

<p>1 Monday, 25 June 2018</p> <p>2 (9.30 am)</p> <p>3 SIR MARTIN MOORE-BICK: Good morning, everyone. Welcome to</p> <p>4 this hearing.</p> <p>5 Because we are starting rather earlier than usual,</p> <p>6 we'll take one slightly longer break during the middle</p> <p>7 of the morning somewhere around 11 o'clock, 11.15. All</p> <p>8 right?</p> <p>9 Yes, Mr Millett.</p> <p>10 MR MILLETT: Mr Chairman, I am going to start, before we get</p> <p>11 to Mr Dowden's evidence, very briefly by just reading</p> <p>12 into the record, if I may, three documents which</p> <p>13 I should have read into the record on Thursday but, in</p> <p>14 my enthusiasm, I didn't.</p> <p>15 They're all dated 14 June 2017 and they are CCTV</p> <p>16 images of flat 16 occupants leaving the tower which have</p> <p>17 been selected from footage by the inquiry, and their</p> <p>18 references are INQ00000055, 22 and 43 respectively.</p> <p>19 SIR MARTIN MOORE-BICK: Thank you.</p> <p>20 MR MILLETT: Sir, I now call Mr Dowden.</p> <p>21 MR MICHAEL DOWDEN (affirmed)</p> <p>22 Questions by COUNSEL TO THE INQUIRY</p> <p>23 SIR MARTIN MOORE-BICK: Thank you very much.</p> <p>24 Now, you stand or sit as you find it most</p> <p>25 comfortable and convenient, and if you get fed up</p> <p>Page 1</p>	<p>1 front of you, which is your statement and its exhibits</p> <p>2 and your contemporaneous notes, and a bigger master</p> <p>3 documents file, and also a separate file of policies.</p> <p>4 But don't worry, because everything I'm going to ask you</p> <p>5 about will come up on the screens.</p> <p>6 The first time I go to a document I give it what we</p> <p>7 call a Relativity number, which is a long number, so</p> <p>8 that everybody can find it later, but after I've</p> <p>9 referred to it once, then I'm not going to go to that</p> <p>10 number again; I'll just refer to the document or its tab</p> <p>11 in the bundle.</p> <p>12 Could you please first take your statement that</p> <p>13 you'll find in the thin bundle in front of you at tab 1.</p> <p>14 That is MET00010915.</p> <p>15 You should also have there, Mr Dowden, the</p> <p>16 contemporaneous notes, MET0005453 and 5454, which in</p> <p>17 your file should just be behind it.</p> <p>18 A. That's correct.</p> <p>19 Q. Is your statement dated 23 February 2018?</p> <p>20 A. That's correct.</p> <p>21 Q. What documents or other material did you have available</p> <p>22 to you when you made this statement?</p> <p>23 A. I believe just my contemporaneous notes.</p> <p>24 Q. Just your contemporaneous notes?</p> <p>25 A. Yes.</p> <p>Page 3</p>
<p>1 standing at some point, just take a seat.</p> <p>2 THE WITNESS: Thank you very much.</p> <p>3 MR MILLETT: Mr Dowden, if you want to sit then we can</p> <p>4 remove the lectern in front of you to make it more</p> <p>5 comfortable for you.</p> <p>6 A. Okay.</p> <p>7 Q. Mr Dowden, good morning. Could you give the inquiry</p> <p>8 your full name, please?</p> <p>9 A. It's Michael Thomas Dowden.</p> <p>10 Q. First, thank you very much for coming to give evidence</p> <p>11 today and to assist the inquiry with its investigations.</p> <p>12 I want you to know that it is very much appreciated.</p> <p>13 My questions are supposed to be short and simple,</p> <p>14 but if you have difficulty understanding anything that</p> <p>15 I'm asking you, please don't hesitate just to ask me to</p> <p>16 repeat the question, which I will, or put it in</p> <p>17 a different way, which again of course I will.</p> <p>18 If you feel you need a break at any point, then just</p> <p>19 let the chairman or me know. There's no harm in that.</p> <p>20 Could I just ask you before you start to keep your</p> <p>21 voice up so that everybody in the room can hear you, and</p> <p>22 the transcribers, who are sitting to your right there,</p> <p>23 can hear you as well.</p> <p>24 What I'm going to do, so you know, is to work with</p> <p>25 you from two files: a thin file, which you'll have in</p> <p>Page 2</p>	<p>1 Q. Have you read this statement recently?</p> <p>2 A. Yes, I have.</p> <p>3 Q. Can you confirm for the inquiry that its contents are</p> <p>4 true?</p> <p>5 A. Yes, I can.</p> <p>6 Q. Thank you.</p> <p>7 Have you discussed your statement or your evidence</p> <p>8 with anybody before coming here today to give evidence?</p> <p>9 A. No, I haven't.</p> <p>10 Q. Thank you very much.</p> <p>11 Can we start just by examining your career. Could</p> <p>12 you give me a summary -- a short summary -- of your</p> <p>13 career with the London Fire Brigade to date?</p> <p>14 A. Yes. In June 2003, I joined London Fire Brigade, and</p> <p>15 from that period I completed a four-month training</p> <p>16 course development at then Southwark Training Centre,</p> <p>17 which ended in roughly about November. From that</p> <p>18 initial Phase 1 development, I was posted to Feltham</p> <p>19 Blue Watch as a trainee firefighter.</p> <p>20 For approximately about four years, I was in the</p> <p>21 role of firefighter, and then I took a temporary</p> <p>22 promotion to crew manager, and that was on the Red Watch</p> <p>23 at Chiswick fire station.</p> <p>24 I then got promoted substantively into the role of</p> <p>25 crew manager at Chiswick Red Watch, and I believe in</p> <p>Page 4</p>

<p>1 about 2009/2010, I took a temporary promotion as a watch 2 manager to Surbiton Green Watch. I went through 3 a development process there and then was successful in 4 becoming a substantive watch manager, where I was posted 5 for a very short amount of time to Biggin Hill Red 6 Watch. 7 I spent I think a month or two months at Biggin Hill 8 Red Watch, and then I was posted back to Surbiton Green 9 Watch where, in February of 2015, I was promoted to my 10 current role, watch manager B, where I was posted to my 11 current posting of Golf 27, North Kensington Red Watch, 12 totalling service up to the point of 14 June, about 14 13 years' service. 14 Q. Yes. Thank you very much. So just to summarise your 15 role at North Kensington, you arrived at North 16 Kensington in February 2015 -- 17 A. Yes. 18 Q. -- as watch manager B in Red Watch? 19 A. That's correct. 20 Q. That was your role, was it, on the night of the fire on 21 14 June 2017? 22 A. That's correct. 23 Q. Yes. 24 And so most of your career as a firefighter was 25 spent in south London?</p> <p style="text-align: center;">Page 5</p>	<p>1 A. The sole difference is the personnel that you're in 2 charge of and also the number of appliances. So for 3 a watch manager A -- 4 Q. Sorry, just pause a moment, we seem to have some 5 feedback. 6 (Pause) 7 A. So for watch manager A, you will be in charge of 8 a one-appliance station, and if you're watch manager B, 9 you'll be in charge of two fire engines or more or 10 a multiple appliance station, and obviously you'll be in 11 charge of more personnel as well. 12 So the only real difference is in terms of the -- on 13 the fire ground we have the same role, the same as 14 incident commander, but it's just at station-based 15 level. You'll be in charge of as a watch manager B two 16 or more appliances; watch manager A will be at a single 17 appliance station. 18 Q. So would I be right in thinking that watch manager B is 19 a more responsible role, going to the more experienced 20 firefighter? 21 A. Not on the fire ground, no. 22 Q. Not on the fire ground? 23 A. On the fire ground, watch manager A and watch manager B 24 will have the same responsibilities on the fire ground. 25 Q. Right.</p> <p style="text-align: center;">Page 7</p>
<p>1 A. South, yes. 2 Q. Yes. 3 As a watch manager, would you expect to be 4 incident commander if you were the first at the scene, 5 the first watch manager at the scene? 6 A. If I was the first watch manager on the scene, I was the 7 highest ranking officer, yes, I would assume the role of 8 incident commander; that's correct. 9 Q. Would you remain incident commander during the early 10 stages of the fire? 11 A. Yes. Generally for watch manager B your role sort of, 12 in terms of its command, will go up to a four-pump on 13 appliances. Anything beyond that will then sort of move 14 up the ranks in terms of station manager, group manager. 15 That can vary in terms of obviously availability of 16 officers and getting into an incident ground, but 17 generally I would be only in charge of a four-pump fire. 18 Q. Right. But is it the case that you might well remain 19 an incident commander in the early stages of a fire, 20 even if, even in those early stages, that fire turned 21 out to be serious and extensive? 22 A. It can be, depending on how the resources can get to the 23 incident ground, yes. 24 Q. Could you just help me explain the difference between 25 watch manager A and watch manager B?</p> <p style="text-align: center;">Page 6</p>	<p>1 You mentioned Red Watch. Could you just explain the 2 different colours? 3 A. Yes. So within London Fire Brigade we adopt four 4 watches. So we have Red Watch, which I'm currently on, 5 we have Blue Watch, White Watch and Green Watch. So at 6 any one time during the night period or the daytime 7 period, one of those watches will be on duty. 8 Q. Right. Is there any difference in functions between the 9 different colours of watch? 10 A. No, not at all. It's just a way of managing the 11 watches. There's no different functionality between any 12 of those watches. They all have -- any one station, 13 they all have the same skills on any one of those 14 watches. 15 Q. Right. Because in your career you say you joined 16 a lot of Red Watches. 17 A. No, no, no, I've been on different watches. I've been 18 blue, red, green, throughout my career in the London 19 Fire Brigade. 20 Q. Right. 21 Now, you say in your statement, at the bottom of 22 page 1: 23 "I am classed as 'competent' in my role as Watch 24 Manager ..." 25 A. That's correct.</p> <p style="text-align: center;">Page 8</p>

<p>1 Q. Could you explain what being classed as competent means?</p> <p>2 A. For any phase of your career as a firefighter in the</p> <p>3 London Fire Brigade, whether that be through being</p> <p>4 a firefighter, watch manager, station manager, you have</p> <p>5 to pass what they call a development phase, and that is</p> <p>6 facilitated over a period of time where you have to sort</p> <p>7 of prove through evidence – whether that's submitted</p> <p>8 evidence, direct observation, and that's facilitated</p> <p>9 through something called an electronic personal</p> <p>10 development record, which basically allows the authority</p> <p>11 to document that over a period of time, you have proved</p> <p>12 that you are competent within your role to be promoted</p> <p>13 to a substantive either firefighter, crew manager or</p> <p>14 watch manager level.</p> <p>15 Q. Are there any other classes of ability other than</p> <p>16 "competent"?</p> <p>17 A. You also can assume the role temporary. So if you're</p> <p>18 a firefighter that had aspirations to become an officer</p> <p>19 in the future or, again, a crew manager wanting to</p> <p>20 further their officer role, then we have something</p> <p>21 that's classed as temporary, where you take up that</p> <p>22 position on a temporary basis. So you're not proved as</p> <p>23 competent, but you are a temporary – in that temporary</p> <p>24 role.</p> <p>25 Q. When were you last classed as competent?</p> <p style="text-align: center;">Page 9</p>	<p>1 on to a development phase of your promotion to prove</p> <p>2 your competency within the role.</p> <p>3 Q. Who delivers the initial watch manager training?</p> <p>4 A. The London Fire Brigade deliver that. That has changed.</p> <p>5 When I – for my promotion, it was the Fire Brigade</p> <p>6 facilitating totally its own training. Since then we</p> <p>7 have outsourced that to Babcock. Now Babcock deal with</p> <p>8 raft training; so that's officer training, firefighter</p> <p>9 training, refresher training.</p> <p>10 Q. Right. You say in your statement that you did</p> <p>11 a refresher course every two years. Who delivered that?</p> <p>12 A. That's correct. Again, that is facilitated centrally</p> <p>13 from London Fire Brigade training department and it's</p> <p>14 called a supervisory management incident refresher</p> <p>15 course.</p> <p>16 That has slightly changed its flavour over the last</p> <p>17 couple of years. We used to go to the Fire Service</p> <p>18 College, but now that Babcock provide our training, we</p> <p>19 do that at sites internally in the London Fire Brigade.</p> <p>20 That was facilitated generally – for incident command</p> <p>21 refresher courses, that's at Harrow fire station,</p> <p>22 they've got a training centre there, and that's done by</p> <p>23 a simulation. So it's sort of – you'll go into a room</p> <p>24 and you'll be given different scenarios on a computer</p> <p>25 based training package.</p> <p style="text-align: center;">Page 11</p>
<p>1 A. My last would have been when I joined the watch</p> <p>2 manager B scheme. From watch manager A to watch</p> <p>3 manager B, I got promoted, and that would be the last</p> <p>4 time I was proved competent, yes.</p> <p>5 Q. When was that?</p> <p>6 A. That would be February 2015.</p> <p>7 Q. Can you explain what training to be a watch manager</p> <p>8 involves?</p> <p>9 A. When you initially get promoted from any role, but from</p> <p>10 a crew manager to watch manager role, you go on to</p> <p>11 a development phase, and within that development phase</p> <p>12 you'll have an initial incident command course. When</p> <p>13 I got promoted to my watch manager role, that was</p> <p>14 facilitated at the Fire Service College. You went up</p> <p>15 there for a week, which is up in Moreton-in-Marsh, and</p> <p>16 you would run through a range of incidents and test your</p> <p>17 ability to operate at a watch manager level.</p> <p>18 So you come back from that week of input at the Fire</p> <p>19 Service College, and then following that, you would have</p> <p>20 a number of recorded sort of block options, and that</p> <p>21 would be how to manage teams, manage performance, sort</p> <p>22 of a bit more how to run a fire station, if I'm honest,</p> <p>23 and that's all on the back of – before you go on to</p> <p>24 your development stage.</p> <p>25 Once you've done those courses, then you have to go</p> <p style="text-align: center;">Page 10</p>	<p>1 Q. Right. Okay.</p> <p>2 Your most recent refresher course prior to the</p> <p>3 Grenfell Tower fire, when was that?</p> <p>4 A. I wouldn't be able to give you specific dates.</p> <p>5 I wouldn't be able to answer that question,</p> <p>6 unfortunately. It would've been in – certainly within</p> <p>7 a minimum of two-year period before Grenfell Tower,</p> <p>8 because that's the minimum time; every two years you</p> <p>9 have to have a refresher course on that.</p> <p>10 Q. So after you joined Red Watch at North Kensington?</p> <p>11 A. I would have had one between the time I joined in 2015,</p> <p>12 I would presume, to the fire on 14 June.</p> <p>13 Q. And was that refresher training based on a standardised</p> <p>14 course?</p> <p>15 A. Yes.</p> <p>16 Q. Do you know who designed the course?</p> <p>17 A. No, I don't.</p> <p>18 Q. Is there a handbook or a guide that you used when you</p> <p>19 did the training?</p> <p>20 A. I can't remember a handbook. You get sent through what</p> <p>21 we call joining instructions. Within there, there's</p> <p>22 some course details, relevant policies and procedures</p> <p>23 that you may need for this course. But I can't remember</p> <p>24 being given any sort of handbook.</p> <p>25 Q. Did the refresher course that you did post-February 2015</p> <p style="text-align: center;">Page 12</p>

<p>1 involve high-rise firefighting?</p> <p>2 A. I think the last one I did was when I -- it was based at</p> <p>3 Harrow, so it was this computer-based training package,</p> <p>4 and I think I did go through a high-rise based scenario,</p> <p>5 yes.</p> <p>6 Q. And how would you have done that? You say it's computer</p> <p>7 based. Talk me through that bit of the training.</p> <p>8 A. You walk into a room and they have a big screen in front</p> <p>9 of you and you have a trainer, and basically the trainer</p> <p>10 will facilitate different roles and they have the</p> <p>11 facility to input different images. It's a moving</p> <p>12 package, so it's a live package and they can put, you</p> <p>13 know, residents, they can put fire spread, they can put</p> <p>14 different officers. There's no audio. The trainer that</p> <p>15 is with you in the incident ground -- in the pod will</p> <p>16 facilitate those roles, and you will have other officers</p> <p>17 in the room as well who may facilitate other roles, take</p> <p>18 messages, draw timelines on a whiteboard that's in the</p> <p>19 room as well.</p> <p>20 Q. You mentioned computer facilitated images and you</p> <p>21 mentioned also fire spread.</p> <p>22 A. Yes.</p> <p>23 Q. Can you remember what the training involved so far as</p> <p>24 concerned fire spread?</p> <p>25 A. Not the specifics, no, no. It will give you the tools</p> <p style="text-align: center;">Page 13</p>	<p>1 Q. Right. You mentioned policies. I am going to ask you</p> <p>2 some detailed questions about policies later, but can</p> <p>3 I ask you now whether you're familiar or you were</p> <p>4 trained to be familiar with certain standing policies of</p> <p>5 the LFB. Did your training or refresher course cover</p> <p>6 LFB policy 431, which is about incident command?</p> <p>7 A. Yes.</p> <p>8 Q. If we put it up on the screen -- I'll give the</p> <p>9 reference. It's tab 11 of the policies bundle, and it's</p> <p>10 LFB00000048. If we can have the first page just to</p> <p>11 refresh your memory, Mr Dowden.</p> <p>12 A. I mean, we, from memory, don't have the policies to hand</p> <p>13 in the refresher training, but they would have referred</p> <p>14 to that policy, yes.</p> <p>15 Q. Right. So can I take it that you were familiar from</p> <p>16 your training with the contents of this policy?</p> <p>17 A. Yes.</p> <p>18 Q. Yes. Thank you.</p> <p>19 What about policy number 238, which is incident</p> <p>20 command procedures, which is tab 1. Just for the</p> <p>21 record, it's LFB00000164. That's policy 238 there on</p> <p>22 the screen, Mr Dowden.</p> <p>23 Were you familiar with that as well?</p> <p>24 A. Yes.</p> <p>25 Q. Right. I'm going to come back to those, I just wanted</p> <p style="text-align: center;">Page 15</p>
<p>1 to be able to sort of walk through and guide yourself</p> <p>2 through an escalating incident of some description, not</p> <p>3 just based on high-rise. It could be RTC, hazmat</p> <p>4 incident, different types of building fires, compartment</p> <p>5 fires, different transport incidents.</p> <p>6 Q. Right. Just being a little bit slower there.</p> <p>7 A. Yes.</p> <p>8 Q. RTC?</p> <p>9 A. I beg your pardon: road traffic collisions.</p> <p>10 Q. And hazmat I think I can understand.</p> <p>11 A. Hazardous materials, so any incident that involves</p> <p>12 hazardous material, yes.</p> <p>13 Q. What specific training did you ever receive for the role</p> <p>14 of incident commander, if any?</p> <p>15 A. Again, that would have been facilitated through --</p> <p>16 initially when you go from firefighter to crew manager,</p> <p>17 there's a big change in what you have to train to do in</p> <p>18 terms of from a firefighter to an officer. So you,</p> <p>19 again, through the different options prior to your</p> <p>20 development stage, you would be given input into the</p> <p>21 command. That will reference that back into incident</p> <p>22 command policy. And at the time when I went from</p> <p>23 firefighter to crew manager, the training was still run</p> <p>24 out of Southwark training centre and there was</p> <p>25 an incident command training team at that time.</p> <p style="text-align: center;">Page 14</p>	<p>1 to make sure you knew what I was talking about. That's</p> <p>2 very helpful.</p> <p>3 Could I turn to the topic of high-rise firefighting.</p> <p>4 As at June 2017, how would you describe your</p> <p>5 knowledge and experience of high-rise firefighting</p> <p>6 policy?</p> <p>7 A. I think I've got a fairly robust and good understanding</p> <p>8 of the policy itself, yes.</p> <p>9 Q. Okay.</p> <p>10 As at June 2017, had you ever heard of generic risk</p> <p>11 assessment, or GRA, 3.2, published by the government</p> <p>12 in February 2014?</p> <p>13 A. No, I haven't.</p> <p>14 Q. Let me just see if you could identify it as a document.</p> <p>15 Could you please throw up on the screen,</p> <p>16 Mr Trial Director, that policy, which I think is in</p> <p>17 tab 7. It's LFB00001255.</p> <p>18 So there it is on the screen, Mr Dowden. I know you</p> <p>19 say you haven't heard of it. This might refresh your</p> <p>20 memory. If it doesn't, it doesn't.</p> <p>21 Have you ever seen this document?</p> <p>22 A. Not pre-June 2017, no.</p> <p>23 Q. Have you seen it since?</p> <p>24 A. Yes.</p> <p>25 Q. When did you see it after June 2017?</p> <p style="text-align: center;">Page 16</p>

<p>1 A. The last time I saw that was a couple of weeks ago at 2 an incident commanders briefing. 3 Q. An incident commanders briefing? 4 A. Yes. 5 Q. A couple of works ago? 6 A. Yes. 7 Q. Where was that? 8 A. Union Street. 9 Q. Union Street? 10 A. Yes. 11 Q. Who gave the briefing? 12 A. It was facilitated by Gary Reason. 13 Q. What's his role? 14 A. He is helping LFB internally in terms of the 15 Grenfell Tower investigation. 16 Q. I see. And who was that briefing given to? 17 A. It was to the incident commanders and the key 18 decision-makers of Grenfell Tower. 19 Q. I see. Did you play a part in that briefing? 20 A. I beg your pardon? 21 Q. Did you play a part in that briefing? 22 A. Yes. 23 Q. Do you know whether there is a report or any documents 24 which show what happened at that briefing? 25 A. I don't, no.</p> <p style="text-align: right;">Page 17</p>	<p>1 Having shown you that, my question is: were you 2 aware that this statement was part of policy? 3 A. No. 4 Q. No. Were you trained, in your training as watch manager 5 and incident command procedures, to be aware that 6 combustible material in voids and cavities and poor 7 quality construction can also contribute to the spread 8 of fire and smoke beyond the compartment of origin? 9 Were you trained to look for that? 10 A. I mean, I've been trained to look for signs of smoke 11 spread and, you know, fire coming out of the compartment 12 and breaching the compartment of origin in the high-rise 13 policy as I know it internally in the London Fire 14 Brigade, but I've not seen it in that document, in that 15 format, before, no. 16 Q. All right. We'll come back to it in documents you might 17 be more familiar with as we go through. 18 A. Okay. 19 Q. Could you please next turn to page 11 internally. 20 Well, actually, before I do, sorry, page 9, the next 21 page -- I'll pick this up with you if I can as we go 22 through -- just below halfway down you'll see the 23 heading in black "Fire behaviour and development", and 24 underneath that in red capitals "Fire and smoke spread": 25 "Fire and smoke in high-rise buildings can spread in</p> <p style="text-align: right;">Page 19</p>
<p>1 Q. You don't, okay. 2 If I wanted to find out what happened at that 3 briefing, who would I ask? 4 A. I would presume Gary Reason. 5 Q. Right. I am sorry, his name should be familiar to me, 6 but it isn't. Is it Reason as in "reason"? 7 A. I believe so, yes. 8 Q. Okay, thank you. 9 I am going to ask some questions about this policy, 10 Mr Dowden, but if you don't know the answer then tell 11 me. 12 Can I ask you, please, first, to turn to page 8 of 13 this document -- internally page 8, which is page 10 in 14 the Relativity reference -- and look, please, first of 15 all, at the red title or heading halfway down 16 "Construction technique": 17 "Any building under construction may provide 18 additional hazards as partitions, doors or fire 19 protection measures may not yet be installed. 20 Timber-frame construction can be vulnerable to rapid 21 fire spread or collapse during the construction phase." 22 Then it says this: 23 "Combustible material in voids and cavities and poor 24 quality construction can also contribute to the spread 25 of fire and smoke beyond the compartment of origin."</p> <p style="text-align: right;">Page 18</p>	<p>1 an upward, downward or horizontal direction and this may 2 be more rapid and less predictable in other building 3 types." 4 The question is: were you aware that that was part 5 of policy? 6 A. Yes. 7 Q. Were you trained to look for that? 8 A. I would say yes. 9 Q. What did that training involve? 10 A. If I'm honest, it's probably -- that would be 11 facilitated more so through a theory session for us at 12 a station-based level to -- for me as incident commander 13 particularly to look at that and reference that in 14 policy. 15 There's no, from what I can understand -- I haven't 16 been given any sort of practical training in terms of 17 how to deal with that and any practical application; 18 it's more of a sort of theory-based session and in terms 19 of how your tactics would -- how you tactically control 20 that if that happened. 21 Q. Tell me a little bit more about the theory. What theory 22 were you trained to apply? 23 A. I mean, from what I can remember, referencing our 24 policy, internal LFB policy, is that can happen and, 25 generally, if a fire breaks out of a compartment -- and</p> <p style="text-align: right;">Page 20</p>

<p>1 this is not just specific to high-rise -- then we would 2 use something called a covering jet, but it does 3 reference in our high-rise policy use of a monitor to 4 sort of try and stop the spread of external fire spread 5 on a high-rise building, but I've never done that and 6 never actually facilitated that in a practical training 7 session.</p> <p>8 Q. So is this fair: your take-away from the theory training 9 you had was that where there is fire and smoke spread in 10 high-rise buildings which breaks out of the compartment, 11 you would apply a ground monitor and fight the fire from 12 the exterior? Is that your training?</p> <p>13 A. In theory, I mean --</p> <p>14 Q. In theory.</p> <p>15 A. It's not uncommon, and I have been on a couple of 16 incidents where fire has broken out of a compartment, 17 and it does happen where the fire may travel up floors, 18 but generally you're looking at one, two, three floors, 19 so the expectation is also that we fight that 20 internally, so we can fight the fire internally to the 21 external.</p> <p>22 Q. We are going to come back to that, as I'm sure you would 23 imagine, later on. Let's just go through this policy 24 a little bit more.</p> <p>25 Could you please turn to page 11 internally.</p> <p style="text-align: center;">Page 21</p>	<p>1 building, a flat, it shouldn't -- we have a certain 2 amount of time, 60 minutes, in terms of that 3 compartmentation, and it should contain that fire within 4 that compartmentation.</p> <p>5 The policy refers to that -- if that individual can 6 leave the property and their flat is on fire, by all 7 means, if it's safe to do so, leave the property, and 8 also the people on that floor. People below or above 9 that compartmentation or that flat should be safe enough 10 to remain within their property and not be affected by 11 the products of smoke, heat or fire travel.</p> <p>12 That will only ever change if the flats or the 13 communal areas will become involved in fire, heat or 14 smoke travel, and then they would be advised to leave 15 their property if it is safe to do so.</p> <p>16 Q. Okay. Thank you very much. I understand that. We're 17 going to examine, I think, that understanding you had 18 later on and try to unpack it a bit, but for the time 19 being, let's leave that where it is.</p> <p>20 Mr Dowden, can we just look together at the next 21 paragraph:</p> <p>22 "Incident Commanders must consider both the effect 23 of firefighting tactics on the evacuation of occupants 24 and conversely the effect of evacuation on tactics. If, 25 for example, a building's evacuation plan includes the</p> <p style="text-align: center;">Page 23</p>
<p>1 At the top of the page it says, "Firefighting and 2 rescue operations", and just a quarter of the way down 3 it says, "Evacuation of buildings" in capital letters in 4 red there. I just want to show you the third paragraph 5 down which says:</p> <p>6 "In addition, the occupants may not be aware ..."</p> <p>7 Can you see that?</p> <p>8 A. Yes.</p> <p>9 Q. "In addition, the occupants may not be aware of the 10 building's evacuation strategy or, in the case of many 11 residential buildings, a 'Stay Put' policy may be in 12 place. This is based on the concept of secured 13 compartmentation of fires."</p> <p>14 Just pausing there, again, was that part of policy 15 something you were trained to be aware of?</p> <p>16 A. Yes, I was aware of the stay-put policy and reference to 17 compartmentation, yes.</p> <p>18 Q. What did the stay-put policy mean to you?</p> <p>19 A. The stay-put policy, from my interpretation, is -- it's 20 difficult -- I don't see it as a policy, you know, 21 I understand it's more of a strategy. It's more of -- 22 the LFB don't have a policy on it. It's something which 23 is borne out of the way a building should behave in 24 a fire.</p> <p>25 Now, generally, if we get a fire within a high-rise</p> <p style="text-align: center;">Page 22</p>	<p>1 use of lifts by occupants, there may be an impact on the 2 availability of fire lifts for use by fire and rescue 3 personnel."</p> <p>4 Then this:</p> <p>5 "The need to assist with the evacuation of occupants 6 can divert personnel away from the task(s) that they 7 were briefed to undertake. This can have an adverse 8 effect on the Incident Commander's plan and resourcing 9 for the incident."</p> <p>10 Now, there's a lot of information in that paragraph, 11 but my question is a simple one: were you aware, as 12 at June 2017, that the matters set out there were part 13 of national firefighting policy?</p> <p>14 A. Yes.</p> <p>15 Q. Next question: were you trained at all in how to 16 understand and apply what is in that policy?</p> <p>17 A. Yes. I would've -- again, referencing it to the Fire 18 Brigade policy, there is, you know, a theory-based -- 19 a theory on that and how we can facilitate evacuation of 20 residents, yes.</p> <p>21 Q. What was the theory in which you were trained?</p> <p>22 A. It depends on the building. So, generally, if we need 23 to evacuate residents, the ideal thing in a high-rise 24 block would be to have two staircases so we can 25 facilitate one as a rescue staircase and one as</p> <p style="text-align: center;">Page 24</p>

