expense and inconvenience they involve.”

208. Hale LJ then went on to cite the “further dimension which is particularly applicable to the statutory services”, as set out in *Watt –v- Hertfordshire County Council* [1954] 1 WLR 835, where Denning LJ emphasised the need, when measuring due care, to balance the risk against the measures necessary to eliminate the risk, and the risk against the end to be achieved. As Denning LJ put it:

“The saving of life or limb justifies taking considerable riskI quite agree that fire engines, ambulances and doctors’ cars should not shoot past the traffic lights when they show a red light. That is because the risk is too great to warrant the incurring of the danger. It is always a question of balancing the risk against the end.”

209. The Second Defendant seeks to rely on the well known case of *Capco*. It seeks to extract three points from the case: first, that the only circumstance in which a fire brigade may owe a duty of care is where they have positively created the danger; second, that the fire brigade owe no duty at common law to firefighters as employers and third, that the standard to be applied, where a duty is owed, is the enhanced or higher test promulgated in the well known case of *Bolam –v- Friern Hospital Management Committee* [1957] 1 WLR 582. I take those points in turn.

210. In order to understand the *Capco* case, the context must be borne in mind. The three cases drawn together in this appeal were all concerned with what duty was owed by the fire service to those whose property was at risk from fire. The appeal was concerned with those who had no pre-existing relationship with the fire service. It was for that reason that the decisive principle in the reasoning of the court was proximity, distinguishing the different cases, and providing the rationale why the fire service was held to be liable in the first conjoined appeal and not the others. It was in that context, and only in that context, that the Court concluded the fire service were

liable only where the service “itself by negligence creates the danger which caused the plaintiff’s injury...”

211. The Court was itself explicit that the reasoning did not apply to employees: see the judgment at 1047F.
212. The Second Defendant cites a number of other authorities as analogous to and suggested support for, their interpretation of *Capco*. However it does not appear to me that any of the cases cited establish the reading of *Capco* sought by the Second Defendant. There can be no question about proximity in relation to employees, acting in the course of duty, and the Court in *Capco* were not considering employees.
213. In *Ogwo –v- Taylor* [1988] AC 431, the House of Lords considered whether a firefighter could sue for injuries sustained in a fire started negligently by the occupier of a house, and found emphatically that such a cause of action lay. The Claimants say it would be extraordinary if a negligent occupier could be sued, but a negligent employer could not.
214. A great number of the professionally qualified and experienced witnesses in the case emphasised the paramount importance of health and safety for operational personnel, and any who were asked if that consideration had ever impeded operational effectiveness, were clear that it had not. The witnesses Liszka and Hobbs are good examples. There was literally no evidence before me to suggest that it might. The Defendants’ expert Mr Evans was himself one of those who suggested no such difficulty. There is no evidential basis for a need for immunity here.
215. As Mr Seaward has emphasised in his submissions, the terms of service of firefighters, known as the “Grey Book”, are significant. The 6th Edition (2004) of the Scheme of Conditions of Service, in Section 5, provides that the National Joint Council for Local Authority Fire and Rescue Services recognises the importance of health, safety and welfare in the workplace, and confirms that fire and rescue authorities have a duty to comply with legislation governing the health, safety and welfare of employers.
216. Counsel reviewed a considerable range of authority from other jurisdictions concerning immunity from suit by firefighters. However the result is a demonstration of the different approaches taken, and does not determine the law in this jurisdiction. I am grateful to Counsel for their researches.
217. For these reasons I reject the Second Defendant’s submission that the approach in *Capco* prevents recovery by fire service employees. The clear statement of principle in *King –v- Sussex* applies, in my view.
218. What of police officers at Marlie Farm? They were not employees of the Second Defendant. Mr Burton who represents the police officer claimants, makes a number of points. He firstly argues that:

“police claimants are not members of the public at large, but are part of the emergency services teams working with the fire service, and in practice subordinate to fire fighting priorities in respect of establishing cordons. There is therefore a high

degree of proximity. Such proximity is underlined by the fact that the fire service also owes them a number of statutory duties.....”