<p>1 a firefighting staircase. In the case of somewhere like 2 Grenfell Tower, that only had one communal staircase. 3 As you can imagine, it would be very difficult to 4 facilitate evacuation of residents when we have 5 firefighters and equipment going up the same staircase 6 as well. And that references back into the stay-put 7 policy, why that would be implemented.</p> <p>8 Q. Did you receive any practical training on the how to 9 consider the effects of firefighting tactics on the 10 evacuation of occupants?</p> <p>11 A. Not in terms of practical application, no.</p> <p>12 Q. What about the other way round, practical training on 13 the effect of evacuation on tactics, did you get any 14 practical training on that?</p> <p>15 A. Not -- it's more of a -- for me, as an incident 16 commander, it would be discussion at a local level, on 17 watch-based level, in terms of how that would be 18 facilitated.</p> <p>19 You may -- it can be facilitated, and I have spoke 20 about it before, when we go to what we call 21 familiarisation visits, and that's something you may 22 well talk about is, okay, if there's a double staircase, 23 single staircase, and that's when you, again, have 24 a good discussion at the familiarisation visits in terms 25 of how to facilitate that sort of rescue operation.</p> <p>Page 25</p>	<p>1 facilitating that familiarisation visit.</p> <p>2 Q. Okay, I'm sorry about this, Mr Dowden, I may be 3 repeating the question over and over again from slightly 4 different angles, but can you give me an idea of the 5 theoretical training on those matters, the development 6 of knowledge, skills and understanding about the impact 7 of fire on the building's construction, layout and 8 contents and occupant behaviour. What was the 9 theoretical content of the training you got?</p> <p>10 A. I think it would come into play in a couple of policies 11 in terms of the building's construction. You know, that 12 would be facilitated maybe within a familiarisation 13 visit again.</p> <p>14 Q. Right.</p> <p>15 A. Looking at the construction of the building, what it's 16 built of.</p> <p>17 Layout -- again, that would be facilitated through 18 a familiarisation visit.</p> <p>19 Occupant behaviour -- I don't know if there's sort 20 of any real training on occupant behaviour. That's 21 something that you would have to pre-empt as 22 an incident commander, I suppose, from previous 23 experience.</p> <p>24 Q. Unpacking that a bit more, how did you get taught to 25 understand the building's construction and layout and</p> <p>Page 27</p>
<p>1 Q. Okay, thank you. We'll probably come back to that in 2 a little bit more detail later on.</p> <p>3 If you could please then turn to page 19 internally 4 of this document. We will go back and look at earlier 5 pages when we come to the topics on them, but just on 6 training at the moment. I want to ask you about the 7 last quarter of this page starting with the word 8 "Training" at the bottom there:</p> <p>9 "Training, which will cover high-rise incidents must 10 include ..."</p> <p>11 And then do you see there are some bullet points?</p> <p>12 I just want to ask you about the first and second bullet 13 point.</p> <p>14 The first bullet point says:</p> <p>15 "... high-rise incidents must include:</p> <p>16 "The development of knowledge, skills and 17 understanding for firefighters on the impact of fire on 18 the building's construction, layout, contents and 19 occupant behaviour."</p> <p>20 My question is: did you receive training on those 21 matters?</p> <p>22 A. Again, no sort of practical input, it would more be 23 facilitated, for me, at local level, station, to 24 reference that through policy, and then, again, when we 25 are out on the high-rise blocks in particular and</p> <p>Page 26</p>	<p>1 contents?</p> <p>2 A. You don't really get taught about a specific individual 3 building; it's more with reference back into policy and 4 more of a generic overview of: these are the things to 5 look out for when you're in these buildings. And that's 6 not just in reference to high-rise; that's any sort of 7 familiarisation visit we do. If there's any, you know, 8 special methods construction that potentially could aid 9 fire spread, if they're involved in fire, how that 10 would -- if they could fail. There's no sort of real -- 11 never training, practical training, in terms of how you 12 apply that.</p> <p>13 Q. I see.</p> <p>14 So of any particular building, what would you be 15 taught to look for specifically of a high-rise building 16 in relation to its construction and layout?</p> <p>17 A. I wouldn't tell you you're taught to look for anything 18 in terms of construction of a high-rise, it's more, for 19 me, as an incident commander, firefighters, how we 20 respond operationally, equipment, you know, tackling the 21 fire, resourcing. I suppose the only way, again, that 22 could be facilitated is through these familiarisation 23 visits, and we do have different systems and processes 24 within the Fire Brigade that can help us document that.</p> <p>25 Q. Right. I mean, were you taught to look at any</p> <p>Page 28</p>

<p>1 particular building's construction or layout in detail, 2 or were you just left to your own devices on these 3 familiarisation visits?</p> <p>4 A. You don't -- as a watch officer, watch manager, that's 5 for you to facilitate going to these buildings and, 6 through policy, reference it and, you know, from your 7 understanding of, okay, what that building is 8 constructed of, is it going to be an issue to 9 firefighters when they're are tackling fires? But 10 I don't recall if I've had any sort of specific training 11 in terms of -- barring reference that back to policy, 12 no.</p> <p>13 Q. Right.</p> <p>14 Looking at the next bullet point down: 15 "Effective call-handling and management of any fire 16 survival guidance calls. This includes the recording, 17 passing and acting on information from Control to the 18 incident."</p> <p>19 Did you receive training in those matters?</p> <p>20 A. Me, I've not -- there is a policy to cover that and, 21 again, we don't -- it's not something that is centrally 22 done by the London Fire Brigade. That would be down to 23 the officers of a fire station to facilitate training of 24 a particular policy to reference that bullet point.</p> <p>25 Q. But did you get training in those matters?</p> <p style="text-align: right;">Page 29</p>	<p>1 bullet points there. I should just tell you that this 2 is the follow-on from the bullet points we were looking 3 at earlier, so this about training and what it must 4 include.</p> <p>5 If you look in the middle of page 20 at the fourth 6 bullet point up from the end, can you see it says: 7 "Evacuation and casualty removal tactics. 8 Incident Commanders should understand when a partial or 9 full evacuation strategy might become necessary in 10 a residential building where a 'Stay Put' policy is 11 normally in place."</p> <p>12 My question is: did you receive any training in 13 those matters?</p> <p>14 A. Me, as a watch officer, no, but, again, it's something 15 that is the expectation through policy that we should 16 have an understanding of how to train at a local level, 17 watch-based level, and how to apply that in 18 an operational scenario.</p> <p>19 Q. So you weren't trained in those matters but you were 20 expected to draw on your experience to pass on those 21 matters -- evacuation and casualty removal tactics -- to 22 your men?</p> <p>23 A. Yes.</p> <p>24 Q. Is that how it worked?</p> <p>25 A. That experience will come from previous training policy</p> <p style="text-align: right;">Page 31</p>
<p>1 A. No.</p> <p>2 Q. You didn't?</p> <p>3 A. I facilitate the training at my local level, at 4 station-based level.</p> <p>5 Q. So you give the training?</p> <p>6 A. Yes.</p> <p>7 Q. Have you had any training on how to give the training?</p> <p>8 A. No.</p> <p>9 Q. Right. So how do you know what to teach people?</p> <p>10 A. Through experience, past experiences, research on the 11 policy.</p> <p>12 Q. And is that, to your knowledge, general across the 13 London Fire Brigade?</p> <p>14 A. Yes.</p> <p>15 Q. Right.</p> <p>16 A. When you're a watch officer, the expectation is you have 17 that knowledge, that experience, to be able to provide 18 training, but we aren't, as such, given a basis of how 19 to train. That's, you know, your expectation when 20 you're an officer.</p> <p>21 Q. We'll come back to that again, like so many of these 22 questions I'm asking you at the moment, when we look at 23 specific policies in the context of specific events. 24 Can I ask you next, please, to turn to page 20. 25 Right in the middle of the page, you'll see a list of</p> <p style="text-align: right;">Page 30</p>	<p>1 or from operational experience. That's correct, yes.</p> <p>2 Q. Is the training that you pass on in those matters -- 3 I am being specific: evacuation and casualty removal 4 tactics -- put together formally by you?</p> <p>5 A. No, no, there is -- as I said, there is no stay-put 6 policy. The London Fire Brigade don't have a stay-put 7 policy. The reference to that would be our internal 8 high-rise firefighting policy, where there would be 9 reference to that, but there is no formal training 10 package, computer-based training package, on the 11 stay-put policy because it doesn't exist.</p> <p>12 Q. Okay. But just looking at the matters in this bullet 13 point which national policy says must be covered by 14 training, when you're training your men, do you do it 15 from a document or some materials that you've prepared?</p> <p>16 A. It will be from a prepared training package or policy 17 from the London Fire Brigade.</p> <p>18 Q. Oh, I see. So the London Fire Brigade prepare the 19 training and then you deliver it; is that how it works?</p> <p>20 A. Yes. So I may not necessarily go through from start to 21 finish with the policy because what I would do is in 22 this sort of theory session is we have a whiteboard 23 and we'll go through how we would -- you know, on 24 arrival tactics at a high-rise incident. Again, on 25 familiarisation visits, when we're there, just have</p> <p style="text-align: right;">Page 32</p>

<p>1 a conversation with the firefighters: okay, if we were</p> <p>2 to have an incident at this tower block -- or even if it</p> <p>3 wasn't a tower block, we do familiarisation visits on a</p> <p>4 number of risks and premises within the London Fire</p> <p>5 Brigade.</p> <p>6 But, yes, that's how that would be facilitated.</p> <p>7 Q. Okay.</p> <p>8 Just so I understand it, in terms of the training on</p> <p>9 the matters that are covered in this bullet point,</p> <p>10 Mr Dowden, I think what you're saying to me -- correct</p> <p>11 me if I have got this wrong -- is that you are not</p> <p>12 trained yourself, but you deliver training to your men</p> <p>13 through a package that's designed by the London Fire</p> <p>14 Brigade?</p> <p>15 A. Not just to men; to my firefighters, yes. Yes.</p> <p>16 Q. Forgive me, quite right, absolutely.</p> <p>17 That's done on a whiteboard. Is there any practical</p> <p>18 training that you deliver to your firefighters on those</p> <p>19 matters?</p> <p>20 A. If I'm honest, I don't think that's something that I've</p> <p>21 personally done a practical -- we did do facilitating</p> <p>22 in February 2016, which was an area training package</p> <p>23 that was facilitated at Hammersmith fire station.</p> <p>24 There were three strands to it. There was</p> <p>25 a practical high-rise drill, which was facilitated at</p> <p style="text-align: right;">Page 33</p>	<p>1 A. As an incident commander, I can't remember any time that</p> <p>2 I had actually been on a training course that would</p> <p>3 facilitate that.</p> <p>4 SIR MARTIN MOORE-BICK: Can I just ask, did anyone give you</p> <p>5 any help or advice in understanding when it might be</p> <p>6 necessary to have a full evacuation, things to look out</p> <p>7 for, or was it just down to your personal experience?</p> <p>8 A. I don't think I've ever had an input from any</p> <p>9 individual. The only way I could relate to that is</p> <p>10 again referencing it back into our own internal</p> <p>11 high-rise policy, particularly maybe, you know, when</p> <p>12 compartmentation fails, et cetera. But I don't think</p> <p>13 I've been -- describe it in terms of a training</p> <p>14 environment where that's been referenced to.</p> <p>15 SIR MARTIN MOORE-BICK: Thank you.</p> <p>16 MR MILLETT: Mr Dowden, did you ever receive any training in</p> <p>17 the evacuation of people from high floors in high-rise</p> <p>18 blocks who might have mobility difficulties?</p> <p>19 A. Again, not for a practical application, that would just</p> <p>20 be through a theory-based scenario in terms of -- you</p> <p>21 know, I'm aware that there are refuge points, but</p> <p>22 generally that's not in residential buildings, that's</p> <p>23 only commercial premises.</p> <p>24 Q. What about the elderly or children? Is it the same</p> <p>25 answer?</p> <p style="text-align: right;">Page 35</p>
<p>1 Hammersmith fire station. We do have sort of what we</p> <p>2 call training towers. We don't have anything that</p> <p>3 replicates a high-rise building where we can actually</p> <p>4 train on, the London Fire Brigade.</p> <p>5 Then we did what we call a tactical decision</p> <p>6 exercise where I was incident commander and, again, you</p> <p>7 are sort of put through a different series of questions</p> <p>8 and put under pressure. I was incident commander and in</p> <p>9 different rooms there were different roles being</p> <p>10 facilitated by watch members, whether that would be</p> <p>11 firefighters, people on the bridgehead, and the trainers</p> <p>12 would again facilitate different roles, whether they</p> <p>13 were responsible people for the building, residents,</p> <p>14 casualties.</p> <p>15 So, yes, that's the experience I've sort of had in</p> <p>16 terms of references to that point.</p> <p>17 Q. Before I leave that bullet point -- we're coming back to</p> <p>18 it -- it says that incident commanders should understand</p> <p>19 when a partial or full evacuation strategy might become</p> <p>20 necessary in a residential building where a stay-put</p> <p>21 policy is normally in place. So this is directed at</p> <p>22 what an incident commander should understand.</p> <p>23 Just so that I've got it, what training did you ever</p> <p>24 receive as an incident commander in how you understand</p> <p>25 those matters?</p> <p style="text-align: right;">Page 34</p>	<p>1 A. Yes, there's -- I don't think our policy refers to --</p> <p>2 doesn't make any differentiation between elderly or</p> <p>3 young children -- young people.</p> <p>4 Q. So just so that I'm really clear -- and I'm sorry to</p> <p>5 repeat the question -- is the answer to my question no,</p> <p>6 that you didn't receive training in the evacuation of</p> <p>7 persons from high floors in high-rise blocks?</p> <p>8 A. I mean, it certainly would be a consideration as</p> <p>9 an incident commander because generally, you know,</p> <p>10 non-ambulant residents, whether having disabilities or</p> <p>11 due to illness or age or younger people, it's going to</p> <p>12 be slightly different to a sort of able-bodied or</p> <p>13 an adult person with no disabilities or illnesses.</p> <p>14 Q. I understand that it would clearly be a consideration.</p> <p>15 A. Yes.</p> <p>16 Q. But my question is: did you ever receive any specific</p> <p>17 training on how to evacuate people from high floors in</p> <p>18 high-rise blocks who had mobility difficulties?</p> <p>19 A. Not that I can recall, no.</p> <p>20 Q. And the same would apply to the elderly and to children,</p> <p>21 would it?</p> <p>22 A. Yes. Not in high-rise residential buildings, no.</p> <p>23 Q. Right.</p> <p>24 Can I ask you then, please, to turn on to page 28 in</p> <p>25 this same policy. I am going to ask you to look with me</p> <p style="text-align: right;">Page 36</p>

<p>1 together at the top of this page, which has three</p> <p>2 paragraphs. I am going to ask you about the second</p> <p>3 paragraph, but I need you to look with me, please, at</p> <p>4 the first and the third.</p> <p>5 The first paragraph says:</p> <p>6 "The Responsible Person [which is a defined term]</p> <p>7 for these premises types also needs to comply with the</p> <p>8 provisions of the Regulatory Reform (Fire Safety) Order</p> <p>9 2005; and if necessary, have a suitable emergency</p> <p>10 evacuation plan, a management strategy and maintenance</p> <p>11 procedures in place identified through their fire risk</p> <p>12 assessment process."</p> <p>13 So that's the context, but just pick up the words</p> <p>14 "suitable emergency evacuation plan", and then it says:</p> <p>15 "The Incident Commander should follow the evacuation</p> <p>16 plan devised as part of the premises fire risk</p> <p>17 assessment when known, unless the fire situation</p> <p>18 dictates otherwise."</p> <p>19 Then it says:</p> <p>20 "Where a 'Stay Put' policy is in place, it should be</p> <p>21 safe for occupants to remain within their own property</p> <p>22 in the event of a fire elsewhere in the building.</p> <p>23 Occupants (if they are able to) should self evacuate</p> <p>24 when the fire, heat or smoke is adversely affecting them</p> <p>25 in their property. This may be as the result of a fire</p> <p style="text-align: center;">Page 37</p>	<p>1 this -- again, something like that would maybe only come</p> <p>2 to light when you visit these premises, and if you speak</p> <p>3 to a responsible person, generally they may well have in</p> <p>4 communal areas what their policy is on that, if it's</p> <p>5 a stay-put policy. And from my understanding, most</p> <p>6 high-rise blocks would implement that stay-put policy.</p> <p>7 The only time that changes, I believe, is if it would be</p> <p>8 sheltered accommodation. So if that's for -- reference</p> <p>9 it back maybe to the last -- two questions ago. If that</p> <p>10 was sort of elderly people's homes or sheltered</p> <p>11 accommodation, if there was vulnerable people in there,</p> <p>12 they may not adopt the stay-put policy.</p> <p>13 Q. It sounds as if -- and I would like you to comment on</p> <p>14 this -- you were taught a lot about what the policy</p> <p>15 contains, but weren't trained specifically in how to</p> <p>16 implement parts of the policy, certainly the parts we've</p> <p>17 been looking at; would that be fair?</p> <p>18 A. I would say it's a fair comment, and it is difficult</p> <p>19 because, as I say, we don't have a high-rise facility to</p> <p>20 train on to do -- the only time you could ever do that</p> <p>21 is to use an existing premise, and that was obviously</p> <p>22 quite difficult because they're generally populated, and</p> <p>23 to facilitate that, that's something we don't do.</p> <p>24 Q. Right. And just so that I've got it -- I think you have</p> <p>25 answered my question, but I am sorry if I sound like I'm</p> <p style="text-align: center;">Page 39</p>
<p>1 that has started in their own property or from elsewhere</p> <p>2 in the building."</p> <p>3 Then the third paragraph says:</p> <p>4 "It should be noted that not all high-rise</p> <p>5 residential buildings are designed or have been</p> <p>6 maintained to have a 'Stay Put' policy in place."</p> <p>7 Now, I read a great big chunk of text to you aloud</p> <p>8 so that you understand it. My question is just more</p> <p>9 focused.</p> <p>10 If we look together at the words in the second</p> <p>11 paragraph:</p> <p>12 "The Incident Commander should follow the evacuation</p> <p>13 plan devised as part of the premises fire risk</p> <p>14 assessment when known, unless the fire situation</p> <p>15 dictates otherwise."</p> <p>16 I just want to look at that sentence.</p> <p>17 My question there is: did you ever receive any</p> <p>18 training as an incident commander as to how to follow</p> <p>19 the evacuation plan devised as part of the premises fire</p> <p>20 risk assessment?</p> <p>21 A. Not that I can recall, no.</p> <p>22 Q. No.</p> <p>23 Were you aware that policy required you to have such</p> <p>24 training?</p> <p>25 A. I am aware it is referenced in policy. But, I mean,</p> <p style="text-align: center;">Page 38</p>	<p>1 repeating it -- looking at that first sentence:</p> <p>2 "The Incident Commander should follow the evacuation</p> <p>3 plan devised as part of the premises fire risk</p> <p>4 assessment when known."</p> <p>5 Were you trained in what you should do to follow</p> <p>6 this policy as an IC, an incident commander, at</p> <p>7 an incident?</p> <p>8 A. The only way as incident commander you could follow that</p> <p>9 is if they had a certain system in place, which is</p> <p>10 something called a premises information box, where</p> <p>11 potentially that may be present. So if that has a -- if</p> <p>12 it does have a premises fire risk assessment that has</p> <p>13 been undertaken by a responsible person of that --</p> <p>14 whoever owns that block, whether it's a housing</p> <p>15 association, the local authority or a private landlord,</p> <p>16 then my understanding as an incident commander or watch</p> <p>17 officer is that would be in something called a premises</p> <p>18 information box which we, as London Fire Brigade, would</p> <p>19 have access to on the scene.</p> <p>20 Q. I see. We'll come back to that, but that's very</p> <p>21 helpful, thank you.</p> <p>22 Could I ask you then, please, to turn to page 30</p> <p>23 internally of this same document, and you'll see there</p> <p>24 a heading in bold, "Building design and fire safety</p> <p>25 measures".</p> <p style="text-align: center;">Page 40</p>

<p>1 I'll just read aloud to you the first paragraph and 2 then show you two other paragraphs: 3 "During a fire, the level of risk can be 4 significantly increased if any of the building's design 5 features are compromised or are not in place because the 6 building is under construction or refurbishment." 7 Then it says: 8 "Early unexpected failure, or non-existence, of 9 internal compartmentation within a flat can cause a fire 10 to be far bigger than normally planned for." 11 My question, Mr Dowden, is: were you trained to look 12 out for early unexpected failure of internal 13 compartmentation? 14 A. My only reference to that in terms of training would be 15 when -- stepping outside of -- before I was an officer, 16 facilitating that -- when I was being given training by 17 my officers, referencing it back into the relevant 18 policies that were within the London Fire Brigade that 19 that would refer to. 20 Q. And doing the best you can, what is it that you were 21 trained to look out for in terms of early unexpected 22 failure of internal compartmentation? What were you 23 trained to look for? 24 A. So that would be sort of observing any signs or symptoms 25 of, you know, smoke or fire present outside that</p> <p style="text-align: right;">Page 41</p>	<p>1 contents on fire spread when doing familiarisation 2 visits? 3 A. Not that I can recall, no. 4 Q. So as an incident commander, either on a familiarisation 5 visit or at a fire, how would you go about considering 6 the impact of building materials and contents on fire 7 spread? 8 A. Could you repeat that question, please? 9 Q. Yes. 10 When you were an incident commander either doing 11 a familiarisation visit or at a fire, an actual fire, 12 how would you go about considering the impact of 13 building materials and contents on fire spread? 14 A. It would be very much in terms of what you can visually 15 see in terms of how that fire is -- if you were getting 16 communications from some crews, from other officers on 17 the fire ground, that's your information source. Yes, 18 so you're looking at visual, different pieces of 19 information from other crews working within the 20 building. That's generally as incident commander where 21 you'll get your information from. 22 Q. Let me dig a little deeper. 23 If you look at the next part of that paragraph, it 24 says: 25 "... for example, some designs of plastic or</p> <p style="text-align: right;">Page 43</p>
<p>1 original compartment. Again, from sort of looking at 2 an incident commander's point of view, putting 3 procedures in place to facilitate what we call a 360, so 4 to look for any other signs of -- rather than where -- 5 your position as incident commander, having a visual on 6 the full outside of the building so you've got 7 an understanding of how this fire is behaving 8 internally. 9 Q. Looking at the fifth paragraph down on this page, so 10 three on from the one we've just been looking at 11 together, it says: 12 "The Incident Commander must consider the impact of 13 building materials and contents on fire spread; for 14 example, some designs of plastic or aluminium window 15 frames/panels can be subject to early failure, promoting 16 fire growth and vertical and horizontal fire spread." 17 Just looking at that, my question is: were you ever 18 trained in those matters? 19 A. It's difficult to say I've actually received training on 20 that, but that would become hopefully apparent if that 21 information was rendered to us when we undertook 22 familiarisation visits. 23 Q. You say it would become apparent on a familiarisation 24 visit. Did anybody ever train you as to what to look 25 for in respect of the impact of building materials and</p> <p style="text-align: right;">Page 42</p>	<p>1 aluminium window frames/panels can be subject to early 2 failure, promoting fire growth and vertical and 3 horizontal fire spread." 4 How were you trained to know which designs of 5 plastic or aluminium windows or panels would be subject 6 to early failure and which wouldn't? 7 A. No, I don't recall receiving any training on that 8 specifically. 9 Q. Right. 10 Can you go back, please, then, to page 20 in the 11 same policy, and there you'll see in red, two-thirds of 12 the way down the page, "Command and control at 13 incidents": 14 "The Incident Commander must follow the principles 15 of the current National Incident Command System." 16 And then going over the page -- that just gives you 17 what this bit is about -- to the top of page 21, I'll 18 just read the paragraph to you. It's short. It says: 19 "The Incident Commander should review and change 20 their plan whenever new information becomes available at 21 the incident or from Fire Control. It is vital that the 22 Incident Commander makes effective use of sector and 23 functional commanders to implement their plan, minimise 24 spans of control and prevent personal information 25 overload."</p> <p style="text-align: right;">Page 44</p>

<p>1 Now, the first question is: were you trained, ever,</p> <p>2 in what you should do to follow this policy as</p> <p>3 an incident commander at an incident?</p> <p>4 A. The only reference I can make to that is specific policy</p> <p>5 and it's called the decision-making model, and that is</p> <p>6 something as an officer you will have a lot of input in.</p> <p>7 It's a policy itself and it goes through a sort of flow</p> <p>8 chart process in terms of specific information relating</p> <p>9 to the task or event, in terms of what we're turning up</p> <p>10 to, resourcing, resources, and also information on risk</p> <p>11 and benefit, and it takes you through a very sort of</p> <p>12 strategic flow chart of how to initially formulate</p> <p>13 a plan if any new information comes to light and how you</p> <p>14 re-evaluate that plan and how you communicate it.</p> <p>15 So in terms of -- that's my understanding. The</p> <p>16 decision-making model would assist incident commanders</p> <p>17 to -- in that paragraph.</p> <p>18 Q. Right. Right. That's very helpful.</p> <p>19 Just so we can be clear, can I ask you to be shown</p> <p>20 tab 13 of the policies bundle, which is the</p> <p>21 decision-making model -- or rather it was the one</p> <p>22 current as at November 2014. I'll just wait for it to</p> <p>23 come up on the screen. It's LFB00000238. This is LFB</p> <p>24 policy 341.</p> <p>25 Is this the model you were referring to, Mr Dowden?</p> <p style="text-align: center;">Page 45</p>	<p>1 "The incident commander should review and change</p> <p>2 their plan whenever new information becomes available of</p> <p>3 the incident or from Fire Control."</p> <p>4 Can you give us an idea of what kind of new</p> <p>5 information at an incident would require you as</p> <p>6 an incident commander to review and change your plan?</p> <p>7 A. Reports of persons involved, reports of any hazardous</p> <p>8 materials, whether that's a chemicals, cinders, any</p> <p>9 risks to firefighters, potential building collapse,</p> <p>10 signs or symptoms of fire smoke spread. Anything that</p> <p>11 the incident commander needs to know, whether that's</p> <p>12 going to increase further resourcing.</p> <p>13 Q. So persons reported and fire and smoke spread are two of</p> <p>14 the flags --</p> <p>15 A. Yes.</p> <p>16 Q. -- would this be fair, that would alert you as</p> <p>17 an incident commander to review and change your plan?</p> <p>18 A. If I didn't have that on arrival or as a first piece of</p> <p>19 information, that is certainly something I would have to</p> <p>20 review as an incident commander to change my plan, yes.</p> <p>21 Q. Right. What about evidence of failure of</p> <p>22 compartmentation? Would that be something that would</p> <p>23 cause you to review and change your plan?</p> <p>24 A. Yes.</p> <p>25 Q. Yes. And what were you trained to do as an incident</p> <p style="text-align: center;">Page 47</p>
<p>1 A. That's correct.</p> <p>2 Q. You refer to a flow chart. Can you please be shown</p> <p>3 page 2 of this document. Is that what you were</p> <p>4 referring to?</p> <p>5 A. That's correct.</p> <p>6 Q. I think there's one at page 3 as well, and in fact on</p> <p>7 through the document, gathering and thinking at page 4,</p> <p>8 information about the task or event page 5, information</p> <p>9 about available resources page 6, and so on. Lots of</p> <p>10 flow charts.</p> <p>11 Is that what you were --</p> <p>12 A. That's right, correct.</p> <p>13 Q. -- referring to. Right, coming back, then -- thank you,</p> <p>14 I think we can close that document down and go back to</p> <p>15 page 21, please, within tab 7, which is the GRA.</p> <p>16 Coming back to the top of page 21, "The</p> <p>17 Incident Commander should review and change their plan",</p> <p>18 you say you did get training in that and that was</p> <p>19 training in policy 341 we've just looked at?</p> <p>20 A. Yes. So that would be initial input as incident</p> <p>21 commander, but also that would be -- I'd have to</p> <p>22 facilitate that at a more local level for myself,</p> <p>23 a watch-based level, a station-based level.</p> <p>24 Q. Just looking, then, at this paragraph at the top of</p> <p>25 page 21:</p> <p style="text-align: center;">Page 46</p>	<p>1 commander if any of those happened: persons reported,</p> <p>2 fire and smoke spread, failure of compartmentation?</p> <p>3 A. It changes your priority. You know, London Fire</p> <p>4 Brigade, the priority is to save life, that's our</p> <p>5 number 1 priority. So we look at, you know, life, fire</p> <p>6 and hazard. The number 1 priority is life, then we look</p> <p>7 at the fire, then any other hazards that may be -- or</p> <p>8 process within that premise.</p> <p>9 So if I got new information that, you know, people</p> <p>10 were involved, that's my number 1 priority and that's</p> <p>11 where I need to sort of direct my resources to and my</p> <p>12 focus to in that incident.</p> <p>13 Q. Thank you.</p> <p>14 We can now, at least for the time being, close that</p> <p>15 policy and go to the next one, which is high-rise</p> <p>16 firefighting and that's policy LFB 633, which you'll</p> <p>17 find in tab 4, and it's LFB00001256. That's the one</p> <p>18 reviewed as current at 1 June 2015 and, as we understand</p> <p>19 it, Mr Dowden, that's the one that was current as</p> <p>20 at June 2017.</p> <p>21 My question is: as at June 2017, were you familiar</p> <p>22 with this policy?</p> <p>23 A. Yes, I was.</p> <p>24 Q. Prior to 14 June 2017, did you have any training on this</p> <p>25 policy?</p> <p style="text-align: center;">Page 48</p>

<p>1 A. Yes.</p> <p>2 Q. How often did you have training on this policy, do you</p> <p>3 think? Do you remember?</p> <p>4 A. Not in terms of individual dates and specifics. As</p> <p>5 I spoke to before, it's -- we can reference that in</p> <p>6 terms of a theory session at a station-based level where</p> <p>7 we sort of talk about en route and arrival tactics for</p> <p>8 high-rise premises. I spoke about in February 2016 we</p> <p>9 had a sort of full day of practical and tactical</p> <p>10 decision exercise which was facilitated at Hammersmith</p> <p>11 fire station, but that would be incorporated into</p> <p>12 something we call our core skills training, and that is</p> <p>13 just one very small part of our training that we have to</p> <p>14 adopt at a local level at the station.</p> <p>15 Q. Right. So in February 2016, you said you had a full day</p> <p>16 of practical and tactical decision exercise facilitated</p> <p>17 at Hammersmith fire station?</p> <p>18 A. Yes.</p> <p>19 Q. We'll come back to that in a moment.</p> <p>20 Can I ask you to look at your training records,</p> <p>21 which the LFB have very kindly put together for us.</p> <p>22 This you will find in the bundle of documents,</p> <p>23 tab 9. It's a very long spreadsheet; it doesn't just</p> <p>24 apply to you. The Relativity reference,</p> <p>25 Mr Trial Director, is LFB00003571, and your training</p> <p style="text-align: center;">Page 49</p>	<p>1 we had a high-rise fire in Trellick Tower, and I know</p> <p>2 that -- it's not in my training diary, but I know it</p> <p>3 certainly has been referenced by the firefighters and my</p> <p>4 junior officers, about two weeks before -- that was my</p> <p>5 last memory of having input in high-rise firefighting.</p> <p>6 It's not in my training record though, so whether it was</p> <p>7 because I was facilitating that training as</p> <p>8 a supervisor -- but that was around -- I know the date</p> <p>9 on that one, because I can be quite specific, was</p> <p>10 28 April, I think, around that sort of time, and there</p> <p>11 were -- there was a couple of challenges at that</p> <p>12 incident at Trellick Tower and we did quite a robust</p> <p>13 session on -- it was like a tactical decision exercise</p> <p>14 on-arrival tactics, because obviously there was a couple</p> <p>15 of challenges at Trellick Tower.</p> <p>16 So, from my memory, that was the most current sort</p> <p>17 of theory-based input that I've been involved with in</p> <p>18 high-rise firefighting.</p> <p>19 Q. Right, okay. That's helpful. We might be able to find</p> <p>20 some of those in a moment just as we look at this</p> <p>21 spreadsheet for different things, but looking at 633, at</p> <p>22 the moment focusing on the one you got on 23 March 2017</p> <p>23 it says theoretical station-based training.</p> <p>24 A. Yes.</p> <p>25 Q. What was that, can you remember?</p> <p style="text-align: center;">Page 51</p>
<p>1 starts, in terms of where it is on the spreadsheet, at</p> <p>2 page 3 and goes back to 2012. It's in reverse order.</p> <p>3 Can I ask you just to note that at the foot of each</p> <p>4 page on the right you should have a page number.</p> <p>5 SIR MARTIN MOORE-BICK: Can you read that on the screen?</p> <p>6 A. Not really, no.</p> <p>7 SIR MARTIN MOORE-BICK: I didn't think you could.</p> <p>8 Which particular part of the --</p> <p>9 MR MILLETT: Well, we are going to start with what ought to</p> <p>10 be page 25, which should have an entry for</p> <p>11 23 March 2017. It isn't terribly clear.</p> <p>12 SIR MARTIN MOORE-BICK: Ah, is that the one you wanted?</p> <p>13 MR MILLETT: Yes. And if you look at 23 March 2017, we</p> <p>14 think that's the last one before the fire on 14 June in</p> <p>15 terms of firefighting and high-rise buildings policy 633</p> <p>16 that you had, Mr Dowden.</p> <p>17 Now, it says -- if you look across the page -- it's</p> <p>18 theoretical station-based training.</p> <p>19 First of all, do you remember independently what</p> <p>20 training you had in late March 2017 on policy 633?</p> <p>21 A. I can't -- wouldn't be able to recall the actual</p> <p>22 specifics in terms of what the actual session entailed,</p> <p>23 but I know there was -- I will get to the answer I want</p> <p>24 to say.</p> <p>25 Prior to Grenfell, in about April, six weeks prior,</p> <p style="text-align: center;">Page 50</p>	<p>1 A. I can't -- I wouldn't be able to honestly say here,</p> <p>2 "This is exactly what I did", but from previous training</p> <p>3 sessions I've held on the theory side of it -- so we</p> <p>4 would look through policy, it would be about, okay, what</p> <p>5 our en route advice would be, so if any further traffic</p> <p>6 comes through; our on-arrival tactics and site of</p> <p>7 appliances; looking at what -- if it's a dry riser or</p> <p>8 wet riser within that building, how we augment that; the</p> <p>9 equipment needed to firefight within high-rise</p> <p>10 buildings; the procedure we adopt within the building in</p> <p>11 terms of the safe system of work, referring that to the</p> <p>12 bridgehead.</p> <p>13 Generally, from my memory, that would be how that</p> <p>14 theory session would've been facilitated.</p> <p>15 Q. It sounds from that pretty comprehensive; would that be</p> <p>16 fair?</p> <p>17 A. I would say so, yes.</p> <p>18 Q. Right. And prior to that, you had another theoretical</p> <p>19 station-based session on 14 September 2016, if you look</p> <p>20 at page 22 of the spreadsheet, which means coming</p> <p>21 forwards. If you look just near the bottom of the page,</p> <p>22 14 September 2016, you'll see another reference to</p> <p>23 firefighting in high-rise buildings 633. Again,</p> <p>24 theoretical station-based training.</p> <p>25 Can you remember what that session was about?</p> <p style="text-align: center;">Page 52</p>

<p>1 A. Again, I wouldn't be able to recall the specifics of it.</p> <p>2 It would be very similar to the tactics I've just</p> <p>3 discussed in terms of the en route, on arrival,</p> <p>4 equipment, anything else, yes.</p> <p>5 Q. So were these sessions the same or did they develop in</p> <p>6 response to new learning between September 2016</p> <p>7 and March 2017?</p> <p>8 A. I don't remember having any new learning within that</p> <p>9 package, no. It would've been a very similar package</p> <p>10 that was delivered between those two dates.</p> <p>11 Q. Right.</p> <p>12 There's one, I should say, in May 2016 on page 21</p> <p>13 and on page 20, 10 February 2016. I won't go to these</p> <p>14 if the answer is the same, but these are all</p> <p>15 station-based and theoretical training on policy 633.</p> <p>16 A. That may be the one that we facilitated at Hammersmith.</p> <p>17 I would have to look.</p> <p>18 Q. Let's go back to that. It's page 20, because you did</p> <p>19 mention, I think, February 2016. Page 20</p> <p>20 is February 2016, and it's round about the middle of the</p> <p>21 page, 10 February 2016. There are actually three</p> <p>22 entries there -- in fact, there are four entries there</p> <p>23 for the same date.</p> <p>24 A. I'm pretty certain that's the one we facilitated at</p> <p>25 Hammersmith fire station -- I may be wrong -- because it</p> <p style="text-align: center;">Page 53</p>	<p>1 entry there, although it says theoretical station-based</p> <p>2 training, is actually linked to a practical?</p> <p>3 A. I can't 100 per cent confirm that but that's what my</p> <p>4 understanding would be, yes.</p> <p>5 Q. Okay. You are going from your recollection, I imagine.</p> <p>6 A. Yes.</p> <p>7 Q. I'm not being very helpful in showing you documents that</p> <p>8 help that. Yes. Okay.</p> <p>9 Now, before we leave this document, can I just ask</p> <p>10 you to look at page 18. It is something I wanted to ask</p> <p>11 you about while I was in the document, Mr Dowden.</p> <p>12 On page 18, we have two references that I wanted to</p> <p>13 ask you about for firefighting in high-rise buildings,</p> <p>14 policy 633.</p> <p>15 Just below halfway down, can you see that on</p> <p>16 28 October 2015 there's theoretical station-based</p> <p>17 training, firefighting in high-rise building 633, and it</p> <p>18 says:</p> <p>19 "Lecturer -- Incident Management -- Buildings and</p> <p>20 Structures -- Buildings and Structures -- Firefighting</p> <p>21 in high-rise buildings -- 633."</p> <p>22 Could you explain that entry?</p> <p>23 A. Again, I wouldn't be able to give specifics, but it</p> <p>24 would be referencing it to policy 633. So, again, it</p> <p>25 would have been a theory session in terms of our</p> <p style="text-align: center;">Page 55</p>
<p>1 was around that sort of time.</p> <p>2 Q. Right. And those are referred to as firefighting in</p> <p>3 high-rise buildings 633 twice, and there is an entry for</p> <p>4 10 February, the theoretical station-based training, and</p> <p>5 again just below that, and then compartment firefighting</p> <p>6 793, same date. But, again, that's referred to as</p> <p>7 theoretical station-based training. So maybe that</p> <p>8 wasn't the one.</p> <p>9 A. With reference to that, because the session we had at</p> <p>10 Hammersmith was a centrally -- it was an area based</p> <p>11 training package, so we was on something we call</p> <p>12 strategic resource where we facilitate the period of</p> <p>13 time where we're not operational, but we still have --</p> <p>14 so that would be a separate entry into our station</p> <p>15 diary, and then next to that we would still have our</p> <p>16 core skills training. So there's no facility for me to</p> <p>17 leave that core skills training blank because it doesn't</p> <p>18 accept -- I have to put -- we would have -- so I could</p> <p>19 only say that that was along -- if that was the same</p> <p>20 date, alongside the training event at Hammersmith fire</p> <p>21 station.</p> <p>22 So we would have to have populated that with some</p> <p>23 kind of high-rise training to tie that in and be able to</p> <p>24 sign that off on our station training diary.</p> <p>25 Q. I see. So in simple terms, are you saying that the</p> <p style="text-align: center;">Page 54</p>	<p>1 on-arrival tactics and equipment needed to firefight in</p> <p>2 a high-rise premise.</p> <p>3 Q. But it refers to you, I think, as a lecturer, is that</p> <p>4 right, or is it referring to somebody else as the</p> <p>5 lecturer?</p> <p>6 A. Right, so the lecturer -- yes, so that would be --</p> <p>7 obviously because as a watch manager and any -- if you</p> <p>8 are an officer of the London Fire Brigade at watch-based</p> <p>9 level, you would be deemed the person to facilitate</p> <p>10 those theories training sessions. So there would be</p> <p>11 an entry -- should be an entry for me delivering the</p> <p>12 theory-based session and then for the other members of</p> <p>13 the watch who are receiving that theory input.</p> <p>14 Q. When it says "Lecturer", as it does quite a lot through</p> <p>15 this training record, are we to understand it that you</p> <p>16 are the person delivering the lecture on the subject to</p> <p>17 your firefighters?</p> <p>18 A. Yes. That's generally how it's facilitated, yes.</p> <p>19 Q. How big was your attendance? Is it just Red Watch?</p> <p>20 A. No, no, that's just local to my watch only. So every</p> <p>21 watch-based officer, it won't be facilitated outside</p> <p>22 their own watch or outside their own team.</p> <p>23 Q. On 633 specifically, were there any lecture materials,</p> <p>24 like handouts or slides, that you would deliver to your</p> <p>25 firefighters when giving that lecture?</p> <p style="text-align: center;">Page 56</p>

<p>1 A. Not that I can recall. It would more be that I would 2 reference it into policy, have a printout policy and 3 generally facilitate maybe some questioning, you know, 4 involvement of the team, and then facilitate maybe 5 a whiteboard, have a diagram of a high-rise premise and 6 how we set up referencing it back to policy 633. 7 Q. We see a little bit lower down the same page for the 8 6 November 2015 that, again, firefighting in high-rise 9 building 633: 10 "Lecturer -- Incident Management -- Buildings and 11 Structures -- Buildings and Structures -- Firefighting 12 in building -- 633." 13 So that's only about 10 days or so later. Again, 14 theoretical station-based training. Do you remember 15 whether that was a different lecture that you delivered? 16 A. I can't, no. 17 Q. Perhaps I should ask you: when it refers to "lecturer", 18 that's you, is it? 19 A. Yes. If that's the record then that would be myself, 20 yes. 21 Q. And do you remember why you delivered what looks like 22 from this document the same lecture only 10 days apart? 23 A. No, I can't. 24 Q. And was anybody supervising you as to what you would be 25 lecturing on when lecturing on high-rise firefighting?</p> <p style="text-align: right;">Page 57</p>	<p>1 themselves on the fire ground. I would never really 2 sort of evaluate the success of that training session. 3 Q. Leaving it to the fire ground in the case of an actual 4 incident, might that not be a bit late? 5 A. It could be seen as -- yes. 6 Q. Okay. 7 Put that bundle away. Can I ask you to take up 8 policy 633, which is in tab 4 of the policy bundle, and 9 I think I gave the reference LFB00000178 [sic: 10 LFB00001256]. This is the one current as at June 2015. 11 Can I ask, please, first of all, to turn to 12 paragraph 7.45, which you'll find on page 14 of 28. 13 I am going to start with this topic, "Evacuation". 14 Para 7.45, the IC ... just give me a moment, I think 15 something may have gone -- no, right, it's been 16 renumbered. It's 7.49, if you could go to that. 17 That's it. Right. 18 Mr Trial Director, could you go back to the one you 19 had just a moment ago? 20 Mr Dowden, I'm sorry about this. 21 That's it there. 7.49, "Evacuation": 22 "The IC should consider following the evacuation 23 plan devised as part of the occupier's fire risk 24 assessment, unless the fire situation dictates 25 otherwise."</p> <p style="text-align: right;">Page 59</p>
<p>1 A. I wouldn't have any supervisor, as such. There would be 2 obviously the rest of the firefighters on the watch and 3 my junior officers and crew managers, but no one really 4 supervising what the content was or a quality assurance, 5 for want of a better word, no. 6 Q. So you didn't go to a superior officer and say, "This is 7 what I'm going to lecture my firefighters on on 633 this 8 afternoon"? 9 A. No. 10 Q. Did that ever happen? 11 A. Not in that respect. We do have a process where our 12 training will be audited by a senior officer, and that 13 would be facilitated by a day of auditing. They'll come 14 down and they'll see a practical application -- not 15 specific to high-rise, they would, you know -- in terms 16 of what we may have training on that day, and then also 17 audit a theory-based session as well and test some 18 firefighters' knowledge of certain bits of equipment. 19 But, again, that's something that would be facilitated 20 by our actual area team. 21 Q. So how could you ever know whether the lectures that you 22 were giving to your firefighters about high-rise 23 firefighting were effective? 24 A. I suppose the only way I could really do that is by when 25 I see them out in the incident ground, how they apply</p> <p style="text-align: right;">Page 58</p>	<p>1 Now, my question is: what training did you ever get 2 in how to consider to follow the evacuation plan under 3 that policy? 4 A. I would say unless -- apart from actually that policy 5 and the individual's discretion in terms of how to apply 6 that, I don't recall receiving any training particular 7 to that statement. 8 Q. So the answer is really the same as the answers you gave 9 before when I was showing you the GRA 3.2? 10 A. Yes. 11 Q. And in relation to the next paragraph, 7.50, where it 12 says: 13 "It may be necessary to undertake a partial or full 14 evacuation in a residential building where a 'Stay Put' 15 policy is normally in place." 16 Again, my question is, or was: what training did you 17 get in respect of undertaking partial or full evacuation 18 in such a building? 19 A. Again, nothing outside what would be in that policy 633. 20 I've not received any practical training of how to apply 21 that. 22 Q. We can take this I think quite quickly if you just then 23 go down to 7.51(a) and (b): 24 "The IC should consider: 25 "(a) the effect of firefighting tactics on</p> <p style="text-align: right;">Page 60</p>

15 (Pages 57 to 60)

<p>1 evacuation (and vice versa).</p> <p>2 "(b) the resources required to support the</p> <p>3 evacuation or 'Stay put' policy ..."</p> <p>4 What was your training in respect of how to consider</p> <p>5 those matters? Is your answer the same?</p> <p>6 A. Yes.</p> <p>7 Q. Can I ask you, then, to look a little bit lower down at</p> <p>8 7.55 over the page. Let's just look at this together.</p> <p>9 This is underneath "Fire survival guidance", which is</p> <p>10 the heading:</p> <p>11 "The advice offered during fire survival calls</p> <p>12 should be re-evaluated throughout an incident and this</p> <p>13 may require a change in the advice given. In</p> <p>14 exceptional circumstances an IC may consider informing</p> <p>15 control that their advice to FSG callers should be</p> <p>16 altered e.g. to attempt to leave their property."</p> <p>17 I am just going to pause there and just ask you to</p> <p>18 look at those words.</p> <p>19 I ask you this question: did you ever receive any</p> <p>20 training in how to re-evaluate the advice offered during</p> <p>21 fire survival calls throughout an incident?</p> <p>22 A. Not that I can recall, no.</p> <p>23 Q. Looking at the next sentence:</p> <p>24 "In exceptional circumstances an IC may consider</p> <p>25 informing control that their advice to FSG callers</p> <p style="text-align: right;">Page 61</p>	<p>1 MR MILLETT: Mr Chairman, that may be a convenient moment</p> <p>2 for a break.</p> <p>3 SIR MARTIN MOORE-BICK: Is that a good time? Yes, all</p> <p>4 right.</p> <p>5 Mr Dowden, we are going to have a break now. We'll</p> <p>6 have 20 minutes to give you time to have a break and</p> <p>7 a cup of coffee or whatever.</p> <p>8 Can I ask you this: now you've started giving your</p> <p>9 evidence, I have to ask you not to discuss your evidence</p> <p>10 or the case or anything about this particular inquiry</p> <p>11 with anyone else until you've finished giving your</p> <p>12 evidence, and that will apply if we go over lunchtime,</p> <p>13 as I think we shall.</p> <p>14 Can you just remember that?</p> <p>15 THE WITNESS: Yes.</p> <p>16 SIR MARTIN MOORE-BICK: Thank you very much.</p> <p>17 11.20, please.</p> <p>18 (11.05 am)</p> <p>19 (A short break)</p> <p>20 (11.25 am)</p> <p>21 SIR MARTIN MOORE-BICK: Now, Mr Dowden, before we continue,</p> <p>22 are you happy standing all the time?</p> <p>23 A. At the moment, yes. I'm fine, thank you.</p> <p>24 SIR MARTIN MOORE-BICK: If you feel you would like to sit</p> <p>25 down -- because we can move that lectern so that you're</p> <p style="text-align: right;">Page 63</p>
<p>1 should be altered e.g. to attempt to leave their</p> <p>2 property."</p> <p>3 Did you ever receive any training on how you would</p> <p>4 go about working through that question, how to consider</p> <p>5 informing control whether the advice should change?</p> <p>6 A. If there's any training, it would just be through that</p> <p>7 obviously paragraph and our own fire survival guidance</p> <p>8 policy and my interpretation of how I would have</p> <p>9 facilitated that as an incident commander.</p> <p>10 Q. So would this be fair: you knew that that was the policy</p> <p>11 but you were left to your own discretion, based on your</p> <p>12 experience, as to how to decide what to do about advice</p> <p>13 to FSG callers?</p> <p>14 A. I was aware that that was the case, you can alter it.</p> <p>15 It does step outside our control operators policy and</p> <p>16 I know that has to be -- only the officer, the watch --</p> <p>17 whoever is in charge of the control room at that time,</p> <p>18 and that's how it can be confirmed, between that</p> <p>19 individual and the incident commander.</p> <p>20 I can't recall whether I've actually received any</p> <p>21 training on how that is done.</p> <p>22 Q. Would the same apply to what to look for by way of</p> <p>23 exceptional circumstances? Were you trained in what</p> <p>24 were exceptional circumstances?</p> <p>25 A. No.</p> <p style="text-align: right;">Page 62</p>	<p>1 not sitting down behind it?</p> <p>2 A. That's very kind. Thank you very much.</p> <p>3 SIR MARTIN MOORE-BICK: Yes, Mr Millett.</p> <p>4 MR MILLETT: Mr Dowden, can I just ask you: how often, as</p> <p>5 at June 2017, did you at North Kensington fire station</p> <p>6 practise drills?</p> <p>7 A. High-rise drills?</p> <p>8 Q. Well, let's start with any drills.</p> <p>9 A. Again, that would be incorporated into the core skills</p> <p>10 training, so I couldn't give you a sort of definitive</p> <p>11 number on that, no.</p> <p>12 Q. I mean, roughly a week, how many drills, ordinary drills</p> <p>13 of any kind, would you do?</p> <p>14 A. Well, we don't work an ordinary week, so we do two days</p> <p>15 and two nights. Generally the practical stuff we</p> <p>16 facilitated on days and then sort of maybe some theory,</p> <p>17 and then potentially on the night duty, theory sessions</p> <p>18 would be practised.</p> <p>19 Q. And now high-rise drills. How often, as at June 2017,</p> <p>20 would you practise high-rise drills at North Kensington?</p> <p>21 A. It's very difficult, particularly at North Kensington,</p> <p>22 to actually do a practical-based high-rise drill. So</p> <p>23 for me, I would generally facilitate the high-rise</p> <p>24 training through more of a theory-based input in terms</p> <p>25 of referencing it to policy 633.</p> <p style="text-align: right;">Page 64</p>

<p>1 Q. Why is it difficult at North Kensington to do 2 a practical-based high-rise drill?</p> <p>3 A. Well, I wouldn't just keep this to North Kensington fire 4 station. We don't have the facility, as far as I'm 5 aware, at any London fire station to replicate 6 a high-rise drill. We have sort of training towers, but 7 we generally use those to facilitate ladder work 8 training, but for me it's quite difficult to facilitate 9 a real, robust high-rise training scenario at a 10 station-based level.</p> <p>11 Q. Where would you go, or where would you be sent, if you 12 were to have a high-rise fire drill which was properly 13 practical?</p> <p>14 A. We can facilitate off-station training, whether 15 they're -- a local authority may surrender a building 16 that's not being used. We can potentially use that 17 facility and then that's deemed -- you have to do a lot 18 of background work behind that, risk assessments and 19 everything else, because obviously it's not an LFB 20 premise.</p> <p>21 Q. Right. And how often, would you say, as at June 2017, 22 would you facilitate an off-station training in 23 a building surrendered by a local authority?</p> <p>24 A. The only time I've ever been involved with that was not 25 my time at North Kensington. I couldn't -- the only</p> <p style="text-align: right;">Page 65</p>	<p>1 Surbiton?</p> <p>2 A. They're very different because obviously it's very hard 3 to replicate at a station-based level a thorough 4 high-rise drill because you cannot replicate the 5 scenario. You do not have the size of that building, 6 the facilities. We just don't have that in London.</p> <p>7 Q. Okay. What was it at Hammersmith that you had in terms 8 of physical structures to enable you to practise 9 high-rise procedures?</p> <p>10 A. A purpose-built training tower, which -- maybe eight 11 floors in height, and the scenario was we'd use the 12 ground floor of that training tower as our what we call 13 our bridgehead, and then from memory we'd facilitate 14 using the two floors above that and the second floor 15 would be the fire floor, and it was, you know, going 16 through in terms of getting the equipment needed at the 17 bridgehead, getting water supplies and then putting 18 firefighter crews through those two floors into what we 19 call the fire floor, into the compartment.</p> <p>20 But you can't replicate a compartment fire. There's 21 no carbonation environment; it's all in safe air.</p> <p>22 Q. Did that programme at Hammersmith, the practical-based 23 training day at Hammersmith, cover compartmentation 24 breach and fire spread beyond the compartment of origin?</p> <p>25 A. Not in the practical session in, from my memory, what we</p> <p style="text-align: right;">Page 67</p>
<p>1 time I've done that, facilitated that, when I was at 2 Surbiton on Green Watch, I facilitated a high-rise 3 practical scenario at Tolworth Tower, and because at 4 that point it was -- a lot of the floors were 5 unoccupied -- I can't be specific on what year that was, 6 but I know that I did facilitate a high-rise sort of 7 search and rescue drill at Tolworth Tower.</p> <p>8 Q. Right. And that's the only one --</p> <p>9 A. That's the only one I've organised as a watch officer.</p> <p>10 Q. You've organised. How many have you actually been 11 involved in in your career?</p> <p>12 A. From memory, it would only be that one and the practical 13 application that we did at the full day at Hammersmith, 14 and then as an incident commander, but not as 15 a watch-based scenario -- so when you go away -- when 16 I went away to Moreton-in-Marsh to the Fire Service 17 College, they had a range of different premises that you 18 could -- your incident command skills would be tested. 19 So they had different buildings and they have 20 a high-rise facility at Moreton-in-Marsh Fire Service 21 College when it was under the sort of public body.</p> <p>22 Q. In terms of the practical application that you did at 23 the full day at Hammersmith, how did that differ -- or 24 did it differ -- from the high-rise exercise that you 25 helped organise at the Tolworth Tower when you were at</p> <p style="text-align: right;">Page 66</p>	<p>1 call the training yard, but we did do a further tactical 2 decision exercise. I can't remember if that 3 incorporated sort of fire spread, but certainly we did 4 do some work on fire survival guidance and I was put 5 under a bit of pressure in terms of that.</p> <p>6 Q. Did you have any practical training on the Hammersmith 7 day in terms of fire survival guidance calls and 8 communications?</p> <p>9 A. Trying to explain it, so I was in one room as the 10 incident commander and I was getting fed information 11 about -- you know, you have to sort of visualise it, 12 really, in terms of what we're trying to achieve. And 13 I remember having a radio and had some traffic coming 14 into it -- I can't be specific of the traffic coming 15 into me. At first it was a high-rise incidents, 16 a high-rise compartment fire, so how we would respond to 17 that, how we would resource it, what my decision-making 18 was, and then as the incident escalates, I remember 19 dropping in.</p> <p>20 I can't 100 per cent guarantee if there was fire 21 spread involved in that scenario, but I do quite 22 specifically remember because at the debrief we were 23 talking about the fire survival guidance stuff. That 24 was later brought in. We have persons reported and we 25 now have to manage the fire survival guidance process.</p> <p style="text-align: right;">Page 68</p>

<p>1 Q. Right. How many fire survival guidance calls were you 2 receiving and juggling during that practical training 3 exercise? 4 A. I couldn't put a number on it, but it wasn't to the 5 scale of what we had at Grenfell Tower. 6 Q. Did you ever practise the evacuation of people with 7 mobility issues or elderly people or children from high 8 floors in high-rise blocks? 9 A. I've never practised that, no. 10 Q. Right. 11 Now, if you go to your witness statement, please, 12 and look at page 2, Mr Dowden, you say that at the end 13 of 2016, the beginning of 2017, you did a back-to-basics 14 training day based on the Lakanal House fire in 2009. 15 Did you attend the Lakanal House fire? 16 A. No. 17 Q. Can you tell us what that training that you refer to 18 involved? 19 A. So there was two -- I think -- I've got a bit confused 20 in terms of that statement. There was two separate 21 things I was trying to explain, so I'll explain those 22 now. 23 That back-to-basics training was the one I'm 24 referring to at Hammersmith, in terms of the tactical 25 decision exercise. From my understanding, the aim of</p> <p style="text-align: right;">Page 69</p>	<p>1 be very similar in terms of what they were trying to 2 replicate, particularly in that tactical decision 3 exercise session. 4 Q. What did you learn from the back-to-basics training that 5 you didn't know before? 6 A. I suppose for me it's how under pressure you can feel 7 and just in -- you know, I've never had any dealings 8 operationally with dealing with fire survival calls and 9 the process of that information. I suppose for me 10 personally how that can make you feel under pressure and 11 how important it is to prioritise your resources when 12 you get a fire survival guidance call. 13 Q. Do you know what prompted the LFB to deliver 14 a Lakanal House-related course at the end of 2016, 15 beginning of 2017? 16 A. I could only presume that it would be from the 17 recommendations from maybe the inquest following 18 Lakanal House. 19 Q. But you don't know from your own knowledge? 20 A. No, not from my own knowledge, no. 21 Q. Was this the first time -- end of 2016, early 2017 -- 22 that this kind of training was delivered to you? 23 A. Yes. 24 Q. Can I ask you to go back to your witness statement and 25 look at page 7 at the bottom of the page, last</p> <p style="text-align: right;">Page 71</p>
<p>1 that tactical decision exercise in particular was to try 2 and replicate some of the learning points that came out 3 of Lakanal House in terms of the fire survival guidance, 4 because at Lakanal House we had no way of managing or 5 processing that information of multiple fire survival 6 guidance, which basically -- you know, people are 7 trapped within their premise from the components of 8 fire, heat or smoke. 9 There was a separate training package put together 10 on Lakanal House which was, again, a theory-based sort 11 of PowerPoint presentation, but that wasn't delivered at 12 that point at Hammersmith when we did the back-to-basics 13 training. 14 Q. Right. What were the learning points, can you remember, 15 that were replicated in that training? 16 A. For me, the main one, I think, was about how we managed 17 the fire survival guidance calls. 18 Q. Right. So that was the subject, but let me press you 19 a little: what was the learning point? What was the 20 take-away from Lakanal House that got replicated in the 21 back-to-basics training? 22 A. I couldn't -- wouldn't be able to give you specifics in 23 terms of the learning outcomes. Just for my own 24 interpretation, it was based on that scenario. Having 25 known the incident at Lakanal House, it seemed to me to</p> <p style="text-align: right;">Page 70</p>	<p>1 paragraph. You refer there to a fire at Shepherds Court 2 and you say: 3 "At a fire within Shepherds Court about 6-7 months 4 before the Trellick Tower incident, the fire did start 5 to spread up the building, but that was caused by 6 burning bits of cladding around the UPVC windows 7 igniting cladding on floors above the fire floor. This 8 is a common event in high rise fires and it is known as 9 the coanda effect." 10 I'll come back to those words in that paragraph in 11 a moment, but I just want to take it in stages. 12 You mention Shepherds Court. That was a fire on 13 19 August 2016. It is a matter of record. 14 A. Okay. 15 Q. Do you remember that? 16 A. I do remember that incident, yes. 17 Q. And what kind of building was it in? 18 A. It was a high-rise block. 19 Q. It was a high-rise. Do you remember where exactly it 20 was? 21 A. It's located in Shepherd's Bush. 22 Q. In Shepherd's Bush. 23 A. Shepherd's Bush Common. 24 Q. Did you attend that fire? 25 A. I did, yes.</p> <p style="text-align: right;">Page 72</p>