219. In my judgment, there is force in that submission. It would be a very artificial distinction, at least on the facts of this case, to conclude that there was any lack of proximity on the part of police officers who were closely involved in a co-operative effort to address the fire, who were attempting to assist by doing their best to deal with the Winters, and who were in such close physical proximity to firefighters right up to the end of the sequence of events. In the terms of the *Caparo –v- Dickman* formulation, it would not seem “fair, just or reasonable” to acknowledge liability to fire service personnel but withhold a duty of care to police officers on the fireground. I therefore conclude that there was a subsisting duty of care to them also.
220. Mr Burton’s final submission relating to this topic is that, even if the *Capco* approach governed the existence of the duty here, a duty would still be owed as the fire service “by instructing Mr Wicker and the police claimants to enter and remain on the fireground they created the danger to them, or alternatively increased the risk to them”. I am not persuaded by this argument. The danger was created by the fire and the risk of explosion from fireworks. Neither was created by any negligence or failure by the fire service. The police officers were exposed to the risk by undertaking their duties. This was not a case where the risk or hazard was created by firefighters; this was a case where the danger was not avoided because of a failure to take care in respect of the danger. There was no “positive negligent act” of the kind under consideration in *Capco*: see p.1032A/C. In my view, no duty of care can be erected on this basis.
221. I turn to the third point which the Second Defendant seeks to derive from *Capco*: namely the standard of care. The trial judge in the “*Hampshire*” case within *Capco* adopted the “*Bolam*” standard, and the Court of Appeal indicated approval of that approach, albeit rather in passing, as a suitable filter against excessive claims: see page 1043H/1044A, and 1051C/F. They describe the test in *Bolam* as “a very high threshold in establishing negligence”.
222. I am not clear, having considered the *Capco* judgment carefully, whether this approach to the standard of negligence was ever argued fully in the case, or indeed if these remarks are other than *obiter dicta*, since the Court was considering the existence and ambit of the duty of care, rather than the standard.
223. I have already indicated that a very careful approach to negligence will always be appropriate when considering actions by an officer on the fireground. With that caveat, I am not persuaded that *Capco* is authority for the proposition that the *Bolam* test must be applied. There are special reasons for the application of this test as to professional matters, where different schools of thought co-exist about highly technical matters, and where medical or scientific advances must not be discouraged by an unduly “safety first” approach to developing techniques of treatment. The problem on the fireground is rather different: the problem is the speed and complexity of events, rather than making allowance for different intellectual or technical approaches. I would hold that *Capco* is no authority for the application of the *Bolam* test, and that there is no need for its application. However, if I am wrong on that

point, as I make clear below, I would in any event find that the failure to evacuate the fireground failed the *Bolam* test.

224. In the light of that authority, it seems to me that the proper approach I should take to liability here can be summarised as follows.
225. Firstly, in respect of common law liability to employees, there is no established “battle immunity” in relation to decisions taken in the heat of the moment by those in charge in the emergency services. The proper approach is to consider the underlying principle enunciated in *Caparo –v- Dickman*: is it fair, just and reasonable that a duty of care should subsist? That approach includes a consideration of decisions by those in command of the fire service in the field. It appears to me that the question of whether a duty of care arises shades into the question of what it is reasonable to expect on the facts, where a duty of care does subsist. If and to the extent that a duty of care subsists in extreme conditions, it is incumbent on the Courts in deciding whether a breach of that duty has been established, to make every allowance for the difficulty of exercising command and making swift decisions on a fireground.
226. Indeed, it appears highly desirable to me, having the facts of this case in mind, that the courts are free to consider the detail of what was done, bearing keenly in mind the inherent difficulties, rather than having to apply or dis-apply a blanket immunity to suit.
227. In my judgment, it is also helpful to keep well in mind the specific nature of the particular decision under scrutiny. Did he or she face a finely balanced judgement? In the alternative, was the error a failure to follow a well established procedure for which he or she had trained and which, whatever the pressure of the moment, clearly should have been carried over into action? Was the decision of the moment determined, or at least heavily affected, by a failure of information, equipment or training determined much earlier and perhaps by others? All such questions are better answered by applying flexibility of the test of reasonableness, rather than having resort to a black and white test as to the existence of duty of care.
228. For all these reasons, I have concluded that no immunity from suit exists in relation to the actions of the Second Defendant and its employees on the day of the fire at Marlie Farm, and that the Second Defendant owed their employees and, where appropriate others, the relevant statutory duties pursuant to Health and Safety Regulations. It also owed, to employees and to police officers, a common law duty of care.