<p>1 Q. You did. At what point in the fire did you attend?</p> <p>2 A. I believe I went on make pumps eight.</p> <p>3 Q. You went on make pumps eight?</p> <p>4 A. Not the initial attendance, no.</p> <p>5 Q. Right. Do you remember how soon after the initial</p> <p>6 attendance pumps were made eight at that incident?</p> <p>7 A. No, I don't.</p> <p>8 Q. Now, you say in your statement that cladding around uPVC</p> <p>9 windows ignited cladding on the floors above the fire</p> <p>10 and that it's a common event, but you also say in the</p> <p>11 next sentence:</p> <p>12 "The fire can spread up the building externally but</p> <p>13 it usually spreads upwards for just one or two floors,</p> <p>14 and this we can manage because firefighters can go one</p> <p>15 or two floors above where the fire is and fire fight it</p> <p>16 from the inside."</p> <p>17 My question is: when you say it usually goes up one</p> <p>18 or two floors, why do you say that?</p> <p>19 A. Just from, you know, experience, experiences I've heard</p> <p>20 about in the Fire Brigade, further case studies.</p> <p>21 Generally, you know, compartments do fail on the</p> <p>22 external. That's not something that's unusual to any</p> <p>23 fire, and sometimes a compartment failing, in terms of</p> <p>24 ie a window or a door or an opening failing, actually</p> <p>25 sometimes isn't a bad thing because it can improve</p> <p style="text-align: right;">Page 73</p>	<p>1 a low melting point, and it generally might be that the</p> <p>2 window around and internal furnishings can burn. Can</p> <p>3 I just follow that up a little bit.</p> <p>4 A. Yes.</p> <p>5 Q. As at June 2017, could you describe your state of</p> <p>6 knowledge and experience as to the melting and burning</p> <p>7 of plastic components around the window.</p> <p>8 A. Yes, I wouldn't have any -- I wouldn't sort of have any</p> <p>9 scientific knowledge in terms of the specific, you</p> <p>10 know -- at what temperature that would fail, but, you</p> <p>11 know, from being in the fire service, you do understand</p> <p>12 that certain materials have a lower tolerance when</p> <p>13 they're involved in fire, you know, and that's why</p> <p>14 certain buildings should -- you know, particularly</p> <p>15 high-rise, you know, should be built in a way that the</p> <p>16 materials used are more tolerant when they're involved</p> <p>17 in fire.</p> <p>18 Q. So would you say that in your experience as it was</p> <p>19 in June 2017, the presence of plastic or plastic-type</p> <p>20 materials around windows was a known risk to you as</p> <p>21 an incident commander?</p> <p>22 A. Yes, yes, there was a known risk.</p> <p>23 Q. Would that be the kind of risk that when you did</p> <p>24 a familiarisation visit or a visit under what we call</p> <p>25 section 7(2)d -- I'll ask you about those later -- when</p> <p style="text-align: right;">Page 75</p>
<p>1 conditions for firefighters within that compartment,</p> <p>2 ie to get rid of unburnt gases, which can be an issue,</p> <p>3 or improve visibility. So that's not something that is</p> <p>4 alien to an officer or a firefighter.</p> <p>5 You know, we resource that accordingly and, as</p> <p>6 I said in my statement, it's not a quick process.</p> <p>7 Generally the window would fail. If we can get access,</p> <p>8 we can get a covering jet on that to try and, you know,</p> <p>9 stop that external fire spread, and that's not something</p> <p>10 that is uncommon. You know, it doesn't generally go at</p> <p>11 such a rate where you can't resource it or sort of stop</p> <p>12 that external fire spread.</p> <p>13 And as I said in my statement, we generally can, you</p> <p>14 know, from experience of firefighters and our officers,</p> <p>15 go into those floors above, and generally it might not</p> <p>16 be -- it's just the outside of that compartment that's</p> <p>17 been compromised. You know, plastic does burn quite --</p> <p>18 has quite a low melting point, and it generally might</p> <p>19 just be the window around or, you know, internal</p> <p>20 furnishings around that, whether it's windows, curtains,</p> <p>21 and it gives us enough time to get into the compartments</p> <p>22 above the fire floor and fight that internally. If it's</p> <p>23 close enough to the ground then covering jets will</p> <p>24 suffice and we can suppress that fire spread.</p> <p>25 Q. You said a minute ago that plastic does burn and has at</p> <p style="text-align: right;">Page 74</p>	<p>1 you did those kinds of visits, is that known risk</p> <p>2 something that you would want to look out for in</p> <p>3 a building you were visiting?</p> <p>4 A. If I'm going to be honest, it's not something that</p> <p>5 would -- I would go into a building, you know, looking</p> <p>6 for that. Maybe that's the expectation. For me, when</p> <p>7 I did a familiarisation visit, it's more about the</p> <p>8 facilities, the layout, et cetera, within that property,</p> <p>9 within the high-rise block.</p> <p>10 Q. We'll come back to that, I just wanted to pursue that</p> <p>11 there.</p> <p>12 In your experience as it was in June 2017, were</p> <p>13 there any occasions that you had come across when a fire</p> <p>14 had gone up further than one or two floors on the</p> <p>15 exterior of a tower block?</p> <p>16 A. The only other point of reference to that would be</p> <p>17 a fire I attended whilst I was at Chiswick very late on</p> <p>18 in the incident. That was at Cambridge Gardens in</p> <p>19 Kingston. That was a high-rise block. I was a crew</p> <p>20 manager at the time. From memory, that only involved</p> <p>21 about three compartments, fully involved three</p> <p>22 compartments. Again, that was, I believe, very near to</p> <p>23 sort of the top of the building.</p> <p>24 That was my only other real experience, either as</p> <p>25 a firefighter or an officer, of being involved in</p> <p style="text-align: right;">Page 76</p>

<p>1 a high-rise fire where it's involved more than one</p> <p>2 compartment.</p> <p>3 Q. Can you give us an idea of when that was, a date?</p> <p>4 A. It must have been between -- it is a bit of a timescale,</p> <p>5 so I do apologise -- 2008, 2009.</p> <p>6 Q. Right. Where were you based?</p> <p>7 A. I was based at Chiswick.</p> <p>8 Q. You were based at Chiswick.</p> <p>9 A. Yes.</p> <p>10 Q. And do you remember what the materials on the exterior</p> <p>11 were that were alight?</p> <p>12 A. No.</p> <p>13 Q. Do you remember what kind of building it was? I mean,</p> <p>14 it was a high-rise block.</p> <p>15 A. It was a high-rise block.</p> <p>16 Q. How high was it?</p> <p>17 A. Again, this would only be an estimate, a guesstimate.</p> <p>18 20 floors, maybe. Maybe less.</p> <p>19 Q. All right. Do you remember how fast the fire spread on</p> <p>20 the exterior?</p> <p>21 A. When I was mobilised to that incident, we were make pump</p> <p>22 20, and generally when an incident of that size goes to</p> <p>23 the make pump -- that can be a fair way into the</p> <p>24 incident and -- yes, but I -- I don't recall at what</p> <p>25 time, no.</p> <p style="text-align: right;">Page 77</p>	<p>1 all, pages 2, 3 and 4. If we just have a look at those.</p> <p>2 So page 2, here are three photographs, an exterior</p> <p>3 fire at Grozny, The Address, Dubai and the Tamweel</p> <p>4 Tower, Dubai.</p> <p>5 Are you familiar with those events?</p> <p>6 A. No.</p> <p>7 Q. You're not?</p> <p>8 A. No.</p> <p>9 Q. Can I ask you to go to the next page, please.</p> <p>10 Same topic, exterior fire on a tower block in</p> <p>11 Shanghai and Baku in Azerbaijan in 2015.</p> <p>12 Were you familiar with those events?</p> <p>13 A. No, I'm not.</p> <p>14 Q. Can you look at the next page, please. Basingstoke and</p> <p>15 Garnock Court exterior fires, and in Garnock Court's</p> <p>16 case, 1999.</p> <p>17 Were you familiar or are you familiar with that?</p> <p>18 A. Not with the Basingstoke. I'm only familiar now with</p> <p>19 Garnock Court because it's been brought to our</p> <p>20 attention, but previous to that, to 14 June 2017, I had</p> <p>21 no knowledge of that.</p> <p>22 Q. When was Garnock Court brought to your attention?</p> <p>23 A. I had a meeting with some representatives from the Fire</p> <p>24 Brigades Union and they brought to my attention that</p> <p>25 this fire had occurred in 1999.</p> <p style="text-align: right;">Page 79</p>
<p>1 Q. Now, I'd like you to look, please, at a slide show,</p> <p>2 which is a document produced by the LFB entitled "Tall</p> <p>3 Building Facades", and it's bundle-tab 10 and,</p> <p>4 Mr Trial Director, it's LFB00003521.</p> <p>5 Now, you'll see that, on the front page there, on</p> <p>6 page 1, it's dated 13 July 2016 and it's an LFB official</p> <p>7 document.</p> <p>8 We have been told by the LFB that in fact -- I'll be</p> <p>9 corrected if I'm wrong about this later and I'll come</p> <p>10 back to you if I have to -- it was completed</p> <p>11 in October 2016, but it looks like the heading date</p> <p>12 didn't change. So bear with me on the basis that this</p> <p>13 is an October 2016 document, and the reasons why I say</p> <p>14 that will become obvious in a moment, I hope.</p> <p>15 First question: have you ever seen this document</p> <p>16 before?</p> <p>17 A. I don't recall seeing that document, no.</p> <p>18 Q. Now, I'm going to show it to you quickly and I'm just</p> <p>19 going to ask you whether you ever had training on parts</p> <p>20 of this document.</p> <p>21 But if you've never seen it before, can I assume</p> <p>22 you've never had training on the document as a whole?</p> <p>23 A. I don't -- yes, I don't recall seeing that document, no.</p> <p>24 Q. Right.</p> <p>25 Can I then ask you, please, to turn to, first of</p> <p style="text-align: right;">Page 78</p>	<p>1 Q. You had a meeting with representatives of the Fire</p> <p>2 Brigades Union?</p> <p>3 A. Yes.</p> <p>4 Q. When was that meeting?</p> <p>5 A. It wasn't just for me; we were invited as a watch to go</p> <p>6 and sort of have a conversation with them, tell them if</p> <p>7 we had any issues around sort of the process we would be</p> <p>8 involved with, any concerns, and that was mentioned to</p> <p>9 me at that meeting.</p> <p>10 Q. When was that meeting?</p> <p>11 A. It was this year.</p> <p>12 Q. This year?</p> <p>13 A. Yes.</p> <p>14 Q. Do you remember when this year?</p> <p>15 A. It was early part of this year, I think. But I can't</p> <p>16 give a specific date, no.</p> <p>17 Q. Where was that meeting?</p> <p>18 A. That was at a hotel in London.</p> <p>19 Q. A hotel?</p> <p>20 A. In London.</p> <p>21 Q. A hotel in London?</p> <p>22 A. Yes, down by Holland -- no, by Hyde Park.</p> <p>23 Q. Okay. And do you remember who from the</p> <p>24 Fire Brigades Union was there?</p> <p>25 A. Matt Wrack was there, and Steve White as well was there.</p> <p style="text-align: right;">Page 80</p>

<p>1 Q. And you say it was your watch.</p> <p>2 A. Yes.</p> <p>3 Q. Was that meeting just with Red Watch North Ken or any</p> <p>4 other watches?</p> <p>5 A. No, I think it was -- it was a fairly useful meeting</p> <p>6 because none of us had been -- we knew the inquiry</p> <p>7 process was coming up, so none of us had been in that</p> <p>8 environment. I believe it was going -- it wasn't just,</p> <p>9 you know, for the Red Watch at North Kensington; there</p> <p>10 was potential for other watches or people involved that</p> <p>11 night to have a meeting with the Fire Brigades Union.</p> <p>12 Q. Were you given any materials, handouts, sheets at that</p> <p>13 meeting?</p> <p>14 A. No.</p> <p>15 Q. Were you shown a slide show or any visuals?</p> <p>16 A. No. It was a very informal meeting. There was no</p> <p>17 handouts given. It was more about some -- if we had any</p> <p>18 questions or concerns about the process, because</p> <p>19 obviously the Fire Brigades Union have been involved in</p> <p>20 very similar processes to this in the past.</p> <p>21 Q. Do you remember who at that meeting mentioned</p> <p>22 Garnock Court?</p> <p>23 A. I believe it was Matt Wrack.</p> <p>24 Q. Do you remember the context in which he mentioned</p> <p>25 Garnock Court to you?</p> <p style="text-align: right;">Page 81</p>	<p>1 "External Fire Spread.</p> <p>2 "What are the issues:</p> <p>3 "Fires allowed to develop may flashover and break</p> <p>4 out through windows.</p> <p>5 "Flames spread up over or through the cladding,</p> <p>6 flames.</p> <p>7 "Flames can extend over 2m above window opening</p> <p>8 regardless of cladding.</p> <p>9 "If fire re-enters the building secondary fires may</p> <p>10 then develop."</p> <p>11 Then in bold at the bottom:</p> <p>12 "It is important that the facade does not contribute</p> <p>13 significantly to the fire spread."</p> <p>14 Now, just looking at those topics, were they</p> <p>15 something that you were aware of as at June 2017 as</p> <p>16 risks in high-rise buildings?</p> <p>17 A. I'd say some of them, but not all of them, no.</p> <p>18 Q. Well, let's take it in stages.</p> <p>19 A. Yes.</p> <p>20 Q. "Fires allowed to develop may flashover and break out</p> <p>21 through windows."</p> <p>22 As at June 2017, were you aware that was a risk?</p> <p>23 A. I'm aware of flashover as a risk, yes.</p> <p>24 Q. Next one:</p> <p>25 "Flame spread up or over or through the cladding."</p> <p style="text-align: right;">Page 83</p>
<p>1 A. I think it was just in relation to, you know, similar</p> <p>2 incidents we've had relating to the incident at</p> <p>3 Grenfell Tower in this country previously.</p> <p>4 Q. Did he say anything about what you should understand by</p> <p>5 what happened at Garnock Court?</p> <p>6 A. No.</p> <p>7 Q. What about other high-rise fires?</p> <p>8 A. No.</p> <p>9 Q. What was your take-away from the meeting you had with</p> <p>10 the Fire Brigades Union?</p> <p>11 A. It was more of the case of, you know, being an FBU</p> <p>12 member, the FBU will be fully supportive of us behind</p> <p>13 this process in terms of our welfare moving forward from</p> <p>14 that meeting.</p> <p>15 Q. Did you talk about any aspect of the evidence you were</p> <p>16 going to give at that meeting?</p> <p>17 A. No, not at all.</p> <p>18 Q. But before June 2017, you'd not heard of Garnock Court?</p> <p>19 A. No.</p> <p>20 Q. Right. Can I go back to the slide show, please.</p> <p>21 Can you please turn to page 5 or be shown page 5.</p> <p>22 Can that be expanded? Thank you.</p> <p>23 This is a page which is taken from a regulatory</p> <p>24 document I won't trouble you with identifying. It's</p> <p>25 entitled:</p> <p style="text-align: right;">Page 82</p>	<p>1 As at June 2017, were you aware that that was a risk</p> <p>2 with high-rise buildings?</p> <p>3 A. No.</p> <p>4 Q. You weren't?</p> <p>5 A. (Indicated dissent).</p> <p>6 Q. Next one:</p> <p>7 "Flames can extend over 2m above window opening</p> <p>8 regardless of cladding."</p> <p>9 Were you aware that that was a risk with high-rise</p> <p>10 buildings as at 2017?</p> <p>11 A. I would say yes, but not just specific to high-rise</p> <p>12 buildings. As I spoke about earlier,</p> <p>13 compartmentation -- windows can fail. That's not</p> <p>14 something that's unexpected.</p> <p>15 Q. No, but it's a risk that applies to high-rise buildings</p> <p>16 as any other.</p> <p>17 A. Yes, that's correct.</p> <p>18 Q. And then the last bullet point:</p> <p>19 "If fire re-enters the building secondary fires may</p> <p>20 then develop."</p> <p>21 As at June 2017, Mr Dowden, were you aware that that</p> <p>22 was a risk in relation to high-rise buildings?</p> <p>23 A. I wouldn't be able to say I was aware of that risk, no.</p> <p>24 SIR MARTIN MOORE-BICK: Were you aware of that as a risk</p> <p>25 with any sort of buildings? Because to the layman, it</p> <p style="text-align: right;">Page 84</p>

<p>1 would seem that if you get a fire breaking out in 2 a floor above, there's always the risk that it will get 3 out and go up another one.</p> <p>4 A. Yes, and -- yes. So, yes, if the fire re-enters the 5 building, secondary fires may develop, yes, because 6 that's not a phenomenon that's separate to high-rise 7 firefighting. As I said before, try and reference back 8 to compartment fire and, you know, generally windows and 9 door openings can fail.</p> <p>10 So I suppose with that in mind, yes, I can, because 11 I was aware of the coanda effect and how the further you 12 go up a high-rise, then obviously that can be an issue.</p> <p>13 So I would have to say yes, I was aware of that.</p> <p>14 Yes.</p> <p>15 MR MILLETT: But that risk is -- well, would you say that 16 that risk there, the risk of re-entry and then secondary 17 fires developing, is particularly acute in the case of 18 high-rise buildings?</p> <p>19 A. Yes, because of obviously the height issue with the 20 building.</p> <p>21 Q. Yes. And then looking at the letters in bold at the 22 bottom:</p> <p>23 "It is important that the facade does not contribute 24 significantly to the fire spread."</p> <p>25 As at June 2017, were you aware of that principle?</p> <p style="text-align: center;">Page 85</p>	<p>1 but just know about, and then if you turn the pages on 2 through to page 25 -- you can see what's between 15 and 3 25, there's an analysis of what caused the fire in the 4 facade -- "General Conclusion", let's look at this 5 together:</p> <p>6 "As a general principle the external envelop[e] of 7 the building should not contribute [in bold] to the fire 8 spread along the facade."</p> <p>9 As at June 2017, Mr Dowden, were you aware of that 10 principle?</p> <p>11 A. No.</p> <p>12 Q. No.</p> <p>13 "New construction material and method of 14 construction are being used in facades with a limited 15 understanding of their fire behaviour/performance."</p> <p>16 Were you aware that that was the case?</p> <p>17 A. No.</p> <p>18 Q. Next one:</p> <p>19 "There is a [bold] need to [bold] understand: 20 "What products are being used in the facade system 21 and their fire behaviour; and 22 "If they are used appropriately and meet the 23 relevant guidance."</p> <p>24 As at June 2017, Mr Dowden, were you aware of the 25 need to understand those matters?</p> <p style="text-align: center;">Page 87</p>
<p>1 A. No, I can't say I was because I wasn't aware that 2 combustible facades were put on the external of 3 buildings.</p> <p>4 Q. Right. Let's just look on in the document to page 15, 5 "Case Study: 20 pump Fire Shepherd's Bush", and there is 6 a picture of a high-rise building.</p> <p>7 Are you familiar with it?</p> <p>8 A. That is Shepherds Court.</p> <p>9 Q. That is Shepherds Court. I am just going to turn the 10 pages with you very quickly, if I can.</p> <p>11 You'll see the case study and the facts are set out:</p> <p>12 "Fire started on 7th floor in 2 bedroom flat with 13 rapid spread of the fire along the facade.</p> <p>14 "Fire spread from the 7th floor to the 10th floor 15 with additional damage at the 11th floor.</p> <p>16 "20 pump, 1 APL, 5 jets and BA.</p> <p>17 "Fire likely to have started from the tumble dryer 18 which was due to be repaired."</p> <p>19 Then just turning the pages on -- first of all, do 20 you remember that as an accurate summary of your own 21 experience at Shepherds Court?</p> <p>22 A. Of my own experience, yes.</p> <p>23 Q. Turning the pages on, we can just look and see what they 24 show.</p> <p>25 There was preliminary testing, which you can ignore</p> <p style="text-align: center;">Page 86</p>	<p>1 A. No.</p> <p>2 Q. No. Last sentence:</p> <p>3 "These could affect the way fires develop and spread 4 in a building."</p> <p>5 As at June 2017, were you aware of that?</p> <p>6 A. No, no, I wasn't.</p> <p>7 Q. Thank you. I think you can put that document away.</p> <p>8 Let me just ask you some general questions.</p> <p>9 Did you get any training or education about the 10 lessons learnt from the Shepherds Court fire?</p> <p>11 A. No.</p> <p>12 Q. Generally, though, is it common that fires exit one 13 compartment and spread to the one above?</p> <p>14 A. I can't say it's a common event. It does happen.</p> <p>15 Q. It does happen.</p> <p>16 A. You know, we -- I'll reference back to the Trellick 17 Tower incident we had. As I spoke about earlier, we had 18 some challenges that night and the main one was because 19 of the height of the building at Trellick Tower, it has 20 to have a wet riser. So that's basically a pipe, for 21 want of a better word, that runs the whole way up the 22 building and it is fully charged with water.</p> <p>23 We had a fire on the 27th floor and, unfortunately, 24 there was a real issue with the water supply within that 25 wet riser and we couldn't make a compartment entry for</p> <p style="text-align: center;">Page 88</p>

<p>1 approximately half an hour. And because of the</p> <p>2 construction of that building, that contained within the</p> <p>3 compartment. There was no external fire spread. It</p> <p>4 obviously developed on the outside of the building, but</p> <p>5 it didn't spread on the external, and that was a real</p> <p>6 delay because of the water supply issues we had getting</p> <p>7 into that compartment.</p> <p>8 Q. Let me ask you, then, a couple more questions about</p> <p>9 Trellick Tower and follow that up.</p> <p>10 Did you understand any differences between the two</p> <p>11 fires -- Trellick Tower, which you attended, and</p> <p>12 Shepherds Court, which you attended -- so far as</p> <p>13 compartmentation was concerned?</p> <p>14 A. No, I would have no knowledge of that. The expectation</p> <p>15 would be the same.</p> <p>16 Q. Did Trellick Tower involve a problem with</p> <p>17 compartmentation?</p> <p>18 A. Sorry, can you say that question again?</p> <p>19 Q. Did the Trellick Tower fire involve a breach of</p> <p>20 compartmentation?</p> <p>21 A. Yes, the fire, from my understanding -- it breached the</p> <p>22 compartmentation in such that the windows, again, had</p> <p>23 failed, which, again, is not an uncommon event, but it</p> <p>24 was contained and confined to that one compartment</p> <p>25 because there was no external fire spread on that</p> <p style="text-align: center;">Page 89</p>	<p>1 A. Yes, that's something that I would have to take into</p> <p>2 account as an incident commander.</p> <p>3 Q. As at June 2017, were you aware that the LFB had written</p> <p>4 to a number of London councils saying that external fire</p> <p>5 spread on high-rise residential buildings as a result of</p> <p>6 being clad in combustible panels presented a generic</p> <p>7 health and safety issue? Did you know that?</p> <p>8 A. I remember seeing some -- not internally in the LFB but</p> <p>9 I believe in the local press, in a newspaper, about</p> <p>10 a letter that had been sent to Hammersmith and Fulham</p> <p>11 Council, I believe, but I can't remember what date that</p> <p>12 was, and I think that was referencing it back to the</p> <p>13 Shepherds Court fire. But not something that was sent</p> <p>14 out internally within the London Fire Brigade, no.</p> <p>15 Q. Right. So could we say that your knowledge was as good</p> <p>16 as the person in the street about that letter?</p> <p>17 A. Yes, I would say so.</p> <p>18 Q. As at June 2017, do you think you would be able to</p> <p>19 identify a cladding fire if you saw one?</p> <p>20 A. No, I wouldn't be able to identify a cladding fire</p> <p>21 because I didn't know at that point that that was being</p> <p>22 used as a building material.</p> <p>23 Q. We're now going to turn to a different topic but one</p> <p>24 which we've been talking a little bit about this</p> <p>25 morning, which is prior visits to Grenfell Tower.</p> <p style="text-align: center;">Page 91</p>
<p>1 property.</p> <p>2 Q. No, right.</p> <p>3 You said a minute ago that -- I may not have got</p> <p>4 your exact words -- you had a fire on the 27th floor and</p> <p>5 there was a problem with the wet riser. I think you</p> <p>6 said that you had to have a wet riser because of the</p> <p>7 height of the building.</p> <p>8 As at June 2017, were you aware of at what height or</p> <p>9 over what height a high-rise building has to have a wet</p> <p>10 riser?</p> <p>11 A. Yes.</p> <p>12 Q. And what is that?</p> <p>13 A. 50 metres as at 2006. Previous to that it was</p> <p>14 60 metres.</p> <p>15 Q. Right. Well, we'll come back to revisit that in</p> <p>16 a moment when we look at Grenfell Tower in particular.</p> <p>17 Before we do, as an incident commander, would you</p> <p>18 have been aware, as at June 2017, that fire spread up</p> <p>19 the exterior of buildings with cladding was a real</p> <p>20 possibility?</p> <p>21 A. No, I didn't.</p> <p>22 Q. Is it part of your training as an incident commander,</p> <p>23 IC, to be alert or aware of the risk of failure of</p> <p>24 compartmentation because of the possibility of fire on</p> <p>25 the exterior?</p> <p style="text-align: center;">Page 90</p>	<p>1 I want to talk about your own personal experience of the</p> <p>2 building prior to the night of 14 June 2017.</p> <p>3 Now, you say on page 2 of your statement that you</p> <p>4 were familiar with Grenfell Tower, although you'd never</p> <p>5 visited it for operational reasons. That's the first</p> <p>6 sentence of the third paragraph on that page.</p> <p>7 Now, just to be clear, does that mean that you had</p> <p>8 visited the tower but had never attended a fire there?</p> <p>9 A. That's correct.</p> <p>10 Q. And you say a little lower down that North Kensington</p> <p>11 watches were asked to visit while Rydon was doing the</p> <p>12 refurbishment.</p> <p>13 A. That's correct.</p> <p>14 Q. Do you remember, was that done on a watch-by-watch</p> <p>15 basis? Did all the watches go?</p> <p>16 A. That's correct, yes. There was a particular thing with</p> <p>17 it because, as I mentioned in my statement, they were</p> <p>18 adding residential floors into the accommodation, and</p> <p>19 because of that, they had to extend the dry riser within</p> <p>20 that block, which is basically a hollow pipe that runs</p> <p>21 the internal of that building which allows the fire</p> <p>22 service to basically augment or allow water supply into</p> <p>23 that building. And currently that only started --</p> <p>24 I can't be 100 per cent sure -- I think it was either</p> <p>25 the fourth or the fifth floor, because that's where at</p> <p style="text-align: center;">Page 92</p>

<p>1 that point in time the current residential accommodation</p> <p>2 started from.</p> <p>3 So all watches were asked to familiarise themselves</p> <p>4 with that because we had to change our tactical plan for</p> <p>5 the duration of the point of when they were extending</p> <p>6 that dry riser down for the rest of the residential</p> <p>7 accommodation.</p> <p>8 The amendment to the tactical plan was that we would</p> <p>9 have had to, from my memory, not use a dry riser in</p> <p>10 its -- when it was finished in its location, when it was</p> <p>11 outside the building on the left-hand side; we would</p> <p>12 have had to haul a length of hose up onto Grenfell Walk,</p> <p>13 supplement -- and almost replicate that being a dry</p> <p>14 riser into the fourth or fifth floor where the current</p> <p>15 dry riser -- first dry riser outlet was.</p> <p>16 But that was only for the very, very short space of</p> <p>17 time, I think two or three days, until that dry riser</p> <p>18 had been extended down to ground-floor level, and then</p> <p>19 once that had been completed, we would go back to sort</p> <p>20 of the default on-arrival tactics, that we would</p> <p>21 actually plug into the dry riser inlet which was at the</p> <p>22 bottom of Grenfell Tower to the left of the main</p> <p>23 entrance.</p> <p>24 Q. Do you remember, off the top of your head, when that</p> <p>25 visit was that you looked at the dry riser and its move?</p> <p style="text-align: center;">Page 93</p>	<p>1 riser"?</p> <p>2 A. No, I didn't.</p> <p>3 Q. Who was the station manager at North Kensington at the</p> <p>4 time of your visits? I appreciate it may have changed</p> <p>5 over time.</p> <p>6 A. We did have quite a turnover of station managers through</p> <p>7 that period. Now, I can't remember if it was Station</p> <p>8 Manager Nick Davis or Station Manager Andy Walton.</p> <p>9 Q. I am just going to write some names down.</p> <p>10 A. Davis, spelt D-A-V-I-S.</p> <p>11 Q. Yes. And Andy Walton?</p> <p>12 A. Yes.</p> <p>13 Q. And roughly -- I don't intend to hold you to the</p> <p>14 dates -- you arrived at North Ken in February 2015.</p> <p>15 A. Yes.</p> <p>16 Q. Can you give me an idea of who, after your arrival</p> <p>17 there, was the station manager up until June 2017?</p> <p>18 A. My first station manager -- he's retired now -- was</p> <p>19 Station Manager Daniel Hallisey.</p> <p>20 Q. Could you spell that?</p> <p>21 A. H-A-L-L-I-S-E-Y.</p> <p>22 Q. Right.</p> <p>23 A. Then it went on to Nick Davis.</p> <p>24 Q. Right.</p> <p>25 A. Then Andy Walton.</p> <p style="text-align: center;">Page 95</p>
<p>1 A. I don't think it was in the same year as Grenfell Tower.</p> <p>2 I believe it was in -- as I said in my statement,</p> <p>3 I believe it was in the summer of 2016, but I can't</p> <p>4 confirm that.</p> <p>5 Q. Okay. We're going to look at some detailed visit dates</p> <p>6 in a moment but, before I do, can I just ask you: at any</p> <p>7 time, were you ever aware of the exact height of</p> <p>8 Grenfell Tower?</p> <p>9 A. I wouldn't say the exact height, no. The only time that</p> <p>10 would be ... no, I can't honestly say that I was aware</p> <p>11 at any moment in time that I was 100 per cent certain of</p> <p>12 the height of Grenfell Tower.</p> <p>13 Q. Were you ever aware of roughly what the height was?</p> <p>14 A. Yes, roughly, yes.</p> <p>15 Q. What was that?</p> <p>16 A. Well, you're looking at, from memory, about 20 floors,</p> <p>17 so we say it's 3 metres per floor, so I'm looking at</p> <p>18 roughly about 60 metres.</p> <p>19 Q. Did it ever occur to you that, being 60 metres, it</p> <p>20 exceeded the height at which dry risers were</p> <p>21 appropriate?</p> <p>22 A. I don't recall at any moment in time having a conscious</p> <p>23 thought that that was the case, no.</p> <p>24 Q. So you never said or thought, "Hang on a second, this</p> <p>25 building exceeds 50 metres, what is it doing with a dry</p> <p style="text-align: center;">Page 94</p>	<p>1 Q. Yes.</p> <p>2 A. And then after Andy Walton, we had Station Manager Wayne</p> <p>3 Johnson.</p> <p>4 Q. Wayne Johnson?</p> <p>5 A. Yes.</p> <p>6 Q. Who was the station manager at the time of the</p> <p>7 Grenfell Tower fire, do you remember?</p> <p>8 A. It was Station Manager Wayne Johnson.</p> <p>9 Q. It was Wayne Johnson by then. Okay.</p> <p>10 How long had he been station manager after taking</p> <p>11 over from Andy Walton?</p> <p>12 A. It was only a matter of three or four months, maybe.</p> <p>13 Q. Right. Okay, thanks.</p> <p>14 When you did your visits to Grenfell Tower, did you</p> <p>15 discuss them with the station manager, whoever it</p> <p>16 happened to be?</p> <p>17 A. I can't remember if there was a specific conversation,</p> <p>18 but there would've been some kind of confirmation that</p> <p>19 we had visited the site, because obviously there was</p> <p>20 a request from the station manager to go and visit the</p> <p>21 site. I can't recall if it was done verbally or whether</p> <p>22 that was confirmed by e-mail.</p> <p>23 Q. Okay. Can I just go back one?</p> <p>24 A. Mm-hm.</p> <p>25 Q. It just occurred to me, the list of names you've given</p> <p style="text-align: center;">Page 96</p>

<p>1 me, that's four station managers between February 2015</p> <p>2 and June 2017.</p> <p>3 A. (Nodded assent).</p> <p>4 Q. So a period of two and a half years.</p> <p>5 In your experience in the London Fire Brigade, what</p> <p>6 can you tell me about the rate of turnover of station</p> <p>7 managers at North Kensington in that period?</p> <p>8 A. I don't up until my point -- I can only talk about my</p> <p>9 experience at North Kensington. So that is quite a high</p> <p>10 turnover of officers in that period. But that's not</p> <p>11 something that doesn't happen in London Fire Brigade.</p> <p>12 Senior officers, if they get promoted, whether they --</p> <p>13 a certain skill set, they move on to different areas.</p> <p>14 That does happen. They don't tend to stay within</p> <p>15 a specific role, station, borough for a real long period</p> <p>16 of time.</p> <p>17 Q. Okay. Now, you say in your statement that you think</p> <p>18 that your watch, Red Watch that is --</p> <p>19 A. Yes.</p> <p>20 Q. -- visited in the summer of 2016. Did you go on that</p> <p>21 visit?</p> <p>22 A. Yes, I did.</p> <p>23 Q. You did. Do you recall that independently, from your</p> <p>24 own memory --</p> <p>25 A. Yes.</p> <p style="text-align: center;">Page 97</p>	<p>1 would go to -- it's not specific to high-rise blocks,</p> <p>2 but we would go to an area that has been identified as</p> <p>3 being a high risk in terms of potential of fire, or</p> <p>4 vulnerable people have been identified. And we would go</p> <p>5 to that building, that premise, and what we would do is</p> <p>6 we would print off some paperwork to take with us, and</p> <p>7 that would allow us to speak to the residents within</p> <p>8 that block and give them some advice, fire safety</p> <p>9 advice, you know, what to do in the event of a fire, and</p> <p>10 look at some basic fire safety within the home, some bad</p> <p>11 practices, general sort of -- you know, overloading of</p> <p>12 sockets, you know, bedtime routines.</p> <p>13 Specifically to high-rise blocks, what to do in the</p> <p>14 event of a fire in terms of, you know, referencing</p> <p>15 that -- what we spoke to earlier, referencing it back to</p> <p>16 the stay-put policy, that generally within a high-rise</p> <p>17 block, if your flat is affected -- you have a fire in</p> <p>18 your flat and it's safe to do so, then leave your</p> <p>19 property and make your way safely through the communal</p> <p>20 areas.</p> <p>21 Q. What is HFSV --</p> <p>22 A. Home fire safety visit. That is not something that</p> <p>23 just -- a group visit allows us to go out and identify</p> <p>24 a larger premise, generally for high-rise blocks, where</p> <p>25 we can, you know, for want of a better word, reach our</p> <p style="text-align: center;">Page 99</p>
<p>1 Q. -- or have you seen a document that reminded you of it?</p> <p>2 A. No, I recall that from my own memory.</p> <p>3 Q. Now, can I just ask you to look at tab 11 of the bundle</p> <p>4 of documents and a list of visits that we've been</p> <p>5 provided with. This is LFB00003111. It's a two-page</p> <p>6 document. We've got it up there on the screen.</p> <p>7 Can I ask you, please, to look at the Red Watch</p> <p>8 visit for 2 February 2016. It's about just below</p> <p>9 halfway down the page. You'll see there that there are</p> <p>10 two entries with the same date but different times,</p> <p>11 12 o'clock and 11 o'clock in the morning, North</p> <p>12 Kensington and it's Red Watch, and the one at 12 o'clock</p> <p>13 is outside duty.</p> <p>14 Do you see, reading across the page, "High-rise</p> <p>15 premises 7(2)d"?</p> <p>16 A. Yes.</p> <p>17 Q. Then underneath that at 11 o'clock, which presumably</p> <p>18 preceded it, "HFSV Group Risk Visit -- Done"?</p> <p>19 A. Yes.</p> <p>20 Q. "G271, G272 Grenfell Tower."</p> <p>21 First of all, let's just go through this document,</p> <p>22 starting with the one you did at 11 o'clock, which is</p> <p>23 "HFSV Group Risk Visit". What is an HFSV group risk</p> <p>24 visit?</p> <p>25 A. So that's a community fire safety based event where we</p> <p style="text-align: center;">Page 98</p>	<p>1 target audience in the most productive way.</p> <p>2 We do do single dwelling home fire safety visits as</p> <p>3 well, but the GRVs are where we've identified particular</p> <p>4 people at -- any vulnerability to high-rise blocks, that</p> <p>5 would facilitate a group risk visit.</p> <p>6 Q. You said in your answer that you would go to an area</p> <p>7 that has been identified as being a high risk in terms</p> <p>8 of potential of fire.</p> <p>9 Can I just explore that a little bit.</p> <p>10 A. Yes.</p> <p>11 Q. The high risk in terms of potential of fire, is that</p> <p>12 occupant-driven risk or is it the building?</p> <p>13 A. That's occupant driven. So we look at -- we call it P1</p> <p>14 people, P1 persons and P1 postcodes. Now, that means</p> <p>15 priority 1. So the reference to the P1 postcode, that</p> <p>16 is anywhere that has had a previous fire, a building</p> <p>17 fire, and that postcode will flag up as being P1. So</p> <p>18 because that's happened, we generally will sort of look</p> <p>19 at that area for trends if there's other fires and we'll</p> <p>20 concentrate our home fire safety visits on that area.</p> <p>21 P1 people are generally people who have been</p> <p>22 identified through other agencies, whether it's alcohol</p> <p>23 or drug misuse, vulnerable residents, whether it's, you</p> <p>24 know, social housing, whether there's a lone parent with</p> <p>25 children, dependants, and that -- we have certain</p> <p style="text-align: center;">Page 100</p>

<p>1 postcodes, again, where we will be able to identify that</p> <p>2 by -- I can't remember the process behind how that is</p> <p>3 identified but, yeah, it's looking at certainly</p> <p>4 postcodes where we've had previous fires and also trying</p> <p>5 to sort of identify the most vulnerable people within</p> <p>6 the community that would be potentially more susceptible</p> <p>7 to fire risk.</p> <p>8 Q. And do you remember what it was about Grenfell Tower in</p> <p>9 particular that made it more vulnerable to that kind of</p> <p>10 risk?</p> <p>11 A. I don't know if it was Grenfell Tower itself. It was</p> <p>12 more that, you know, it was a social housing block, and</p> <p>13 it was, you know, specific that we would maybe target</p> <p>14 these high-rise blocks that were social housing. So</p> <p>15 there's nothing from my understanding that would stick</p> <p>16 out, the risk from the building. It was more the actual</p> <p>17 P1 people, the vulnerable people, that potentially would</p> <p>18 live inside that block.</p> <p>19 Q. What kind of detailed information did you have about the</p> <p>20 makeup of the population within the block to enable you</p> <p>21 to come to a decision or view that it was high risk so</p> <p>22 as to deserve an HSFV visit?</p> <p>23 A. The only thing I can reference that back to, and I can't</p> <p>24 remember if that is the case that actually happened with</p> <p>25 that visit, but it would be the -- I remember having</p> <p style="text-align: right;">Page 101</p>	<p>1 A. They're the same.</p> <p>2 Q. They're the same. And a 7(2)d visit, is it formal?</p> <p>3 A. Yes, it's a fairly formal process, yes.</p> <p>4 Q. Right. Okay, we'll come back to that in a minute.</p> <p>5 Just in terms of this 7(2)d visit, you went on that.</p> <p>6 Is there anything that you remember particularly,</p> <p>7 standing here now, about what you saw or learnt on that</p> <p>8 visit?</p> <p>9 A. If it was the same one where we went to reference it</p> <p>10 back to where they were extending the dry riser, I think</p> <p>11 that's the only thing I can really remember in terms</p> <p>12 of ...</p> <p>13 Q. Okay.</p> <p>14 You say in your statement, in fact, that you were</p> <p>15 asked to familiarise yourself with the dry risers and</p> <p>16 amendments to approaches to the tower.</p> <p>17 A. Yes.</p> <p>18 Q. Who asked you to familiarise yourself with those things?</p> <p>19 A. From memory, it was the station manager at the time at</p> <p>20 North Kensington.</p> <p>21 Q. So that would be Mr Hallisey, would it?</p> <p>22 A. I --</p> <p>23 Q. Sorry, Nick Davis?</p> <p>24 A. I can't remember -- it would be one of the two, either</p> <p>25 Nick Davis or Andy Walton, Station Manager Andy Walton.</p> <p style="text-align: right;">Page 103</p>
<p>1 a spreadsheet at the station that had postcodes that</p> <p>2 were identified as risk areas, so whether that would be</p> <p>3 from where we had previous fires or from sort of</p> <p>4 information gathering that had been done, the</p> <p>5 concentration of the people within that area, or that</p> <p>6 block, were at risk.</p> <p>7 Q. Going back to the spreadsheet if I can, then, you then</p> <p>8 do at noon on 2 February 2016, "Outside Duty, High-rise</p> <p>9 premises 7(2)d". What was that?</p> <p>10 A. So an outside duty is a system that we have in place in</p> <p>11 London Fire Brigade. It's not just specific to</p> <p>12 high-rise premises. So if there's a building or premise</p> <p>13 on our station's ground that has a particular --</p> <p>14 proposed a particular risk to firefighters, then we can</p> <p>15 go out by a process called a 7(2)d familiarisation visit</p> <p>16 and we can gather certain information from that block,</p> <p>17 that premise, that building, that allows us to input</p> <p>18 that onto an LFB system in terms of what risks or</p> <p>19 processes are in that premise that could cause risk to</p> <p>20 firefighters if we get a incident at that premise.</p> <p>21 Q. Now, you referred to it in your answer just now as</p> <p>22 a 7(2)d familiarisation visit, but I think some people</p> <p>23 refer to them as different things. Can I just</p> <p>24 understand what you understand by a 7(2)d visit. Is it</p> <p>25 the same as or different from a familiarisation visit?</p> <p style="text-align: right;">Page 102</p>	<p>1 Q. Right, either Nick Davis or Andy Walton. All right.</p> <p>2 Was there a document that you were given setting out</p> <p>3 your instructions as to what you should look at on that</p> <p>4 visit?</p> <p>5 A. I cannot remember.</p> <p>6 Q. Do you remember on that visit whether the building was</p> <p>7 being refurbished?</p> <p>8 A. From my memory, yes, it was.</p> <p>9 Q. Were you asked to look at anything else other than the</p> <p>10 dry risers and the amendments to the approaches?</p> <p>11 A. From memory, on that visit we -- I do remember sort of</p> <p>12 liaising with a -- whether it's the site manager or</p> <p>13 a contractor from Rydon's, and I do remember him</p> <p>14 speaking to us about the -- that they had a panel in the</p> <p>15 ground floor lobby area, which was a smoke extract panel</p> <p>16 system, and from my understanding, how it worked was</p> <p>17 that you'd have a detector head in all the communal</p> <p>18 lobby areas in the flats, and how it works is if that</p> <p>19 detector head -- there's a fire in a compartment, smoke</p> <p>20 comes out into the lobby area, that detector head will</p> <p>21 actuate. It will send a signal down to that alarm</p> <p>22 panel. It was obviously to show data that there has</p> <p>23 been activation on that floor, and the what we call</p> <p>24 automatic opening vent on that floor should clear any</p> <p>25 smoke or carbonaceous environment into the protective</p> <p style="text-align: right;">Page 104</p>

<p>1 shaft, and then take the products of combustion up out 2 of a vent on the top of Grenfell Tower.</p> <p>3 Q. Do you remember the name of the site manager or 4 contractor from Rydon that you spoke to?</p> <p>5 A. No, no, I don't.</p> <p>6 Q. So you told us about the AOV. Did you learn anything 7 else from Rydon on that visit about the refurbishment 8 which was relevant to your assessment of fire safety?</p> <p>9 A. I can't remember, the only other thing I remember doing 10 is there was a boxing gym, I believe, and he showed us 11 the boxing gym. We had a look in the boxing gym. 12 That's obviously nothing to do in terms of the fire 13 safety measures. I think the main thing was -- yes, the 14 smoke extract system that was obviously located in the 15 panel, how it was operated, how it should operate.</p> <p>16 Q. Did you learn anything about the building construction 17 and the materials being used?</p> <p>18 A. Not that I can recall, no.</p> <p>19 Q. Did you look at the exterior?</p> <p>20 A. I would've looked at the exterior.</p> <p>21 Q. Did you look at it critically, though, from a fire 22 safety point of view?</p> <p>23 A. No.</p> <p>24 Q. Did you notice the rainscreen cladding?</p> <p>25 A. I didn't notice the rainscreen cladding because I wasn't</p> <p style="text-align: center;">Page 105</p>	<p>1 where they were extending the residential accommodation.</p> <p>2 But I can't remember, you know, how far up I went 3 into the tower, if at all. I really can't recall that.</p> <p>4 Q. Did you note the fact that it had a single protected 5 escape route?</p> <p>6 A. If I'm honest, at that point in time, I don't think 7 I did, no.</p> <p>8 Q. Did you notice anything about whether there were or 9 weren't any sprinklers?</p> <p>10 A. No.</p> <p>11 Q. Did you notice anything about the layout of the lobbies 12 outside the flats?</p> <p>13 A. I do remember -- I can't remember if it was from that 14 visit or from the night, but I obviously do remember 15 that in the lobbies there were the dry riser outlets. 16 So, from memory, as you came up -- if you were standing 17 in the lobby, to your left-hand side there was a dry 18 riser outlet.</p> <p>19 Q. Do you remember having any views at the time of your 20 visit about whether the dry riser outlet on each floor 21 in the lobby was in an appropriate place or not?</p> <p>22 A. Not at that moment in time, no.</p> <p>23 Q. Did anybody show you the lifts?</p> <p>24 A. I can't recall if we were shown the lifts.</p> <p>25 Q. Did anybody say anything about whether the lifts were</p> <p style="text-align: center;">Page 107</p>
<p>1 aware at that time that there was such thing as 2 rainscreen cladding.</p> <p>3 Q. No. Perhaps it was a slightly unfair question. 4 At the time of your visit, in what condition was the 5 exterior? Was it under construction or had it been 6 completed?</p> <p>7 A. I don't think it had -- I think it was still under 8 construction.</p> <p>9 Q. Did you ask any questions about what was going up on the 10 exterior of the building?</p> <p>11 A. No.</p> <p>12 Q. Did anybody show you round the building?</p> <p>13 A. Yes. I think the contractor we met on site did show us 14 around the building, yes.</p> <p>15 Q. Did you go up the tower? Did you go up the building?</p> <p>16 A. I can't recall if we went up the building.</p> <p>17 Q. Did you note or do you remember noting anything about 18 the layout of the lobbies and the stair?</p> <p>19 A. The only time I remember, I think, going into the 20 building, I was up at the Grenfell Walk that came into 21 obviously Grenfell Tower, and I remember I was in the 22 staircase and I think they were doing the extension to 23 the -- putting the increase in residential 24 accommodation. I remember being around that sort of 25 area, and it was like -- there was boarding maybe to</p> <p style="text-align: center;">Page 106</p>	<p>1 fire lifts or firefighting lifts?</p> <p>2 A. I can't remember.</p> <p>3 Q. Okay.</p> <p>4 We're going to dig a little bit more into the 5 detail, and what I'm going to show you is a number of 6 policies. I'm going to looking at GRA 3.2 and 663. But 7 the reason I'm doing it, Mr Dowden, just so you know, is 8 really by way of a shopping list, so you know why I'm 9 asking you.</p> <p>10 Can I ask you, then, to go to GRA 3.2, which is 11 policy bundle, tab 7, and turn, please, internally to 12 page 16. On page 16, which I think is page 18 in the 13 Relativity reference, so internal page 16.</p> <p>14 This is a list of bullet points which is contained 15 in a passage which starts two pages before, which you 16 don't need to look at, called "Key control measures, 17 Planning". And some way into that section -- just so 18 you're clear and I'm clear, this is the national 19 guidance:</p> <p>20 "Information to be gathered in relation to high-rise 21 incidents should include ..."</p> <p>22 You can just see the shopping list and the wording 23 at the top.</p> <p>24 Now, you've told us this morning that you're not 25 familiar with the policy and I understand that, but</p> <p style="text-align: center;">Page 108</p>

1 I just want to go down the shopping list to see whether,
2 when you did your 7(2)d visit in February 2016, these
3 items on the shopping list were checked or not.
4 First of all:
5 "Access for the siting of appliances, firefighters
6 and equipment."
7 Did you look at that?
8 **A. I would say yes, because we knew where to site the**
9 **appliances because obviously there was only one route**
10 **into Grenfell Tower, and that's Grenfell Road, and we**
11 **needed to know how to site those appliances in terms of**
12 **how to supply the dry rising main.**
13 Q. The next one:
14 "Availability of information for firefighters."
15 Did you look at that?
16 **A. It's quite a broad statement, I mean --**
17 Q. Yes. It is. Let me see if I can make it a bit more
18 specific.
19 For example, when you did your visit, did you work
20 out where you'd find plans to the building?
21 **A. If I'm honest, I can't recall and I don't think we did,**
22 **no.**
23 Q. Do you remember looking for a premises information box?
24 **A. Not on that visit, but I know that's something that**
25 **generally would installed in a high-rise premise.**

Page 109

1 Q. Right. Do you remember on your visit actually going out
2 and looking for it?
3 **A. No.**
4 Q. You don't?
5 MR SEAWARD: Sir, I'm sorry to interrupt, I wonder if
6 a short break might be a good idea. It's just I have
7 been looking at the demeanour of the witness over the
8 last two or three minutes and he seems to have -- his
9 eyes have reddened and he looks a little bit less
10 secure.
11 SIR MARTIN MOORE-BICK: How are you feeling, Mr Dowden?
12 THE WITNESS: A break would be nice, if that's okay, please.
13 SIR MARTIN MOORE-BICK: Thank you, Mr Seaward.
14 Would 5 minutes be enough for the moment?
15 THE WITNESS: Yes.
16 SIR MARTIN MOORE-BICK: Do think about what I said about
17 sitting down if you would find it more comfortable. You
18 might find it a bit more relaxing.
19 All right, I'll rise for 5 minutes then.
20 NEW SPEAKER: Thank you very much.
21 (12.37 pm)
22 (A short break)
23 (12.45 pm)
24 SIR MARTIN MOORE-BICK: Mr Dowden, are you happy to carry
25 on?

Page 110

1 THE WITNESS: Yes.
2 SIR MARTIN MOORE-BICK: We'll be stopping for lunch before
3 very long and give you a longer break.
4 Yes, Mr Millett.
5 MR MILLETT: Mr Dowden, are you happy to carry on for
6 another 20 or so minutes?
7 **A. Yes.**
8 Q. If not, if you want another break, just let me know.
9 Back to the shopping list if we could, please.
10 Height of building. When you went on this visit --
11 oh, sorry, forgive me, we'll come back to that in
12 a moment.
13 I did need to ask you about this visit in 2016. Who
14 else from Red Watch visited Grenfell Tower with you on
15 that trip?
16 **A. Without having the information in front of me,**
17 **I couldn't actually reel off any of the actual sort of**
18 **list of other attendees in terms of the firefighters or**
19 **any other junior officers that were there. That would**
20 **be difficult to --**
21 Q. No. To be fair to you, Mr Batterbee, Charlie Batterbee,
22 says he went on it. Would that --
23 **A. That would confirm, yes. That would be right, yes.**
24 Q. Do you remember, were you the most senior person from
25 North Ken Red Watch on that visit?

Page 111

1 **A. I would've been, yes.**
2 Q. Yes.
3 Can I then go back to the shopping list and ask you
4 what I was going to ask you, which was about the height
5 of the building.
6 On that visit, did you look at it? Did you make
7 an assessment of the height of the building?
8 **A. I don't remember making a conscious decision in terms of**
9 **the actual recording the height of the building, just,**
10 **you know, noting and understanding it was a high-rise**
11 **block.**
12 Q. You've answered my question about lifts.
13 Can I just ask you about evacuation protocols. Can
14 you see there's a bullet point a little lower down:
15 "Evacuation protocols for the building (such as a
16 'Stay Put' policy, phased or full evacuation. Please
17 see Approved Document B ..."
18 I won't ask you about that.
19 But in terms of evacuation protocols for the
20 building, on your visit, did you make an assessment of
21 what those evacuation protocols for Grenfell Tower were?
22 **A. I can't recall I did, no.**
23 Q. No. This policy does say, "Please see
24 Approved Document B paragraph 4.27".
25 I've got to ask this question really: have you ever

Page 112

28 (Pages 109 to 112)

<p>1 heard of Approved Document B?</p> <p>2 A. No.</p> <p>3 Q. No.</p> <p>4 Evacuation protocols. On the subject of evacuation,</p> <p>5 when you did your visit, did you find out what the</p> <p>6 standing advice to residents was in the case of a fire?</p> <p>7 A. I may have done. I can't recall, you know, with the</p> <p>8 interaction I had with the contractor from Rydon, that</p> <p>9 could've been covered, but this is something I can't</p> <p>10 recall, unfortunately.</p> <p>11 Q. No.</p> <p>12 Could I ask you to look at a document -- it's</p> <p>13 a photograph -- in tab 12, the documents bundle. This</p> <p>14 is a photograph. Its reference is BLA00002416 and it's</p> <p>15 taken by our expert in this inquiry Dr Barbara Lane, and</p> <p>16 it's a photograph taken between the lifts within</p> <p>17 Grenfell Tower after the fire.</p> <p>18 Is this familiar?</p> <p>19 A. That particular document isn't familiar; however, I have</p> <p>20 seen -- that is a fairly common feature within high-rise</p> <p>21 blocks, particularly if it's managed by a local</p> <p>22 authority, and that would usually be in the lobby areas</p> <p>23 at lifts to inform obviously residents of what to do in</p> <p>24 the event of a fire.</p> <p>25 Q. Right. Did you see this sign or something like it on</p> <p style="text-align: center;">Page 113</p>	<p>1 A. No.</p> <p>2 Q. Did you investigate whether there were any elderly</p> <p>3 people within the block who might need help getting out?</p> <p>4 A. No.</p> <p>5 Q. And what about people with mobility challenges or</p> <p>6 children?</p> <p>7 A. Not that I can remember, no.</p> <p>8 Q. During your visits, did you or your team you were with</p> <p>9 give any particular advice to the residents that you</p> <p>10 found there about evacuation?</p> <p>11 A. Not that I can recall, because my understanding was the</p> <p>12 building was still in its refurbishment stage, so</p> <p>13 I don't remember interacting or speaking with any</p> <p>14 residents, no.</p> <p>15 Q. All right, okay.</p> <p>16 Can I ask you to go back to the shopping list on</p> <p>17 page 16 of the GRA, please, and look at the next item</p> <p>18 down:</p> <p>19 "Location, control and status of any fixed</p> <p>20 installation and fire suppression system and the</p> <p>21 facilities provided for the Fire and Rescue Authority,</p> <p>22 such as firefighting shafts, rising mains and</p> <p>23 ventilation systems."</p> <p>24 To the best of your recollection, Mr Dowden, do you</p> <p>25 remember looking at any of those matters or those things</p> <p style="text-align: center;">Page 115</p>
<p>1 your 2016 visit?</p> <p>2 A. I can't honestly say I recall seeing that.</p> <p>3 Q. Okay. Let's just look at the advice it says in the</p> <p>4 middle:</p> <p>5 "If you are safely within your flat & there is</p> <p>6 a fire elsewhere in the block.</p> <p>7 "You should initially be safe to stay in your flat</p> <p>8 keeping the the doors and windows closed.</p> <p>9 "On arrival the Fire Brigade will make an assessment</p> <p>10 and will assist with evacuation if required."</p> <p>11 In your experience, was that advice normal advice to</p> <p>12 give to residents in a high-rise block?</p> <p>13 A. Yes.</p> <p>14 Q. It is.</p> <p>15 Did you investigate on your visit what else, if</p> <p>16 anything, the building owner had done to ensure that its</p> <p>17 residents understood what to do in the event of a fire?</p> <p>18 A. I can't recall if that conversation took place, no.</p> <p>19 Q. Did you investigate whether there were persons in the</p> <p>20 block whose command of English might obstruct their</p> <p>21 understanding of that advice?</p> <p>22 A. I can't recall.</p> <p>23 Q. Did you investigate whether there were children in the</p> <p>24 block who might need help in the event of a need to</p> <p>25 evacuate?</p> <p style="text-align: center;">Page 114</p>	<p>1 on your visit in February 2016?</p> <p>2 A. That was something we looked at because the purpose of</p> <p>3 the visit was detailing the extension of the dry riser.</p> <p>4 Obviously it was explained to us about the smoke extract</p> <p>5 system, how it operated. Yes. So, yes, we did.</p> <p>6 Q. Did you look, first of all, at the doors between the</p> <p>7 protected stair and the lobbies?</p> <p>8 A. I can't recall that happened, no.</p> <p>9 Q. Am I right in thinking that you didn't ask anybody about</p> <p>10 the fire rating for those doors?</p> <p>11 A. No. I mean, the expectation is they should be, you</p> <p>12 know, 60-minute fire rated doors, but I can't remember</p> <p>13 if that conversation -- or had that conversation or</p> <p>14 asked that question, no.</p> <p>15 Q. What about the front doors of the flats leading out from</p> <p>16 the individual flats in Grenfell Tower to the lobbies?</p> <p>17 Did you ask about how those were fire rated?</p> <p>18 A. I can't recall, no.</p> <p>19 Q. Looking at the next bullet point down:</p> <p>20 "The layout, compartmentalisation and size of the</p> <p>21 building, including specific features such as atria or</p> <p>22 security features such as grilles or reinforced doors."</p> <p>23 I am interested in layout, compartmentalisation and</p> <p>24 size of the building.</p> <p>25 On your visit in February 2016, did you look and</p> <p style="text-align: center;">Page 116</p>