Findings of Negligence and Breach of Regulations

229. I have concluded above that the Second Defendant was at fault in not recognising fully the risks of fireworks stored in bulk, and particularly in containment. This constituted negligence. The risks from inadequate knowledge and inadequate training on such a subject were foreseeable and indeed obvious. Better training on this issue would have meant that Mr Upton (and others on the fireground) would have had a markedly higher level of concern about the container and its contents. This would probably have led to an earlier evacuation of the fireground, and should and would have led to an effective evacuation, once that decision had been taken by Mr Upton. This failure was thus causative. Had all personnel been removed even to 200 yards, the deaths and injuries would have been avoided.

230. I also conclude that this failure was a breach of regulations 6 and 12 of the Hazardous Substances Regulations, regulations 5 and 9 of the Dangerous Substances Regulations, and arguably regulation 3 of the Management Regulations.
231. I note the provisions of regulation 22 of the latter regulations which would appear to have the effect of restricting civil liability for breach of these regulations to employees, thus in this instance to firefighters and to Mr Wembridge. Of course, the absence of such a provision from the other Workplace Regulations carries the contrary implication.
232. I have also concluded above that there was a failure to ensure that Marlie Farm was not only properly inspected, but that a 7(2)(d) card prepared and made available for firefighters attended the scene. I have indicated above what information would have been made available by such means.
233. In my judgment, this too was a negligent failure for the reasons I have given. It was foreseeable it would lead to harm, since a lack of knowledge of a site storing large quantities of explosives is evidently potentially harmful. Had this knowledge been available as it should have been, it would have had a material effect on the dynamic decision-making on the ground. The knowledge of poor local water supply would have meant there was a higher degree of caution in fighting the fire, and would have augmented the likelihood of an earlier decision to evacuate the fireground.
234. The knowledge that the swimming pool was present was likely to have meant an earlier attempt to use that water to cool the container. However I cannot conclude that would probably have meant the container was cooled earlier enough and effectively enough to avoid an explosion.
235. This failure also represented a breach of regulations 6 and 12 of the Hazardous Substances Regulations, regulations 5 and 9 of the Dangerous Substances Regulations and arguably Regulation 3 of the Management Regulations.
236. I have already concluded that there was no negligent failure in relation to the equipment provided to the firefighters. I should also make it plain that I do not conclude that there was a breach of the Equipment Regulations. I do not conclude the equipment was not “suitable” within regulation 4, or that there was any failure in the provisions of information or instructions pursuant to regulation 8. The risk here arose from the fireground, not from the equipment, and thus it does not seem to me there was a breach of regulation 7. I do not conclude there was a failure in training how to use the equipment under regulation 9. It is my view a strained interpretation to say that a lack of knowledge of the risks represented by the explosives came within the “risks which ...use may entail”. This regulation appears to me to be addressed to the risks attendant on the equipment, not the fireground.
237. I have concluded above there was a negligent failure to pass on the information that significant explosions were reported from Marlie Farm before the fire service arrived at the scene. This too was a contributory cause of the deaths and injuries, since the level of concern about subsequent explosions would have been raised.