<p>1 gather information about that?</p> <p>2 A. I think -- I can't be sure of this because obviously we</p> <p>3 do have a number of high-rise blocks on North</p> <p>4 Kensington's ground, so I think there was a conversation</p> <p>5 in terms of how to access the main entrance into</p> <p>6 Grenfell Tower, but I can't be specific if it was on</p> <p>7 that visit or if it was something that we generally</p> <p>8 would ask on a familiarisation of a high-rise block,</p> <p>9 because obviously it's secure access, you know, because</p> <p>10 it's a residential block, and generally in terms of the</p> <p>11 security features -- and that isn't generally specific</p> <p>12 just to Grenfell Tower -- our access would be by what we</p> <p>13 call an express key. So it allows firefighters to</p> <p>14 override that and enter a high-rise premise or, you</p> <p>15 know, a secure residential premise.</p> <p>16 Q. Yes, yes. I'm going to come back to that. An express</p> <p>17 key, is that like a drop key?</p> <p>18 A. A drop key, yes.</p> <p>19 Q. A drop key. I'll come back to the drop key shortly.</p> <p>20 While I'm still on this list, I'll stick to it.</p> <p>21 Just a couple down, you see:</p> <p>22 "Effectiveness of communications and identification</p> <p>23 of any radio 'blind spots'."</p> <p>24 On your visit, did you look at that?</p> <p>25 A. Again, I can't recall that's something that happened,</p> <p style="text-align: center;">Page 117</p>	<p>1 welcome another break.</p> <p>2 MR MILLETT: Very well. These are quite important</p> <p>3 questions, Mr Chairman, so perhaps --</p> <p>4 SIR MARTIN MOORE-BICK: Of course. Would you rather break</p> <p>5 now for lunch and come back?</p> <p>6 MR MILLETT: Let's break now.</p> <p>7 Mr Dowden, I'm sorry, I'm in the middle of</p> <p>8 a question but I think it's probably right that you have</p> <p>9 a break -- we all have a break.</p> <p>10 So, Mr Chairman, I'm in your hands.</p> <p>11 SIR MARTIN MOORE-BICK: Well, in that case, we'll stop for</p> <p>12 lunch now and we'll resume at 2.15, which is a slightly</p> <p>13 longer lunch hour than usual but you have all been</p> <p>14 sitting there for quite a long time.</p> <p>15 Mr Dowden, just remember what I said earlier: don't</p> <p>16 talk about the matters to which you're giving evidence</p> <p>17 or the inquiry or anything. You might want to talk</p> <p>18 about the football or something like that instead. All</p> <p>19 right?</p> <p>20 2.15, please.</p> <p>21 (1.00 pm)</p> <p>22 (The short adjournment)</p> <p>23 (2.15 pm)</p> <p>24 SIR MARTIN MOORE-BICK: Could we have Mr Dowden back,</p> <p>25 please.</p> <p style="text-align: center;">Page 119</p>
<p>1 no.</p> <p>2 Q. No.</p> <p>3 Next one:</p> <p>4 "Building construction features, such as the</p> <p>5 presence and location of maisonette-style construction,</p> <p>6 sandwich panels, timber framing, cladding systems,</p> <p>7 surface mounted trunking, ducting and voids, in addition</p> <p>8 to features which present a specific hazard, such</p> <p>9 asbestos."</p> <p>10 Now, that's a fairly long list of things that you</p> <p>11 are required to look at in relation to building</p> <p>12 construction features.</p> <p>13 The question is: when you went on your 7(2)d visit</p> <p>14 in February 2016, did you look at building construction</p> <p>15 features generally, first of all?</p> <p>16 A. Again, that's something I can't recall, no.</p> <p>17 Q. What about --</p> <p>18 SIR MARTIN MOORE-BICK: How are you getting on with the</p> <p>19 list?</p> <p>20 MR MILLETT: I am going to ask about sandwich panels and</p> <p>21 cladding systems.</p> <p>22 SIR MARTIN MOORE-BICK: Is that going to be the last bit for</p> <p>23 the moment?</p> <p>24 MR MILLETT: Yes.</p> <p>25 SIR MARTIN MOORE-BICK: Because I think the witness might</p> <p style="text-align: center;">Page 118</p>	<p>1 MR MILLETT: Please.</p> <p>2 (Pause)</p> <p>3 SIR MARTIN MOORE-BICK: All right, Mr Dowden, happy to carry</p> <p>4 on?</p> <p>5 THE WITNESS: Yes.</p> <p>6 SIR MARTIN MOORE-BICK: Let me know if you need a break at</p> <p>7 any point.</p> <p>8 THE WITNESS: Will do, thank you.</p> <p>9 SIR MARTIN MOORE-BICK: Yes, Mr Millett.</p> <p>10 MR MILLETT: Mr Dowden, I was in the middle of a question</p> <p>11 when we stopped based on the generic risk assessment</p> <p>12 3.2, which I appreciate is a document or policy you are</p> <p>13 not familiar with.</p> <p>14 Can I just take a step back and try to shorten</p> <p>15 things a little bit.</p> <p>16 A. Yes.</p> <p>17 Q. In terms of your seniority as a watch manager, could you</p> <p>18 put some context around that?</p> <p>19 So who would be below you as a watch manager at</p> <p>20 North Kensington?</p> <p>21 A. I have two junior officers at the rank of crew manager</p> <p>22 and I had two of those at the time of the fire in June</p> <p>23 2017.</p> <p>24 (Pause for technical reasons)</p> <p>25 SIR MARTIN MOORE-BICK: Thank you very much.</p> <p style="text-align: center;">Page 120</p>

<p>1 Sorry about that interruption.</p> <p>2 Mr Millett.</p> <p>3 MR MILLETT: Mr Chairman.</p> <p>4 Mr Dowden, can I continue with my question just</p> <p>5 about your seniority and where you fit into the London</p> <p>6 Fire Brigade hierarchy.</p> <p>7 So you've explained who was junior to you at the</p> <p>8 time of the Grenfell Tower fire at North Kensington.</p> <p>9 Could you just explain the seniority of the ranks above</p> <p>10 you?</p> <p>11 A. So above me there will be a station manager who would be</p> <p>12 responsible for the running of all four watches at North</p> <p>13 Kensington, and that would be replicated across all</p> <p>14 London fire stations.</p> <p>15 Above that, you'll have what we call a group</p> <p>16 manager, a borough commander. So in respect of North</p> <p>17 Kensington, the borough commander would be in charge of</p> <p>18 the Kensington and Chelsea borough, and that includes</p> <p>19 North Kensington fire station, Chelsea fire station and</p> <p>20 Kensington fire station.</p> <p>21 Above that, you have a deputy assistant</p> <p>22 commissioner, who would be in charge of an area, and</p> <p>23 there's four areas within the London Fire Brigade. The</p> <p>24 area I work within is the southwest area, so a deputy</p> <p>25 assistant commissioner would be in charge of that</p> <p style="text-align: right;">Page 121</p>	<p>1 responsible for ensuring that watches that do 7(2)d</p> <p>2 visits look at the things on the list?</p> <p>3 A. The 7(2)d process for us is sort of a system, so local</p> <p>4 crews will go out to visit a premise, they will gather</p> <p>5 the relevant information and this will be uploaded on to</p> <p>6 a Brigade system called the ORD, the operational risk</p> <p>7 database.</p> <p>8 Once the information has been uploaded onto the</p> <p>9 operational risk database and that's been submitted,</p> <p>10 then that will go through to the relevant station</p> <p>11 manager of that particular station, a verification. If</p> <p>12 the station manager is happy with the quality of that</p> <p>13 information, then that will then get further submitted</p> <p>14 to our PDA section, which is a predetermined attendance</p> <p>15 section, who have overriding sort of authorisation on</p> <p>16 that.</p> <p>17 If at any one of those two points, the assurance</p> <p>18 points, the station manager, or our PDA department</p> <p>19 aren't happy with the quality of the information that's</p> <p>20 been gathered, then they can refer that back to station</p> <p>21 level, and within the ORD -- operational review</p> <p>22 database -- system, they can annotate comments against</p> <p>23 that and point the station personnel in the right</p> <p>24 direction in terms of where the information is lacking.</p> <p>25 Q. Thank you.</p> <p style="text-align: right;">Page 123</p>
<p>1 specific area and all the stations will that area.</p> <p>2 Above them, you have ACs, and they are in charge of</p> <p>3 specific fire stations, quality assurance, et cetera,</p> <p>4 and above that you have director level, which is you</p> <p>5 have the commissioner, director for contracts and</p> <p>6 financial services, director of operations and director</p> <p>7 of safety and assurance.</p> <p>8 Q. Right. Thank you very much.</p> <p>9 Now, I asked you some questions earlier about the</p> <p>10 generic risk assessment 3.2, and you did explain that it</p> <p>11 wasn't a document you were familiar with.</p> <p>12 Can I show you the London Fire Brigade policy for</p> <p>13 high-rise firefighting, which is policy 633, which is in</p> <p>14 tab 4 of the policies bundle which we looked at before.</p> <p>15 Can I ask you, please, to turn to internal page 19,</p> <p>16 appendix 1. This is a list of things that, on 7(2)d</p> <p>17 visits, personnel should ensure they're familiar with</p> <p>18 and their impact on firefighting and search and rescue</p> <p>19 operations. You can see there on the screen a long list</p> <p>20 of things.</p> <p>21 My question is: is that list familiar to you from</p> <p>22 policy 633?</p> <p>23 A. It's something I've seen in the past, yes.</p> <p>24 Q. Yes. And when you do 7(2)d visits, who at North</p> <p>25 Kensington or in the London Fire Brigade generally is</p> <p style="text-align: right;">Page 122</p>	<p>1 Looking at this shopping list and picking up the</p> <p>2 line of questions I was asking you about before we broke</p> <p>3 for lunch, can you see that about halfway down this</p> <p>4 bullet point list, there's a reference to floor layouts</p> <p>5 and any building construction features? I'll go on:</p> <p>6 "Floor layouts and any building construction</p> <p>7 features which may promote rapid or abnormal fire</p> <p>8 spread, such as sandwich panels, timber-framed</p> <p>9 construction, atria or voids."</p> <p>10 On your visits to Grenfell Tower that we saw earlier</p> <p>11 this morning in 2016, did you look at any of those</p> <p>12 features?</p> <p>13 A. The only one I can really have any recollection of would</p> <p>14 be the floor layouts itself.</p> <p>15 Q. I know it doesn't say cladding in this list, but can</p> <p>16 I just ask: did you, when you did your 7(2)d visit at</p> <p>17 Grenfell Tower, look at the cladding?</p> <p>18 A. That's something I didn't look at, I wasn't aware of,</p> <p>19 and having known what I know now, that's something</p> <p>20 I would've looked at without a doubt.</p> <p>21 Q. Thank you.</p> <p>22 Just a couple more questions on visits.</p> <p>23 Can I ask you to look at bundle-tab 27, which is</p> <p>24 a run of e-mails the reference to which is LFB0000129</p> <p>25 and following, and I just want to show you this,</p> <p style="text-align: right;">Page 124</p>

<p>1 Mr Dowden, just to see if I can prompt your recollection 2 of a visit in the summer of 2016. 3 If you go to that run of e-mails and turn to page -- 4 well, it's 00001135.1 and .2. If we start with .2 -- 5 like all e-mails, they're backwards. 6 Mr Trial Director, if you can go to the next 7 document in the run. Right, thank you. 8 You'll see at the top of the page, this is an e-mail 9 from Nicholas Davis to you, Mr Dowden, dated 10 20 July 2016: 11 "Subject: Grenfell -- advising LFB operational crews 12 of works completion. 13 "Importance: High. 14 "Mike, 15 "Could you contact Janice Wray regarding the request 16 to attend Tuesday morning. You have a QA1 with GM 17 Davies scheduled but he will be away on leave so that 18 will not happen. This will be a good opportunity for 19 crews to ask any questions with the site agent before 20 they leave." 21 And your response to that comes on the next page, 22 the page before, where you go back to Nicholas Davis the 23 next day, 21 July 2016, and copied to Janice Wray: 24 "Janice, 25 "We can attend on Tuesday. Would 11.30hrs be ok. I</p> <p style="text-align: center;">Page 125</p>	<p>1 Q. Do you remember whether it was Dave Hughes, that was his 2 name? 3 A. I can't remember his name, no. 4 Q. Okay. Summarising it, would it be right, given what you 5 said this morning about your visit or visits, that apart 6 from the dry rising main -- well, let me ask the 7 question this way: apart from looking at the dry rising 8 main, did you look at anything else so far as 9 firefighting and evacuation was concerned at 10 Grenfell Tower on that visit or the visit in February? 11 A. The only other thing, as I mentioned before, is in terms 12 of the -- the fire engineering solutions of the smoke 13 extract system. That was -- whether that was covered in 14 either/or of those visits, that's my memory. 15 And also looking at the floor layout, because I do 16 remember that the -- particularly in the lift lobby 17 areas, the dry riser outlet being in that left-hand 18 corner. So there must have been some, you know, 19 information gathering in terms of that lobby area layout 20 as well. 21 Q. So on the basis of what you've just said, can we take it 22 that that's the totality, that's all you -- 23 A. As I can remember as of this point, yes. 24 Q. Yes, thank you very much. 25 Mr Dowden, I'm now going to go -- before I go to the</p> <p style="text-align: center;">Page 127</p>
<p>1 am off duty now until Tuesday morning. I will pick up 2 your response then." 3 Then the last document, which is just a little bit 4 above that on the same page, the response from 5 Janice Wray of 22 July to you, copied to Nicholas Davis 6 and other people at the KCTMO: 7 "Hi Michael 8 "Thanks for coming back to me. The Rydons Site 9 Agent, Dave Hughes, has confirmed that Tuesday at 11.30 10 for familiarisation at Grenfell Tower is convenient for 11 him. 12 "He will see you then. 13 "Regards 14 "Janice." 15 Now just looking at that short e-mail exchange, does 16 that prompt a recollection in your mind as to a visit in 17 July 2016 to Grenfell Tower? 18 A. That's the visit I alluded to in my statement, yes. 19 Q. I see. So at that stage, what did the works look like, 20 the refurbishment works, in terms of how they were 21 completed? 22 A. I honestly can't recall at the time. 23 Q. Do you remember meeting the Rydon site agent? 24 A. As I referred to previously, yes, I do remember making 25 contact with a representative from Rydon's, yes.</p> <p style="text-align: center;">Page 126</p>	<p>1 night -- just to a very small number of documents just 2 to see if you can help me with them. 3 Can I ask you first to look at the document in our 4 bundle-tab 2, which is LFB00000144. 5 Now, this is a document -- it's not on this page, 6 it's at the back, but I'll tell you the date of it: it's 7 3 November 2016, and you can see from the top it's 8 called the "London Fire Brigade -- Fire Safety 9 Regulation Premises Inspection and Data Collection 10 Form". 11 My first question is: have you ever seen this type 12 of document before? 13 A. No, I haven't, no. I would presume that's not something 14 that generally would be filtered down to the 15 station-based level. I can only presume that's 16 something that would be for our fire safety department. 17 Q. Right. So if I was to ask you any questions about this 18 document, would you be able to help me? 19 A. No. 20 Q. Right, then I won't. 21 Next document is tab 13 of the bundle, LFB00003116. 22 This is in LFB document which says "ORD" at the top. 23 Are you familiar with this type of document? 24 A. Yes, I am. 25 Q. Could you explain what it is, please?</p> <p style="text-align: center;">Page 128</p>

<p>1 A. This is part of the, as you see ORD at the top, 2 operational risk database. So this is for when crews go 3 and visit a premise, and I was alluding to earlier in 4 terms of the quality assurance of that by either the 5 station manager or our predetermined attendance 6 department, either any visits from a station level or 7 any changes we can maybe annotate on that, and this will 8 be borne off of the system. So it's electronically 9 filed. And also comments from either the station 10 manager or the PDA department will also be populated 11 within this document.</p> <p>12 Q. Thank you. 13 Now, at the top you'll see that it's completed by 14 "rickettsd". I think that's Dean Ricketts.</p> <p>15 A. That's correct.</p> <p>16 Q. Could you just explain who he is?</p> <p>17 A. He is a watch manager B, like myself, and he's in charge 18 of the North Kensington Green Watch.</p> <p>19 Q. Green Watch?</p> <p>20 A. Yes.</p> <p>21 Q. Is he senior to you or junior to you?</p> <p>22 A. No, he's the same rank.</p> <p>23 Q. Is he watch manager A or B?</p> <p>24 A. He's watch manager B.</p> <p>25 Q. Oh, he's B as well? Right.</p> <p style="text-align: right;">Page 129</p>	<p>1 Q. I see. And if you go to the first page of the document, 2 going back in the bundle one page, you go to the bottom 3 of that page, there it refers to a site visit to 4 Grenfell Tower, and the user is "DowdenM" -- I assume 5 that's you, Mr Dowden?</p> <p>6 A. That's correct.</p> <p>7 Q. With a date of 3 February 2016, and that would have been 8 the day after your 7(2)d visit we looked at on the visit 9 schedule this morning; is that correct?</p> <p>10 A. That's correct.</p> <p>11 Q. It says: 12 "Site visit to Grenfell Tower following 13 refurbishment of block. A temp dry riser inlet will be 14 installed on fourth floor to allow additions to 15 residential accommodation being added to 2nd and 3rd 16 floors. This should only occur for a period of 3 days. 17 Authority will be informed when this occurs. Rydon 18 (building contractor are currently liaising with Fire 19 Safety)."</p> <p>20 Is that the information you have put onto the ORD 21 yourself?</p> <p>22 A. Yes.</p> <p>23 Q. Did you put any other information onto the ORD as 24 a result of your visit?</p> <p>25 Take it from me, it's not on this document.</p> <p style="text-align: right;">Page 131</p>
<p>1 A. Yes.</p> <p>2 Q. It is dated 15 February 2017, and if you just look 3 through the document just over the page, it starts at 4 the bottom and it runs, as it were, upwards, so the most 5 recent -- it looks like the comments come in and are 6 piled on top of each other.</p> <p>7 It starts, if you go over the page, with an entry on 8 10 February 2015, that's before your 2016 visit, and it 9 says: 10 "Grenfell Tower is currently undergoing major 11 refurbishment. 9 extra flats are being added taking the 12 block to a total of 129 flats.</p> <p>13 "The DRM is being moved to outside the building and 14 work is scheduled for completion on 23/10/15.</p> <p>15 "Grenfell Road is frequently blocked by site 16 vehicles now and the bottom 2-3 floors of the tower are 17 site offices and a building site although access to the 18 DRM and lifts remain."</p> <p>19 And it's put on there by someone "HealyA". Who is 20 that?</p> <p>21 A. Andrew Healy is a crew manager on the Green Watch.</p> <p>22 Q. Group manager Green Watch --</p> <p>23 A. No, crew manager.</p> <p>24 Q. Crew manager?</p> <p>25 A. Yes.</p> <p style="text-align: right;">Page 130</p>	<p>1 A. I don't -- if I had then it would be available for all 2 people -- through that ORD system.</p> <p>3 Q. Right.</p> <p>4 A. But I can't remember.</p> <p>5 Q. Okay.</p> <p>6 And then it continues on up the page, and at the 7 top, it says: 8 "Entry via front door." 9 This is the entry by "RickettsD", 15 February 2017: 10 "Entry via front door. If drop key is used, this 11 will release the internal door between entrance lobby 12 and lift lobby."</p> <p>13 Just pausing there, can you help us with what a drop 14 key is?</p> <p>15 A. A drop key is a fire service key and it allows us -- two 16 uses: it will allow us to get into -- not just specific 17 to high-rise, to a secure access block, if it's 18 residential, but it will also allow us to command the 19 majority of firefighting lifts in the event of a fire in 20 a high-rise block.</p> <p>21 Q. Okay. Where is the drop key normally kept?</p> <p>22 A. It should be kept in a set of station -- fire appliance 23 keys that's on -- lifts keys, we call it, a lift key bag 24 that's on the front of most -- on the front of every 25 front line pumping appliance, whether that's a pump</p> <p style="text-align: right;">Page 132</p>

<p>1 ladder or a pump.</p> <p>2 Q. I see, thank you.</p> <p>3 We may come to this in detail later, but can you use</p> <p>4 the drop key, normally, to access a building which is</p> <p>5 protected with electronic security and a fob system?</p> <p>6 A. That's correct.</p> <p>7 Q. You normally can, can you?</p> <p>8 A. You normally can.</p> <p>9 Q. Can I ask you, then, to go to another document, tab 14,</p> <p>10 next tab, which is LFB00003596. This is a series of</p> <p>11 screenshots from something called the station diary.</p> <p>12 Are you familiar with this document or this run of</p> <p>13 screenshots, this kind of thing?</p> <p>14 A. Yes, I am.</p> <p>15 Q. Okay. Can you explain what it is?</p> <p>16 A. That there is a screenshot of the -- our electronic</p> <p>17 system that helps us sort of gathering and processing</p> <p>18 the information that we will obtain on a high-rise or</p> <p>19 a familiarisation visit.</p> <p>20 Q. I see.</p> <p>21 A. That first screen there is the screenshot from an</p> <p>22 internal software system, our station diary, allows us</p> <p>23 to access the ORD system.</p> <p>24 Q. Okay. And you can identify, can you, who fills this</p> <p>25 document in?</p> <p style="text-align: right;">Page 133</p>	<p>1 has actually updated that system.</p> <p>2 Q. Could you turn to page 9, please, within the run of</p> <p>3 screenshots.</p> <p>4 I wonder if there's any way of enlarging the page</p> <p>5 just a little bit.</p> <p>6 Before the Trial Director does that, can you see,</p> <p>7 Mr Dowden, on this page of the screenshots it says:</p> <p>8 "Building Specific Tab -- Unchecked."</p> <p>9 Then underneath it there's another box that says:</p> <p>10 "Building Specific Tab -- Checked."</p> <p>11 A. Yes.</p> <p>12 Q. Could you just explain the difference between the</p> <p>13 unchecked box and the checked box? If you are having</p> <p>14 difficulties seeing it, we can --</p> <p>15 A. This is --</p> <p>16 Q. -- blow it up.</p> <p>17 A. This is a system or format that helps us identify at</p> <p>18 station level the risk and, according to that risk, how</p> <p>19 regular we need to visit that building.</p> <p>20 So the one where it says unchecked, every single one</p> <p>21 of those currently, if it's not highlighted in blue, has</p> <p>22 not been checked by someone inputting some data onto</p> <p>23 that system, so we physically have to open that system</p> <p>24 up and click on the relevant number corresponding to</p> <p>25 what information we've identified or gathered on the</p> <p style="text-align: right;">Page 135</p>
<p>1 A. It's auditable, yes.</p> <p>2 Q. So if we look, for example, at page 4 of 13 internally,</p> <p>3 you can see if you blow it up that at the bottom it says</p> <p>4 "A risk matrix for this address" -- and this is</p> <p>5 Grenfell Tower -- "was last completed by [Watch Manager]</p> <p>6 (B) Ricketts, D on 15/02/2017 at North Kensington Fire</p> <p>7 Station Green Watch".</p> <p>8 So from that, would it be right, I just want to ask</p> <p>9 you, that whoever goes on the 7(2)d visit or other kind</p> <p>10 of visit would fill in this document on the station</p> <p>11 diary?</p> <p>12 A. Not to a full extent, you know. There would be a lot of</p> <p>13 information already on the 7(2)d process or system, so</p> <p>14 you won't necessarily have to do a full, robust</p> <p>15 information gathering because a lot of that information</p> <p>16 should already be there, the expectation is it should be</p> <p>17 there.</p> <p>18 If it was the first time anyone had visited that</p> <p>19 premise then, yes, that is correct; however, you may</p> <p>20 have to make slight amendments because things do change</p> <p>21 within properties, whether that's residential or</p> <p>22 commercial.</p> <p>23 Q. Yes.</p> <p>24 A. The way that will be identified is from that previous</p> <p>25 screenshot we saw, which was the audit process of who</p> <p style="text-align: right;">Page 134</p>	<p>1 visit.</p> <p>2 Q. Right. So just following that up a little bit, if you</p> <p>3 look at the unchecked box just below where it says</p> <p>4 "Environment Specific (risk to staff and public)", there</p> <p>5 is a -- it's not on the screen, but it says --</p> <p>6 Mr Trial Director, I don't know if you can get down</p> <p>7 a bit further, there:</p> <p>8 "A risk matrix ... completed by ... Ricketts, D on</p> <p>9 15/02/2017 ..."</p> <p>10 So when you look at that box, is it right that where</p> <p>11 it's unchecked, it's because Mr Ricketts has decided not</p> <p>12 to check the particular item?</p> <p>13 A. I can't say that's true, no. He may have checked that</p> <p>14 specific item, but unfortunately sometimes the systems</p> <p>15 are only as good as the data entry.</p> <p>16 Q. Yes. Okay. Fair enough. I won't press it too much</p> <p>17 further.</p> <p>18 Just to push it a little bit, though, can you see</p> <p>19 items 405 and 407?</p> <p>20 A. Yes.</p> <p>21 Q. "405 -- Flammable core sandwich panel construction."</p> <p>22 A. Yes.</p> <p>23 Q. "407 -- Modern methods of construction, unusual design,</p> <p>24 materials ..."</p> <p>25 First of all, what are those numbers, do you know,</p> <p style="text-align: right;">Page 136</p>

<p>1 405 and 407? What do they correspond to?</p> <p>2 A. They correspond to policy note 800, which is management</p> <p>3 operational risk information.</p> <p>4 Q. Right. And where those two items are listed as</p> <p>5 unchecked, what does that mean?</p> <p>6 A. That means that the individual -- one or two things,</p> <p>7 either the individual hasn't gathered that information</p> <p>8 on the visit, or the individual has gathered that</p> <p>9 information but unfortunately hasn't entered it</p> <p>10 correctly onto the system.</p> <p>11 Q. Right.</p> <p>12 Then checked, which is the box at the bottom, you</p> <p>13 can see:</p> <p>14 "504 -- Appliances access difficulties."</p> <p>15 And then:</p> <p>16 "505 -- Crew access difficulties ..."</p> <p>17 And your name appears under previous edition for</p> <p>18 that entry.</p> <p>19 Again, is it right that those numbers correspond to</p> <p>20 a particular risk in policy 800?</p> <p>21 A. Yes. There's a risk matrix in policy 800, yes.</p> <p>22 Q. So would it follow that where that risk has been checked</p> <p>23 and the system has picked it up correctly, it would make</p> <p>24 its way onto this document?</p> <p>25 A. That's correct.</p> <p style="text-align: right;">Page 137</p>	<p>1 screenshot was taken, it would suggest there wasn't, no.</p> <p>2 Q. Right.</p> <p>3 A. Can I just clarify some other points on this?</p> <p>4 SIR MARTIN MOORE-BICK: Yes.</p> <p>5 A. So at the top we have medium to low, and that denotes --</p> <p>6 so medium to low has a score of 300. So we have certain</p> <p>7 markers within the policy note 800, so anything up to</p> <p>8 a score of 150, we have to sort of as a watch officer</p> <p>9 decide: does that need inclusion on the ORD? Is that</p> <p>10 enough of a risk to put that onto our operational</p> <p>11 database? As you can see, Grenfell Tower scored 300.</p> <p>12 So on that system, it shows medium to low risk and visit</p> <p>13 at least every three years.</p> <p>14 So what will happen is that as a minimum</p> <p>15 requirement, any watch -- this is not just related to</p> <p>16 Grenfell Tower, this is any high-rise property, any</p> <p>17 building, that will be on our operational review</p> <p>18 database. So the expectation would be that a watch</p> <p>19 would have to visit a premise of that medium to low risk</p> <p>20 roughly every three years.</p> <p>21 MR MILLETT: Yes.</p> <p>22 And 300 out of how much, is the first question</p> <p>23 I would ask?</p> <p>24 A. Yes. If I'm honest, without referencing it back to</p> <p>25 policy 800, I wouldn't be able to tell you what the</p> <p style="text-align: right;">Page 139</p>
<p>1 Can I just talk about that?</p> <p>2 Q. Mm.</p> <p>3 A. If we can scan back up, there are -- it's quite</p> <p>4 important to talk about that -- there are two other</p> <p>5 unchecked items on there.</p> <p>6 Q. Yes.</p> <p>7 A. Which, again, is really relevant to high-rise --</p> <p>8 high-rise premises. Now -- so -- yes, so there's -- so</p> <p>9 if you see 403a and 403b.</p> <p>10 Q. Yes.</p> <p>11 A. So the expectation is -- and for whatever reason, that</p> <p>12 hasn't happened on this data entry -- if those two boxes</p> <p>13 are checked then it automatically generates a further</p> <p>14 tab within the ORD, operational risk database, and</p> <p>15 that's called an EPIP, electronic premises information</p> <p>16 plate, and basically what that allows us -- what</p> <p>17 information that holds is specific to a high-rise</p> <p>18 premise, so entrances, exits, fixed installations, fire</p> <p>19 lifts, orientation of the building, number of floors,</p> <p>20 dimensions. On this, that unfortunately has not been</p> <p>21 annotated on there.</p> <p>22 Q. Thank you very much.</p> <p>23 Do you know whether there was an EPIP for</p> <p>24 Grenfell Tower as at June 2017?</p> <p>25 A. I would -- looking at that system, depending when that</p> <p style="text-align: right;">Page 138</p>	<p>1 maximum was.</p> <p>2 Q. Let me see if I can help you, because you mention</p> <p>3 policy 800. I assume you are familiar with the policy?</p> <p>4 A. Yes, yes.</p> <p>5 Q. Let's just have a look at it, just follow this through.</p> <p>6 If you go to the policies bundle and go to tab 6,</p> <p>7 this is policy 800 as at 25 August 2015, and it's</p> <p>8 entitled, "Management of operational risk information".</p> <p>9 You were, I think, wanting to refer to the scores.</p> <p>10 There's a risk grading matrix at appendix 2. Could you</p> <p>11 be shown that? It's page 17 internally. I don't think</p> <p>12 it's got the actual scores on there -- oh, yes, it does,</p> <p>13 in red, above 750, which is high.</p> <p>14 Does that help you with your recollection of the --</p> <p>15 A. Yes, that's correct, yes.</p> <p>16 Q. So on that, Grenfell Tower, at 300, would be medium to</p> <p>17 low in yellow there.</p> <p>18 A. That's correct.</p> <p>19 Q. In your experience, did you ever play any part in</p> <p>20 scoring buildings for the purposes of applying this risk</p> <p>21 grading matrix?</p> <p>22 A. Yes, I have.</p> <p>23 Q. Did you do that for Grenfell Tower ever?</p> <p>24 A. I can't recall if I actually scored using policy note</p> <p>25 800 on Grenfell Tower, no.</p> <p style="text-align: right;">Page 140</p>

<p>1 Q. While we're in the policy, Mr Dowden -- and I'll take 2 this very quickly, if I can -- let's go back a little 3 bit. If you go to paragraph 10, levels of risk, types 4 of plan, frequency of visits, which is on page 8 5 internally, you'll see that there is the table that we 6 saw a moment ago, and then if you look at 7 paragraph 10.2: 8 "Station Managers and Borough Commanders must ensure 9 that 100% of the visits identified for a station based 10 upon the matrix above are completed in accordance with 11 the programme of visits as prompted by the station 12 diary." 13 From your knowledge, Mr Dowden, did the station 14 manager, at North Kensington or the borough commander 15 responsible for North Kensington ensure that all the 16 visits carried out by North Kensington crews were 17 completed in accordance with the programme prompted by 18 the station diary? 19 A. That would be quite difficult for me to comment because 20 the only way I can reference that is in terms of the 21 quality assurance, the station manager and the -- so he 22 or she will have a first sort of glance at the 23 information input by station personnel, and if they're 24 happy then obviously that will then be submitted to PDA. 25 So I would not be able to comment. I don't know.</p> <p style="text-align: center;">Page 141</p>	<p>1 Grenfell Tower, we have to -- going back to that risk 2 matrix, depending on how high it scores, there is 3 a tactical plan, but there is, let's say -- it's 4 a preformed document on -- electronically that allows 5 you to populate your tactical plan. 6 Q. So would it be fair to say that the tactical plan 7 generated for any high-rise block, for example, or 8 indeed any set of premises covered by this policy, that 9 tactical plan would only be as good as the information 10 on the ORD? 11 A. Yes, that's correct. 12 Q. Yes. Right. Thank you, Mr Dowden. 13 I want to turn now to the night of the fire. 14 A. Can I just ask for a quick refreshment break before we 15 carry on with that? 16 SIR MARTIN MOORE-BICK: Would 5 minutes be enough, do you 17 think? 18 THE WITNESS: That's fantastic. 19 SIR MARTIN MOORE-BICK: You leave us now, then, and I'll be 20 coming after you in a minute. We'll rise for 5 minutes. 21 THE WITNESS: Thank you. 22 (Pause) 23 SIR MARTIN MOORE-BICK: Right, 2.55, please. 24 (2.52 pm) 25 (A short break)</p> <p style="text-align: center;">Page 143</p>
<p>1 Q. Now, you're familiar with this policy because you said 2 you were and you referred to it. 3 Can I just ask you very briefly one or two questions 4 about some other parts of it. Really very briefly. 5 If you go back to page 5 of 26. Look at 6 paragraph 7.4. It says: 7 "Where risks are recorded on the ORD, the 8 information gathering process will need to record the 9 detail of the hazards and all influencing issues." 10 Were you aware of that policy and its requirements? 11 A. Yes, so within the operational review database, there is 12 a section where you can identify hazards within that 13 property, yes. 14 Q. Looking down at 7.5 it says: 15 "Where possible the information gathered would allow 16 the following to be achieved." 17 And I'll just take you to the third bullet point: 18 "The formulation of a tactical plan, in order to 19 effectively implement appropriate operational procedures 20 to mitigate risk." 21 Again, when you were doing your visits and entries 22 into the ORD, did you know that the requirement of the 23 policy was to allow the formulation of a tactical plan 24 in part? 25 A. Again, yes, this isn't just to do with the</p> <p style="text-align: center;">Page 142</p>	<p>1 (2.55 pm) 2 SIR MARTIN MOORE-BICK: Right. Well, Mr Dowden is on his 3 way down. We'll have to wait just a short time until he 4 is with us. 5 (Pause) 6 All right, Mr Dowden? 7 THE WITNESS: Yes, thank you. 8 SIR MARTIN MOORE-BICK: Yes, Mr Millett. 9 MR MILLETT: Mr Dowden, I'm going to ask you about the first 10 call-out to Grenfell Tower now. 11 On the evening of 13 June 2017, you came on duty at 12 8 pm. 13 A. That's correct. 14 Q. And when reporting for duty on that evening, can you 15 tell me who was the most senior officer on duty at North 16 Kensington? 17 A. That was myself. 18 Q. And I think you detailed two firefighters to the watch 19 room. 20 A. Yes. We have one firefighter who would take the primary 21 role of looking after watch and receiving fire calls, 22 enquiries from members of the public, making logbookings 23 and then we have what we call a number 2, his assistant, 24 who will then, if he's called out or she's called out on 25 a fire call, at least we have someone else to man the</p> <p style="text-align: center;">Page 144</p>

<p>1 watch room -- to facilitate the watch room.</p> <p>2 Q. Where is the watch room in the station at North</p> <p>3 Kensington?</p> <p>4 A. It's on the ground-floor level, adjacent to the</p> <p>5 appliance bay.</p> <p>6 Q. Right.</p> <p>7 Now, I think you say in your statement that downtime</p> <p>8 started at midnight and you were resting after that</p> <p>9 point.</p> <p>10 A. Correct.</p> <p>11 Q. Do you know what the rest of Red Watch were doing during</p> <p>12 downtime?</p> <p>13 A. They would most probably be resting as well.</p> <p>14 Q. And during downtime, is the watch room manned?</p> <p>15 A. There is a facility to have someone present in the watch</p> <p>16 room. The tendency would be that if a fire call is</p> <p>17 received, then it is a duty of the watch room attendant</p> <p>18 to make sure they are first into the watch room to</p> <p>19 receive that call and to start gathering the information</p> <p>20 in terms of from the call slip that's on the</p> <p>21 teleprinter.</p> <p>22 Q. And who was the watch room attendant on duty at and from</p> <p>23 midnight on 13/14 June, do you remember?</p> <p>24 A. Without referring to my statement, I wouldn't --</p> <p>25 I can't --</p> <p style="text-align: center;">Page 145</p>	<p>1 station in London, that the 999 call goes to control and</p> <p>2 then control call the watch room?</p> <p>3 A. That is generally what happens. There is another sort</p> <p>4 of process to that we call running call. So if</p> <p>5 an appliance is mobile, and that means if they're not at</p> <p>6 station, whether they're attending -- on the way back</p> <p>7 from an incident, training session or familiarisation</p> <p>8 visit, then if we're directly contacted by a member of</p> <p>9 the public then we can also almost self-mobilise, but we</p> <p>10 have to put that call into control.</p> <p>11 Q. Right, okay.</p> <p>12 In terms of communications between the control room</p> <p>13 at Stratford or Merton, how does it work? Is there</p> <p>14 a landline or is it a radio communication or some other</p> <p>15 means?</p> <p>16 A. No, it's -- so what happens is we have a mobilising</p> <p>17 system at every station within London, that when -- it's</p> <p>18 simultaneous activity. So when we receive a fire call</p> <p>19 or any call to an incident, all lights will come on</p> <p>20 within the station, there's an audible warning or</p> <p>21 an audible sound, a mobilisation message, and that would</p> <p>22 denote the appliances from that station who are</p> <p>23 attending.</p> <p>24 At the same time, you will have a teleprinter in the</p> <p>25 watch room that will also basically come out with</p> <p style="text-align: center;">Page 147</p>
<p>1 Q. You don't remember?</p> <p>2 A. No.</p> <p>3 Q. No, okay.</p> <p>4 In your statement, on page 2, you say that you got</p> <p>5 a call at 00.55 on 14 June to Grenfell Tower.</p> <p>6 Do you remember, when you did your statement, where</p> <p>7 you got that time from?</p> <p>8 A. The only reference I would have to that would either be</p> <p>9 one of two things: the actual -- we call them tip sheet,</p> <p>10 the information sheet that was available at the time, or</p> <p>11 I referenced that back into our mobilising system. We</p> <p>12 have sort of an electronic log of the Vision mobilising</p> <p>13 system.</p> <p>14 Q. Vision, okay.</p> <p>15 Now, you say that the mobilisation call came through</p> <p>16 the watch room. Do you remember who took that call?</p> <p>17 A. Not name specific. The assumption is that it would be</p> <p>18 the watch room attendant.</p> <p>19 Q. Do you know or do you remember where the call came in</p> <p>20 from?</p> <p>21 A. The call comes from our control centre.</p> <p>22 Q. Control centre. And that night, I think everyone knows,</p> <p>23 that was at Stratford?</p> <p>24 A. Later on I understand that's correct, yes.</p> <p>25 Q. Yes. Is that the usual line of communication to a fire</p> <p style="text-align: center;">Page 146</p>	<p>1 a piece of paper, and on that piece of paper you have</p> <p>2 various information relating to that fire call or that</p> <p>3 incident: that's the address; the classification of</p> <p>4 incident; the appliances attending; how that was</p> <p>5 mobilised; whether it was a mobile number; if it was</p> <p>6 an auto dialler or an AFA system automatic fire alarm</p> <p>7 system; the appliances who are attending or in</p> <p>8 attendance. There's a range of information you can sort</p> <p>9 of gather from that piece of paper.</p> <p>10 Q. That piece of paper, is it sometimes called a tip sheet?</p> <p>11 A. That's correct.</p> <p>12 Q. Right. Is it "tip" or is it "TIP"? Does it stand for</p> <p>13 anything?</p> <p>14 A. No, I just think it's a Brigade terminology.</p> <p>15 Q. Okay. So it's an automatic system. What triggers it?</p> <p>16 Is it a computer message or ...?</p> <p>17 A. As at that point in 2017 -- it's a computer generated</p> <p>18 programme. It used to be manually logged by control,</p> <p>19 the operators, and they would have to mobilise</p> <p>20 themselves. Now it's controlled by this software system</p> <p>21 called Vision, and that is a computer-based software</p> <p>22 system that basically manages the calls coming in,</p> <p>23 appliance mobilising and the filtering down to station</p> <p>24 level as well.</p> <p>25 Q. And the information on the tip sheet, where does that</p> <p style="text-align: center;">Page 148</p>

<p>1 come from?</p> <p>2 A. That would be from -- again, I don't work in control,</p> <p>3 but from my knowledge, it will be from this software</p> <p>4 package, Vision, that has all the data inputted into it,</p> <p>5 in terms of the resources, appliances available, there</p> <p>6 attributes, officers and everything else.</p> <p>7 Q. What information about the premises would the tip sheet</p> <p>8 contain? You gave us a little list earlier, a little</p> <p>9 bit. How much information about the premises would be</p> <p>10 contained on the tip sheet?</p> <p>11 A. Not so much on the tip sheet. With relation to</p> <p>12 a high-rise premise, there may be what we call</p> <p>13 an underwrite. So at the bottom of that tip sheet, if</p> <p>14 there's a particular comment logged against that premise</p> <p>15 or building, that will be available on the tip sheet,</p> <p>16 and generally for high-rise premises, that will come</p> <p>17 up: this is a high-rise premise.</p> <p>18 Q. I see, okay.</p> <p>19 Casting your mind back to the night, could you</p> <p>20 describe for us the moment that you received the shout</p> <p>21 or the call?</p> <p>22 A. It's very difficult to be specific on the moment</p> <p>23 I received the call because, you know, North Kensington</p> <p>24 is a busy operational fire station, so it's very</p> <p>25 difficult to differentiate between the different calls</p> <p style="text-align: right;">Page 149</p>	<p>1 Q. So that was my next question: was there anything unusual</p> <p>2 about that mobilisation that you'd want to tell us</p> <p>3 about?</p> <p>4 A. I think the only thing that would generally be different</p> <p>5 about that mobilisation was -- and I know it was</p> <p>6 identified when we were en route to the incident -- but</p> <p>7 at that point in time our PDA, which is our</p> <p>8 predetermined attendance to high-rise fires was four</p> <p>9 pumping appliances, and at that point of mobilisation</p> <p>10 there was only three pumping appliances that had been</p> <p>11 allocated to that incident.</p> <p>12 Q. Yes. And you say on page 2 that you were aware -- just</p> <p>13 four lines up from the bottom -- that 331 Kensington's</p> <p>14 pump ladder had also been deployed to Grenfell Tower.</p> <p>15 How did you become aware of that?</p> <p>16 A. That's part of the information that will be included on</p> <p>17 the tip sheet. So not just specific to the station,</p> <p>18 other appliances attending according to the</p> <p>19 predetermined attendance.</p> <p>20 Q. Right. And you say that pumps G271 and 272 were called.</p> <p>21 I think G271 is your pump.</p> <p>22 A. That's correct.</p> <p>23 Q. Another word we use for fire engine or appliance?</p> <p>24 A. Yes. We use phonetic, so in the London Fire Brigade we</p> <p>25 don't refer to it as G, we refer to it as Golf, but it</p> <p style="text-align: right;">Page 151</p>
<p>1 we receive, and at that time I don't really remember</p> <p>2 anything that really stood out about the mobilisation,</p> <p>3 if I'm honest.</p> <p>4 Q. How many mobilisations would you normally get a week?</p> <p>5 A. It's very difficult to put a number on it, very</p> <p>6 difficult, but -- and this is just a very sort of vague</p> <p>7 recollection. You know, North Kensington I think is in</p> <p>8 certainly the top 5 -- one of the top 5 busiest fire</p> <p>9 stations in London.</p> <p>10 Q. Right, okay. So how many would you get a week? One or</p> <p>11 two? Ten?</p> <p>12 A. Specific to a watch on your shift, a quiet period, it</p> <p>13 could be anything up to three, four, five; a busy</p> <p>14 period, it could be ten or more.</p> <p>15 Q. Right. Right.</p> <p>16 After the call came through, what happened next?</p> <p>17 I mean, do you remember specifically or ...?</p> <p>18 A. Not specifically, but the general -- you know, what</p> <p>19 would happen is that the firefighters will don their</p> <p>20 PPE -- their personal protective equipment -- before</p> <p>21 they get onto their fire appliance, and that's depending</p> <p>22 on what machine they are designated to ride. But</p> <p>23 I don't have anything, you know, in terms of that</p> <p>24 mobilisation that really sort of stuck out at that</p> <p>25 point.</p> <p style="text-align: right;">Page 150</p>	<p>1 is G. As for a member of the public, they would</p> <p>2 understand that as G271. That's correct.</p> <p>3 Q. Right. So you had 271 and 272. What was the difference</p> <p>4 between 271 and 272?</p> <p>5 A. The difference is that as a watch manager, either A or</p> <p>6 B, you'll ride a pump ladder, and then the Golf 272 will</p> <p>7 generally -- the officer in charge of that will be</p> <p>8 a crew manager. The only real difference is that the</p> <p>9 pump ladder will have 13.5 ladder, so that means it</p> <p>10 extends to a maximum of 13.5 metres, and then on the</p> <p>11 pump you will have a 9-metre ladder.</p> <p>12 Q. Right.</p> <p>13 In terms of communication abilities, are they the</p> <p>14 same or different? Is a pump ladder the same as a pump</p> <p>15 in terms of its ability to communicate?</p> <p>16 A. So in terms of its radio capabilities?</p> <p>17 Q. Yes.</p> <p>18 A. Yes. It had the same main scheme radio, yes.</p> <p>19 Q. So in terms of the people that were on the two pumps, on</p> <p>20 G271 I think you had firefighter Danny Bills driving, do</p> <p>21 you remember that?</p> <p>22 A. As far as my recollection accounts, yes, that's correct.</p> <p>23 Q. I think you say you were next to him as watch manager in</p> <p>24 the front.</p> <p>25 A. That's correct.</p> <p style="text-align: right;">Page 152</p>

<p>1 Q. So he's driving. He's on the right. You're on the 2 nearside, I suppose. 3 A. On the nearside; that's correct. 4 Q. Immediately behind you, who have you got? 5 A. So immediately behind me will be a -- what, in terms of 6 their name? 7 Q. Yes. 8 A. Without referring back to my statement, it would be -- 9 Q. Yes. I mean, we've got the list of people who were 10 there at the second paragraph on page 2. We've got 11 Danny Bills driving and Danny Brown, Firefighter Danny 12 Brown, where was he? Do you remember where he was? 13 A. Again, this is -- I think he would've been behind myself 14 because he was -- that's generally where the rider sits 15 who is the watch room attendant because it's the closest 16 position to the watch room, so it's the easiest way for 17 them to get to the watch onto the fire appliance. 18 Q. Oh, I see. And then Crew Manager Charlie Batterbee, 19 where was he sitting? 20 A. He would have been on the off-side, so the off-side 21 behind the driver. 22 Q. Right. 23 And then Dave Badillo. He was also on G271. Where 24 would he be sitting? 25 A. He would be in between either Charlie and Danny in the</p> <p>Page 153</p>	<p>1 Do you remember, what did you tell them about the 2 tactics that you were going to adopt at this fire? 3 A. I don't think it was very much specific in terms of 4 individual, you know, detailing of roles, because at the 5 point you receive the incident and the point you're 6 operational, there isn't really time to have a real 7 detailed briefing, and that's why obviously we have 8 those on-arrival tactics and theory sessions back at the 9 station. 10 So its more of -- you know, that's not related just 11 to this incident; any incident I will get as an incident 12 commander, and every incident commander will adopt this 13 on a front line pumping appliance, it's a personal 14 responsibility to update your crews if there's further 15 traffic coming through in terms of -- traffic in terms 16 of persons reporting -- multiple calls, and just to 17 refresh the crews in terms of: okay, this is what we've 18 got, this is the expectation. You know, it would be 19 naive of me to say here I detailed very, very clear -- 20 because you don't have time to do that as incident 21 commander on a fire appliance; that's all part of the 22 pre-planning. 23 Q. Part of the pre-planning? 24 A. Yes. 25 Q. How easy is it to have a four or five-way conversation</p> <p>Page 155</p>
<p>1 middle -- well, not in the middle because we have four 2 seats across the rear of the cab, so he would've taken 3 one of the vacant seats that were available in the 4 middle of the appliance. 5 Q. Right. So that night on G271 there were five of you? 6 A. That's correct. 7 Q. Then on G272 you've listed Chris Secrett as the crew 8 manager, firefighter Tom Abell driving, and in the back 9 Firefighters Alex De St Aubin, Justin and Chris Dorgu. 10 A. That's correct. 11 Q. I mean, you've put it in your statement; do you remember 12 that or have you looked at a document to refresh 13 yourself? 14 A. I had to refresh myself in terms of the ridership 15 levels, and that was done from our StARS system, which 16 is how we manage our personnel software system. 17 Q. Yes. If you look at the very bottom of page 2 and the 18 top of page 3, you're talking about what happens 19 en route and you say: 20 "I updated the members of my team in relation to the 21 radio traffic from Control, and reminded them of the 22 tactics in relation to high-rise buildings, breathing 23 apparatus policies (BA), the equipment required for the 24 bridgehead and the fact that the bridgehead would be 25 located two floors below the fire floor."</p> <p>Page 154</p>	<p>1 when you're donned in personal protective equipment and 2 you have got a diesel engine running at speed? 3 A. It is difficult, but, you know, it's -- I still -- if 4 I get radio traffic updates, it's still very important 5 to get that radio traffic to the crew members. 6 Q. Now you say in the next sentence, three to four lines 7 down from the top of page 3: 8 "My appliance has a mobile data terminal (MDT) on 9 which important information about every premises can be 10 accessed, this information concerning tactics, layout, 11 number of flats, rendezvous points, and the location of 12 the dry risers, plus any other information that may be 13 useful when fighting a fire." 14 I'll come to the next sentence about EPIP in 15 a minute. 16 Just focusing on that sentence for the moment 17 Mr Dowden, my first question is: is a mobile data 18 terminal present on every pump in the London Fire 19 Brigade? 20 A. Yes. 21 Q. Not just the pump ladders? 22 A. No, it's on the pump ladder and a pump. 23 Q. Right. 24 Could you just describe for us -- you're sitting in 25 the cab. Where is the mobile data terminal and what</p> <p>Page 156</p>

<p>1 does its look like?</p> <p>2 A. So if this was my position in the fire appliance, the</p> <p>3 situation of the MDT is between myself and the driver.</p> <p>4 Q. Right. And when you get on to the appliance at the</p> <p>5 start of a call or shout --</p> <p>6 A. Yes.</p> <p>7 Q. -- does the mobile data terminal come on automatically</p> <p>8 or do you have to boot it up and switch it on? How does</p> <p>9 it work?</p> <p>10 A. At the same time a call is received at the station,</p> <p>11 because it is run from the same mobilising system,</p> <p>12 Vision, so the information that's on the tip sheet will</p> <p>13 also be duplicated onto the mobile data terminal.</p> <p>14 Q. I see. And it's ready and on, is it, when you get into</p> <p>15 the cab and go?</p> <p>16 A. There are -- not on this night, but there are occasions</p> <p>17 that sometimes -- it is a computer system and it does</p> <p>18 have glitches and failures, but on that night, yes, it</p> <p>19 was available.</p> <p>20 Q. Right. Can you interrogate it? Can you ask it</p> <p>21 questions?</p> <p>22 A. You can interrogate it. You can't ask it questions but</p> <p>23 there is different -- we spoke about earlier the</p> <p>24 operational risk database. So the information that is</p> <p>25 collated from the ORD is available to access on your</p> <p style="text-align: center;">Page 157</p>	<p>1 you also have status 15, which is mobile to stand by.</p> <p>2 So if I get requested from control to stand by at</p> <p>3 another station, I have to relay that information by</p> <p>4 pressing 15 on my MDT and that confirms to control that</p> <p>5 I am mobile to stand by at a neighbouring station.</p> <p>6 Q. Thank you. Can I just go back to status 1.</p> <p>7 A. Yes.</p> <p>8 Q. You said that's when you're operationally ready at</p> <p>9 a fire station to respond to fire calls.</p> <p>10 Who is it in the fire station who makes the crew</p> <p>11 status 1?</p> <p>12 A. So for the fire appliances, that will be the officer in</p> <p>13 charge. But we can back that up with the watch room</p> <p>14 attendant, because sometimes -- as I said, it is</p> <p>15 a computer system. Sometimes there are errors and it</p> <p>16 can be delayed getting through, so it is good practice</p> <p>17 also to make sure that we can make phone contact with</p> <p>18 control to make sure that appliance is status 1 and</p> <p>19 operationally ready.</p> <p>20 Q. What button do you press to show you're status 1?</p> <p>21 A. It is literally a button with number 1 on it.</p> <p>22 Q. In the cab?</p> <p>23 A. On the MDT, touch-screen.</p> <p>24 Q. So they're all available, all those statuses --</p> <p>25 A. All touch-screen, yes.</p> <p style="text-align: center;">Page 159</p>
<p>1 mobile data terminal.</p> <p>2 Q. Right. Okay.</p> <p>3 We've seen the ORD before. Perhaps let's go back to</p> <p>4 it again.</p> <p>5 A. Can I just comment, one more thing that is important to</p> <p>6 comment on is that also we have a system where we have</p> <p>7 to identify control that we've accepted the fire call,</p> <p>8 so that is also the MDT. There's a green icon that</p> <p>9 flashes up and we have to accept it.</p> <p>10 Also we have another tab on the mobile data terminal</p> <p>11 which is a status button, okay? So it's probably</p> <p>12 quite -- to explain the background on that.</p> <p>13 So status 1 is when any pump or pump ladder is</p> <p>14 operational ready at a fire station to respond to fire</p> <p>15 calls.</p> <p>16 Status 2, which will need to be pressed when you</p> <p>17 receive a mobilisation, basically means, yes, I received</p> <p>18 that call at the fire station and we are proceeding to</p> <p>19 the incident.</p> <p>20 Status 3 is when you're in attendance at the</p> <p>21 incident.</p> <p>22 Status 6 is when you're mobile, so that could be</p> <p>23 when you finish at an incident and you're on your way</p> <p>24 back to station.</p> <p>25 If you're off on an off-site visit, station visit,</p> <p style="text-align: center;">Page 158</p>	<p>1 Q. Right. Thank you.</p> <p>2 Now, you say in your statement that en route you</p> <p>3 printed off the tactical plan details, and that's on</p> <p>4 page 3. Do you remember doing that?</p> <p>5 A. Yes, I have the vague memory of actually having the</p> <p>6 printed up document in my hand, yes.</p> <p>7 Q. Can I just ask you about those tactical plan details.</p> <p>8 I'm not sure we have them as a document, but before</p> <p>9 I put a document to you to see if it helps with your</p> <p>10 recollection, what did the document tell you? What did</p> <p>11 the tactical plan details tell you about what to expect?</p> <p>12 A. Well, it's going to be difficult for me to reference</p> <p>13 exactly to that night, but from my knowledge previous to</p> <p>14 that night and after that night, it's -- it's a --</p> <p>15 I wouldn't say snapshot, but it gives you an overview of</p> <p>16 that operational risk database that's been uploaded. So</p> <p>17 it gives you a site profile in terms of the dimensions</p> <p>18 of the building, the height of the building, the life</p> <p>19 risk, water supplies, any hazards within that premise.</p> <p>20 And that's not specific to Grenfell Tower; that will be</p> <p>21 to any property that is subject to an operational review</p> <p>22 database and a 7(2)d programme.</p> <p>23 So any hazards within that premise, so whether it's</p> <p>24 medical oxygen, if there's a hoarder within the premise,</p> <p>25 any processes, we can reference policy into it. Any</p> <p style="text-align: center;">Page 160</p>