238. Had this information been available, the “dynamic risk assessments” of Mr Upton would have been improved, and it is possible there would have been an earlier decision to evacuate.
239. Since it is agreed that risk assessments on a fireground must be “dynamic”, I conclude that there was here a breach of regulations 6 and 12 of the Hazardous Substances Regulations and 5 and 9 of the Dangerous Substances Regulations.
240. I have already expressed my conclusion that there was a failure to take an earlier decision to evacuate, by at least around 14.20. This was a negligent failure, given all that was in fact known. The position would have been even more stark, had the earlier failures I have identified not taken place.
241. Mr Burton submitted that the decision to fight the fire was a breach of regulation 7 of the Hazardous Substances Regulations and Regulation 6 of the Dangerous Substances Regulations. I have not concluded that the decisions to fight the fire at all was negligent and I therefore reject the submissions that the decision to fight the fire was in breach of regulations as he submitted. However I do find that in failing to evacuate by around 14.20, the risks of injury were not “reduced or avoided” in breach of those two regulations.
242. Finally, I have concluded that the failure to effect an evacuation of the fireground after the order to do so at 14.29 was clearly negligent. I have indicated how that failure was a culmination of earlier breaches. This was, however, a serious, free-standing breach of the duty of care. Death or injury was clearly foreseeable, and all the deaths and injuries caused are attributable. If it adds anything, I also find this constituted a breach of regulation 7 of the Hazardous Substances Regulations and regulation 6 of the Dangerous Substances Regulations.
243. I have given my reasons above why, in my view, there is no requirement for the applications of the “*Bolam*” test to this decision by Mr Upton. However, if I am wrong on this point of law, I do find that this decision fails the “*Bolam*” test. Given what he actually knew, and given the correct decision to evacuate the fireground, no reasonable and responsible body of incident commanders would support the failure to follow through the decision to evacuate. As Mr Evans agreed, it was indefensible.

The Allegation of Contributory Negligence against the late Mr Wembridge

244. The point made by the Second Defendant in respect of Mr Wembridge is “that he was advised several times that he should leave the main site. He did not”. Mr Wembridge was an experienced firefighter whose job was to record video footage for training and safety purposes. His long standing practice, in order to maximise the value of his filming, was to be close to the action on the fireground. In his closing submissions on behalf of Mrs Wembridge, Mr Seaward submitted that Wembridge complied, albeit after several reminders, with the instruction to withdraw from the Builders Beams area of the site. As Mr Seaward submits, there is nothing to suggest that had Mr Wembridge complied with the instruction to withdraw from that area sooner, this would have prevented him being present in a different sector of the site some 15 minutes later. The withdrawal, from the Builders Beams area was merely a partial withdrawal not a site evacuation. Mr Wembridge was never instructed to leave the site or to stop filming the incident overall. When firefighters went round to Sector 4

he followed them. That was entirely consistent with his normal practice on the fireground. I heard no evidence of an instruction given to Mr Wembridge that he should not do so. He was in precisely the same situation as Mr Wicker and the others in the proximity of the container. During that final phase of events Mr Wembridge received no instruction to leave and no warning of the risk represented by the container. His position at the crucial final phase was no different from that of his firefighter colleagues.

245. Although there was some criticism of Mr Wembridge in the final report of the Inquiry (see section Q42), it does not appear to me to that this was specifically focussed on what Mr Wembridge was doing at the final phase of this incident. In so far as the criticism represents a generalisation from this incident and previous incidents, it appears to me Mr Seaward is correct in submitting that if Mr Wembridge had been prone to place himself near risk areas generally, that was an accepted and condoned practice by the Second Defendant. The video footage produced by his presence on such sites was used regularly.
246. For these reasons I reject the claim of contributory negligence in respect of Mr Wembridge.

Conclusion

247. For the reasons given, the Claimants succeed.