<p>1 fixed installations, your best site and route access.</p> <p>2 Operational planning considerations. Other agencies</p> <p>3 that we may need on the scene.</p> <p>4 Q. Right. So it's quite a information-rich document if</p> <p>5 it's done right?</p> <p>6 A. As I referenced, if the data entry has been quite robust</p> <p>7 and it is correct, then yes.</p> <p>8 Q. Can I ask you to look at a document in tab 13,</p> <p>9 Mr Trial Director, of the bundle, the documents bundle,</p> <p>10 which is the ORD. We looked at it before, let's have it</p> <p>11 up on the screen again, if we can.</p> <p>12 If you turn, please, to the third page of this</p> <p>13 document, you see the address, and this is on the ORD.</p> <p>14 Then there's a map.</p> <p>15 Do you remember whether that was information you got</p> <p>16 on the MDT on the night, or the kind of information you</p> <p>17 would've got?</p> <p>18 A. It's the kind of information we get but it's in</p> <p>19 a slightly different format.</p> <p>20 Q. Right.</p> <p>21 A. Because that there, what we're showing there, is the</p> <p>22 actual the sort of station-based desktop version.</p> <p>23 Q. Right, I see.</p> <p>24 If you turn to the next page, which is page 4 of the</p> <p>25 Relativity reference, there's something called "Tactical</p> <p style="text-align: right;">Page 161</p>	<p>1 You'll see "Site Details" and you've got, "High-rise</p> <p>2 Block of Flats of 20 floors", and there's the</p> <p>3 dimensions, and:</p> <p>4 "Life risks: 400 persons.</p> <p>5 "Water supply: Hydrants in adjacent roads ..."</p> <p>6 Then operational hazards: glass planing and coanda</p> <p>7 effect.</p> <p>8 Do you remember seeing that on the night or did you</p> <p>9 have more information?</p> <p>10 A. No, I have -- you know -- I remember printing that</p> <p>11 document off, but if I'm going to be honest, I don't</p> <p>12 have an absolute clear recollection of every single</p> <p>13 piece of information that I sort of gleaned from that</p> <p>14 additional -- printed off the appliance.</p> <p>15 Q. Okay. If you go to the next page, "Access", you'll see</p> <p>16 primary entry Grenfell Road and also by foot Bramley</p> <p>17 Road, then:</p> <p>18 "Site Access.</p> <p>19 "... limited space for appliances. First engine to</p> <p>20 pull directly outside main entrance."</p> <p>21 Do you remember seeing that on the mobile data</p> <p>22 terminal?</p> <p>23 A. I can't confirm whether, you know, that's something --</p> <p>24 I had it, but I can't remember specifically screwing</p> <p>25 down into those areas.</p> <p style="text-align: right;">Page 163</p>
<p>1 plan". And it says "Tactical Plan", at the top,</p> <p>2 "Operation Contingency Plan", and "Site Details".</p> <p>3 Is that the tactical plan that you printed off?</p> <p>4 A. Not that exact tactical plan because that copy we have</p> <p>5 there is the one that would be again at station-based</p> <p>6 level through the station diary. So that's a desktop</p> <p>7 version. It's very similar to the one we can print off</p> <p>8 at that point in June 2017, yes.</p> <p>9 Q. Right. If you go to the top of the document:</p> <p>10 "Operation Contingency Plan.</p> <p>11 "Plan name: Grenfell Tower.</p> <p>12 "...</p> <p>13 "Version: 1.</p> <p>14 "Date Effective From ..."</p> <p>15 And we see 30 October 2009, and then date documented</p> <p>16 the same.</p> <p>17 Was the version that you printed off in the mobile</p> <p>18 data terminal on the way to the Grenfell Tower fire this</p> <p>19 version or was it an updated version?</p> <p>20 A. I wouldn't be able to confirm that. I would suggest it</p> <p>21 was that version but -- yes.</p> <p>22 Q. Okay. Well, let's see if we can just go through the</p> <p>23 document seeing if what you see on the page here was</p> <p>24 what you had on the night, or what you had on the night</p> <p>25 was more.</p> <p style="text-align: right;">Page 162</p>	<p>1 Q. Just let me try a couple of other things.</p> <p>2 "Fireman's drop lift key opens main entrance door</p> <p>3 and all internal doors for 90 seconds, should alarm be</p> <p>4 activating all internal doors unlocked."</p> <p>5 Do you remember en route seeing something about drop</p> <p>6 key?</p> <p>7 A. No.</p> <p>8 Q. And then under "En Route Considerations", you'll see in</p> <p>9 the last section or last box in the bigger box, "En</p> <p>10 Route Considerations", you'll see:</p> <p>11 "This building has a 'stay put' policy."</p> <p>12 Do you remember seeing that on the way to the</p> <p>13 Grenfell Tower fire?</p> <p>14 A. That's not something that I can remember that stands</p> <p>15 out, particularly en route to the fire at Grenfell</p> <p>16 Tower, because as incident commander, your en route</p> <p>17 considerations -- I received, you know, two bits of</p> <p>18 further traffic from control in terms of, you know, the</p> <p>19 additional appliance to make the predetermined</p> <p>20 attendance and, you know, the additional call we</p> <p>21 received to flat 16 and, you know, your focus sometimes</p> <p>22 can be taken away. So that's the only reason why maybe</p> <p>23 I haven't taken that information down because I had, you</p> <p>24 know, further traffic from control to deal with as well.</p> <p>25 Q. Yes. Really what I'm seeking to get a handle on,</p> <p style="text-align: right;">Page 164</p>

<p>1 Mr Dowden, is whether the document we're looking at here</p> <p>2 bears any relationship to what you remember of what you</p> <p>3 saw on the mobile data terminal.</p> <p>4 A. I can only presume that that is as was on the night,</p> <p>5 yes.</p> <p>6 Q. Okay. If we find anything else then obviously I'll ask</p> <p>7 you about it.</p> <p>8 A. Okay.</p> <p>9 Q. Thank you.</p> <p>10 Now, in terms of the usefulness of the information</p> <p>11 in the mobile data terminal, can you in very brief terms</p> <p>12 tell me what you learnt when you looked at it about the</p> <p>13 layout and fire safety features of Grenfell Tower prior</p> <p>14 to your arrival?</p> <p>15 A. I can't say at that moment or point I learnt anything,</p> <p>16 if I'm honest. You know, I had had a familiarisation</p> <p>17 visit at Grenfell Tower. Nothing sticks out in my mind,</p> <p>18 just, you know, from the information from the ORD or MDT</p> <p>19 that I had learnt anything.</p> <p>20 Q. Well, let me just test it a little bit by asking you</p> <p>21 some specific questions, and if you don't know, you</p> <p>22 don't know.</p> <p>23 Did you learn anything from the mobile data terminal</p> <p>24 about the height of the building and the number of</p> <p>25 floors?</p> <p style="text-align: center;">Page 165</p>	<p>1 to other matters.</p> <p>2 MR MILLETT: Yes, I am.</p> <p>3 SIR MARTIN MOORE-BICK: That probably would be a good idea.</p> <p>4 And you would probably like a break as well, Mr Dowden.</p> <p>5 THE WITNESS: Yes, please.</p> <p>6 SIR MARTIN MOORE-BICK: We'll have a short break now. Let's</p> <p>7 say 10 minutes. That should be enough?</p> <p>8 THE WITNESS: Okay.</p> <p>9 SIR MARTIN MOORE-BICK: And be back here, if you would, at</p> <p>10 3.40.</p> <p>11 Okay, you leave us now and the usher will help you</p> <p>12 out.</p> <p>13 (3.33 pm)</p> <p>14 (A short break)</p> <p>15 (3.40 pm)</p> <p>16 SIR MARTIN MOORE-BICK: I think Mr Dowden is being called so</p> <p>17 we'll just have to wait a moment or two.</p> <p>18 MR MILLETT: Yes. Mr Chairman, can I just say, I am</p> <p>19 detecting that the witness is tired.</p> <p>20 SIR MARTIN MOORE-BICK: Yes.</p> <p>21 MR MILLETT: He has been under a lot of pressure all day.</p> <p>22 I would like to finish off a particular line with him,</p> <p>23 but I would suggest, if it's all right with you, we</p> <p>24 finish at 4 o'clock.</p> <p>25 SIR MARTIN MOORE-BICK: Well, you take your time, but if we</p> <p style="text-align: center;">Page 167</p>
<p>1 A. I do remember -- if I'm honest, I do remember -- that's</p> <p>2 one of the things I have a vague -- in terms of the</p> <p>3 number of floors and the height of the building, that's</p> <p>4 something I did glean off the --</p> <p>5 Q. Right. Did you learn anything about the nature of the</p> <p>6 evacuation plan for Grenfell Tower that had been devised</p> <p>7 by the premises fire risk assessment or any other plan?</p> <p>8 A. Was that on the -- you're asking if that was on the MDT?</p> <p>9 Q. I am asking you whether you learnt anything from the MDT</p> <p>10 about the nature of any evacuation plan for</p> <p>11 Grenfell Tower.</p> <p>12 A. I can't say I learnt anything because I don't think that</p> <p>13 information was, from what I understand, available.</p> <p>14 Q. Did you learn anything about who to talk to, who to</p> <p>15 identify or contact as the responsible person</p> <p>16 responsible for Grenfell Tower?</p> <p>17 A. Not at that moment in time, no.</p> <p>18 Q. Did the MDT information give you anything about</p> <p>19 evacuation routes or protected staircases, do you</p> <p>20 remember?</p> <p>21 A. I don't remember, no.</p> <p>22 MR MILLETT: Mr Chairman, it's 3.30 and I know we've had one</p> <p>23 short break this afternoon, perhaps we should have</p> <p>24 another.</p> <p>25 SIR MARTIN MOORE-BICK: Well, you are going to be moving on</p> <p style="text-align: center;">Page 166</p>	<p>1 can finish slightly on the earlier side, I think that</p> <p>2 would be a good thing.</p> <p>3 MR MILLETT: Very well. (Pause)</p> <p>4 Mr Chairman, I have just had information. I think</p> <p>5 Mr Dowden is not feeling able to continue today.</p> <p>6 SIR MARTIN MOORE-BICK: Oh, really?</p> <p>7 MR MILLETT: That is what I am told. So I think, in</p> <p>8 fairness to him, we would get more out of him and he</p> <p>9 would be able to serve us better if we were to stop now</p> <p>10 and resume tomorrow morning.</p> <p>11 SIR MARTIN MOORE-BICK: I certainly don't want to ask him to</p> <p>12 go on if he's not able to do so, and not feeling fit to</p> <p>13 do so.</p> <p>14 Mr Millett, I have been becoming increasingly</p> <p>15 concerned during the course of the day that Mr Dowden is</p> <p>16 finding this a difficult exercise, and I am very</p> <p>17 conscious that we are about to get to that part of the</p> <p>18 story which he's likely to find most difficult to deal</p> <p>19 with.</p> <p>20 MR MILLETT: Yes.</p> <p>21 SIR MARTIN MOORE-BICK: And I am asking you, but through you</p> <p>22 those who are responsible for his welfare, to consider</p> <p>23 whether giving evidence in this way is the best thing</p> <p>24 for him. We need to have his evidence, but we need to</p> <p>25 take whatever steps we can to ensure that he is as</p> <p style="text-align: center;">Page 168</p>

<p>1 comfortable as possible and, therefore, able to give us 2 the best evidence that he can.</p> <p>3 It may be that we could make other arrangements. 4 They aren't in place at the moment, but I think they 5 could be put in place fairly quickly. But I would need 6 some guidance from others as to whether that is 7 desirable and whether he would feel more comfortable 8 doing that or not.</p> <p>9 I'm very conscious of the fact that he is clearly 10 an officer who takes his position very seriously, and 11 might not wish to give evidence in another way; he may 12 feel that it's part of his duty to give evidence from 13 the witness box in the ordinary way.</p> <p>14 MR MILLETT: Yes.</p> <p>15 SIR MARTIN MOORE-BICK: So I wouldn't want to make an order 16 about that without knowing what his own reaction would 17 be.</p> <p>18 MR MILLETT: No.</p> <p>19 SIR MARTIN MOORE-BICK: But can I just raise that as 20 a possibility, and maybe those who are in touch with him 21 could explore that possibility.</p> <p>22 MR MILLETT: Yes.</p> <p>23 SIR MARTIN MOORE-BICK: I didn't remind him as he left that 24 he's not to talk to other people about his evidence, but 25 I make it clear now that he can talk to other people</p> <p style="text-align: right;">Page 169</p>	<p>1 quite a lot of material still to go through with this 2 witness.</p> <p>3 SIR MARTIN MOORE-BICK: Yes, and just so that people 4 understand, it's not that we are feeling masochistic; 5 the problem we have with the firefighter witnesses is 6 that they are here in accordance with a rota which has 7 been agreed to fit in with their own professional 8 rostering arrangements, so we can't just change them in 9 order to suit ourselves, otherwise we shall interfere 10 with the London Fire Brigade's arrangements.</p> <p>11 So we do need to try and keep up to schedule, and 12 I think for that reason it's wise to start a bit earlier 13 tomorrow and possibly the day after -- we'll see how we 14 go -- and if we have an early end to the afternoon, we 15 shan't have done quite as badly as we would otherwise 16 have done.</p> <p>17 So I'm going to rise now and say that I'll sit again 18 at 9.30 tomorrow and we'll resume with Mr Dowden then.</p> <p>19 MR MILLETT: Yes.</p> <p>20 SIR MARTIN MOORE-BICK: Thank you very much. 21 (3.49 pm)</p> <p>22 (The hearing adjourned until Tuesday, 26 June 2018 at 23 9.30 am)</p> <p>24</p> <p>25</p> <p style="text-align: right;">Page 171</p>
<p>1 about the manner in which he gives evidence at the 2 inquiry, and I would welcome any assistance that I can 3 be given on that front.</p> <p>4 MR MILLETT: Yes. Well, I'm sure he'll be reminded of the 5 requirement not to discuss his evidence with anybody 6 overnight, but in terms of the arrangements, perhaps the 7 best thing, Mr Chairman, is if I speak to Mr Walsh and 8 Mr Seaward about what arrangements can be made to take 9 the best evidence from him we can during tomorrow.</p> <p>10 SIR MARTIN MOORE-BICK: Yes.</p> <p>11 MR MILLETT: It may be that we have a different arrangement. 12 We'll try to put that in place as fast as we can 13 overnight.</p> <p>14 SIR MARTIN MOORE-BICK: I think it would help me if you 15 could have that conversation as soon as possible.</p> <p>16 MR MILLETT: Yes.</p> <p>17 SIR MARTIN MOORE-BICK: And let me know what the outcome of 18 it is, because once I know that, we can speak to the 19 technical people and get any necessary changes put in 20 place.</p> <p>21 MR MILLETT: Yes. Yes.</p> <p>22 Well, Mr Chairman, I think we'll do that and take it 23 from there.</p> <p>24 Can I ask that we at least notionally signal a start 25 of 9.30 tomorrow morning again? I am conscious I have</p> <p style="text-align: right;">Page 170</p>	<p>1 I N D E X</p> <p>2 MR MICHAEL DOWDEN (affirmed)1</p> <p>Questions by COUNSEL TO THE INQUIRY1</p> <p>3</p> <p>4</p> <p>5</p> <p>6</p> <p>7</p> <p>8</p> <p>9</p> <p>10</p> <p>11</p> <p>12</p> <p>13</p> <p>14</p> <p>15</p> <p>16</p> <p>17</p> <p>18</p> <p>19</p> <p>20</p> <p>21</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p> <p style="text-align: right;">Page 172</p>

A	146:9 161:22	141:6	answer 12:5 18:10	appreciate 95:4
Abell 154:8	actuate 104:21	agreed 171:7	35:25 36:5 50:23	120:12
abilities 152:13	acute 85:17	Ah 50:12	53:14 60:8 61:5	appreciated 2:12
ability 9:15 10:17	added 130:11	aid 28:8	100:6 102:21	approaches 103:16
152:15	131:15	aim 69:25	answered 39:25	104:10
able 12:4,5 14:1	adding 92:18	air 67:21	112:12	appropriate 94:21
30:17 37:23 50:21	addition 22:6,9	alarm 104:21 148:6	answers 60:8	107:21 142:19
51:19 52:1 53:1	118:7	164:3	anybody 4:8 42:24	appropriately
54:23 55:23 70:22	additional 18:18	alcohol 100:22	57:24 106:12	87:22
84:23 91:18,20	86:15 163:14	alert 47:16 90:23	107:23,25 116:9	Approved 112:17
101:1 128:18	164:19,20	Alex 154:9	170:5	112:24 113:1
139:25 141:25	additions 131:14	alien 74:4	AOV 105:6	approximately
162:20 168:5,9,12	address 79:3 134:4	alight 77:11	apart 57:22 60:4	4:20 89:1
169:1	148:3 161:13	allocated 151:11	127:5,7	April 50:25 51:10
able-bodied 36:12	adjacent 145:4	allow 92:22 99:7	APL 86:16	area 33:22 54:10
abnormal 124:7	163:5	131:14 132:16,18	apologise 77:5	58:20 99:2 100:6
absolute 163:12	adjourned 171:22	142:15,23	apparatus 154:23	100:19,20 102:5
absolutely 33:16	adjournment	allowed 83:3,20	apparent 42:20,23	104:15,20 106:25
accept 54:18 158:9	119:22	allows 9:10 92:21	appears 137:17	121:22,24,24
accepted 158:7	adopt 8:3 39:12	99:23 102:17	appendix 122:16	122:1,1 127:19
access 40:19 74:7	49:14 52:10 155:2	117:13 132:15	140:10	areas 23:13 39:4
109:5 117:5,9,12	155:12	133:22 138:16	appliance 7:10,17	97:13 99:20 102:2
130:17 132:17	adult 36:13	143:4	132:22,25 145:5	104:18 113:22
133:4,23 137:14	adverse 24:7	alluded 126:18	147:5 148:23	121:23 127:17
137:16 157:25	adversely 37:24	alluding 129:3	150:21 151:23	163:25
161:1 163:15,18	advice 35:5 52:5	alongside 54:20	153:17 154:4	arrangement
accessed 156:10	61:11,13,15,20,25	aloud 38:7 41:1	155:13,21 156:8	170:11
accommodation	62:5,12 99:8,9	alter 62:14	157:2,4 159:18	arrangements
39:8,11 92:18	113:6 114:3,11,11	altered 61:16 62:1	163:14 164:19	169:3 170:6,8
93:1,7 106:24	114:21 115:9	aluminium 42:14	appliances 6:13 7:2	171:8,10
107:1 131:15	advised 23:14	44:1,5	7:16 52:7 109:5,9	arrival 32:24 47:18
account 91:2	advising 125:11	amendment 93:8	109:11 137:14	49:7 53:3 95:16
accounts 152:22	AFA 148:6	amendments	147:22 148:4,7	114:9 165:14
accurate 86:20	affect 88:3	103:16 104:10	149:5 151:9,10,18	arrived 5:15 95:14
achieve 68:12	affirmed 1:21	134:20	159:12 163:19	asbestos 118:9
achieved 142:16	172:2	amount 5:5 23:2	application 20:17	asked 92:11 93:3
ACs 122:2	afternoon 58:8	analysis 87:3	25:11 35:19 58:14	103:15,18 104:9
acting 29:17	166:23 171:14	Andrew 130:21	66:13,22	116:14 122:9
activating 164:4	age 36:11	Andy 95:8,11,25	applies 84:15	asking 2:15 30:22
activation 104:23	agencies 100:22	96:2,11 103:25,25	apply 20:22 21:11	108:9 124:2
activity 147:18	161:2	104:1	24:16 28:12 31:17	165:20 166:8,9
actual 43:11 50:21	agent 125:19 126:9	angles 27:4	36:20 49:24 58:25	168:21
50:22 58:20 59:3	126:23	annotate 123:22	60:5,20 62:22	aspect 82:15
101:16 111:17	ago 17:1,5 39:9	129:7	63:12	aspirations 9:18
112:9 140:12	59:19 74:25 90:3	annotated 138:21	applying 140:20	assent 97:3

assessment 16:11 37:12,17 38:14,20 40:4,12 59:24 105:8 112:7,20 114:9 120:11 122:10 166:7 assessments 65:18 assist 2:11 24:5 45:16 114:10 assistance 170:2 assistant 121:21,25 144:23 association 40:15 assume 6:7 9:17 78:21 131:4 140:3 assumption 146:17 assurance 58:4 122:3,7 123:17 129:4 141:21 atria 116:21 124:9 attempt 61:16 62:1 attend 69:15 72:24 73:1 125:16,25 attendance 56:19 73:4,6 123:14 129:5 148:8 151:8 151:19 158:20 164:20 attendant 145:17 145:22 146:18 153:15 159:14 attended 76:17 89:11,12 92:8 attendees 111:18 attending 147:6,23 148:4,7 151:18 attention 79:20,22 79:24 attributes 149:6 Aubin 154:9 audible 147:20,21 audience 100:1 audio 13:14 audit 58:17 134:25 auditable 134:1	audited 58:12 auditing 58:13 augment 52:8 92:22 August 72:13 140:7 authorisation 123:15 authority 9:10 40:15 65:15,23 113:22 115:21 131:17 auto 148:6 automatic 104:24 148:6,15 automatically 138:13 157:7 availability 6:15 24:2 109:14 available 3:21 44:20 46:9 47:2 132:1 146:10 149:5,15 154:3 157:19,25 159:24 166:13 aware 19:2,5 20:4 22:6,9,15,16 24:11 35:21 38:23 38:25 62:14 65:5 83:15,22,23 84:1 84:9,21,23,24 85:11,13,25 86:1 87:9,16,24 88:5 90:8,18,23 91:3 94:7,10,13 106:1 124:18 142:10 151:12,15 Azerbaijan 79:11	BA 86:16 154:23 Babcock 11:7,7,18 back 5:8 10:18,23 14:21 15:25 19:16 21:22 25:6 26:1,4 28:3 29:11 30:21 34:17 35:10 39:9 40:20 41:17 44:10 46:13,14,16 49:19 50:2 53:18 57:6 59:18 71:24 72:10 76:10 78:10 82:20 85:7 88:16 90:15 91:12 93:19 96:23 99:15 101:23 102:7 103:4,10 111:9,11 112:3 115:16 117:16,19 119:5,24 120:14 123:20 125:22 126:8 128:6 131:2 138:3 139:24 141:2 142:5 143:1 146:11 147:6 149:19 153:8 154:8 155:8 158:3 158:24 159:6,13 167:9 back-to-basics 69:13,23 70:12,21 71:4 background 65:18 158:12 backwards 125:5 bad 73:25 99:10 Badillo 153:23 badly 171:15 bag 132:23 Baku 79:11 Barbara 113:15 barring 29:11 based 11:25 12:13 13:2,4,7 14:3 22:12 54:10 62:11 69:14 70:24 77:6	77:7,8 98:25 120:11 141:9 basic 99:10 basically 9:10 13:9 70:6 88:20 92:20 92:22 138:16 147:25 148:22 158:17 Basingstoke 79:14 79:18 basis 9:22 30:18 78:12 92:15 127:21 Batterbee 111:21 111:21 153:18 bay 145:5 bear 78:12 bears 165:2 becoming 5:4 168:14 bedroom 86:12 bedtime 99:12 beg 14:9 17:20 beginning 69:13 71:15 behave 22:23 behaving 42:7 behaviour 19:23 26:19 27:8,19,20 87:21 behaviour/perfor... 87:15 believe 3:23 4:25 18:7 39:7 73:2 76:22 81:8,23 91:9,11 94:2,3 105:10 benefit 45:11 best 41:20 115:24 161:1 168:23 169:2 170:7,9 better 58:5 88:21 99:25 168:9 beyond 6:13 18:25 19:8 67:24	big 13:8 14:17 38:7 56:19 bigger 3:2 41:10 164:9 Biggin 5:5,7 Bills 152:20 153:11 bit 10:22 13:7 14:6 20:21 21:24 23:18 26:2 27:24 44:17 57:7 59:4 61:7 68:5 69:19 75:3 77:4 91:24 100:9 108:4 109:17 110:9,18 118:22 120:15 126:3 135:5 136:2,7,18 141:3 149:9 165:20 171:12 bits 58:18 72:6 164:17 BLA00002416 113:14 black 19:23 blank 54:17 blind 117:23 block 10:20 24:24 33:2,3 40:14 72:18 76:9,15,19 77:14,15 79:10 92:20 99:8,17 101:12,18,20 102:6,16 112:11 114:6,12,20,24 115:3 117:8,10 130:12 131:13 132:17,20 143:7 163:2 blocked 130:15 blocks 26:25 35:18 36:7,18 39:6 69:8 99:1,13,24 100:4 101:14 113:21 117:3 blow 134:3 135:16 blue 4:19 8:5,18
--	--	---	--	---

135:21 boarding 106:25 body 66:21 bold 40:24 83:11 85:21 87:7,19,19 boot 157:8 borne 22:23 129:8 borough 97:15 121:16,17,18 141:8,14 bottom 8:21 26:8 52:21 71:25 83:11 85:22 93:22 130:4 130:16 131:2 134:3 137:12 149:13 151:13 154:17 box 40:10,18 109:23 135:9,13 135:13 136:3,10 137:12 164:9,9 169:13 boxes 138:12 boxing 105:10,11 105:11 Bramley 163:16 breach 67:24 89:19 breached 89:21 breaching 19:12 break 1:6 2:18 63:2 63:5,6,19 83:3,20 110:6,12,22 111:3 111:8 119:1,4,6,9 119:9 120:6 143:14,25 166:23 167:4,6,14 breaking 85:1 breaks 20:25 21:10 breathing 154:22 bridgehead 34:11 52:12 67:13,17 154:24,24 brief 165:11 briefed 24:7 briefing 17:2,3,11	17:16,19,21,24 18:3 155:7 briefly 1:11 142:3,4 Brigade 4:13,14 8:3,19 9:3 11:4,5 11:13,19 19:14 24:18 28:24 29:22 30:13 32:6,17,18 33:5,14 34:4 40:18 41:18 48:4 56:8 73:20 91:14 97:5,11 102:11 114:9 121:6,23 122:12,25 123:6 128:8 148:14 151:24 156:19 Brigade's 171:10 Brigades 79:24 80:2,24 81:11,19 82:10 broad 109:16 broke 124:2 broken 21:16 brought 68:24 79:19,22,24 Brown 153:11,12 building 14:4 18:17 20:2 21:5 22:23 23:1 24:22 27:15 28:3,14,15 29:7 31:10 34:3,13,20 37:22 38:2 40:24 41:6 42:6,13,25 43:6,13,20 47:9 52:8,10 55:17 57:9,12 60:14,18 65:15,23 67:5 72:5,17 73:12 76:3,5,23 77:13 78:3 83:9 84:19 85:5,20 86:6 87:7 88:4,19,22 89:2,4 90:7,9 91:22 92:2 92:21,23 93:11 94:25 99:5 100:12	100:16 101:16 102:12,17 104:6 105:16 106:10,12 106:14,15,16,20 109:20 111:10 112:5,7,9,15,20 114:16 115:12 116:21,24 118:4 118:11,14 124:5,6 130:13,17 131:18 133:4 135:8,10,19 138:19 139:17 149:15 160:18,18 164:11 165:24 166:3 building's 22:10 23:25 26:18 27:7 27:11,25 29:1 41:4 buildings 19:25 21:10 22:3,11 28:5 29:5 35:22 36:22 38:5 50:15 52:10,23 54:3 55:13,19,20,21 57:10,11 66:19 75:14 83:16 84:2 84:10,12,15,22,25 85:18 86:3 90:19 91:5 140:20 154:22 built 27:16 75:15 bullet 26:11,12,14 29:14,24 31:1,2,6 32:12 33:9 34:17 84:18 108:14 112:14 116:19 124:4 142:17 bundle 3:11,13 15:9 45:20 49:22 59:7,8 98:3 108:11 113:13 122:14 128:21 131:2 140:6 161:9 161:9	bundle-tab 78:3 124:23 128:4 burn 74:17,25 75:2 burning 72:6 75:6 Bush 72:21,22,23 86:5 busiest 150:8 busy 149:24 150:13 button 158:11 159:20,21 <hr/> C <hr/> cab 154:2 156:25 157:15 159:22 call 1:20 3:7 9:5 12:21 25:20 34:2 34:5 42:3 49:12 54:11 67:12,19 68:1 71:12 75:24 100:13 104:23 117:13 121:15 132:23 144:23,25 145:16,19,20 146:5,9,15,16,19 146:21 147:1,2,4 147:4,10,18,19 148:2 149:12,21 149:23 150:16 157:5,10 158:7,18 164:20 call-handling 29:15 call-out 144:10 called 9:9 11:14 21:2 40:10,17 45:5 102:15 108:16 123:6 128:8 133:11 138:15 144:24,24 148:10,21 151:20 161:25 167:16 callers 61:15,25 62:13 calls 29:16 61:11 61:21 68:7 69:1 70:17 71:8 144:21	148:22 149:25 155:16 158:15 159:9 Cambridge 76:18 capabilities 152:16 capital 22:3 capitals 19:24 carbonaceous 104:25 carbonation 67:21 career 4:11,13 5:24 8:15,18 9:2 66:11 carried 141:16 carry 110:24 111:5 120:3 143:15 case 6:18 22:10 25:1 59:3 62:14 63:10 73:20 79:16 82:11 85:17 86:5 86:11 87:16 94:23 101:24 113:6 119:11 Casting 149:19 casualties 34:14 casualty 31:7,21 32:3 cause 41:9 47:23 102:19 caused 72:5 87:3 cavities 18:23 19:6 CCTV 1:15 cent 55:3 68:20 92:24 94:11 centrally 11:12 29:21 54:10 centre 4:16 11:22 14:24 146:21,22 certain 15:4 23:1 40:9 53:24 58:18 75:12,14 94:11 97:13 100:25 102:16 139:6 certainly 12:6 36:8 39:16 47:19 51:3 68:3 101:3 150:8
--	--	--	---	--

168:11 cetera 35:12 76:8 122:3 chairman 1:10 2:19 63:1 119:3,10 121:3 166:22 167:18 168:4 170:7,22 challenges 51:11,15 88:18 115:5 change 14:17 23:12 44:19 46:17 47:1 47:6,17,20,23 61:13 62:5 78:12 93:4 134:20 171:8 changed 11:4,16 95:4 changes 39:7 48:3 129:7 170:19 charge 6:17 7:2,7,9 7:11,15 62:17 121:17,22,25 122:2 129:17 152:7 159:13 charged 88:22 Charlie 111:21 153:18,25 chart 45:8,12 46:2 charts 46:10 check 136:12 checked 109:3 135:10,13,22 136:13 137:12,22 138:13 Chelsea 121:18,19 chemicals 47:8 children 35:24 36:3 36:20 69:7 100:25 114:23 115:6 Chiswick 4:23,25 76:17 77:7,8 Chris 154:7,9 chunk 38:7 cinders 47:8 circumstances	61:14,24 62:23,24 clad 91:6 cladding 72:6,7 73:8,9 83:5,8,25 84:8 90:19 91:19 91:20 105:24,25 106:2 118:6,21 124:15,17 clarify 139:3 classed 8:23 9:1,21 9:25 classes 9:15 classification 148:3 clear 36:4 45:19 50:11 92:7 104:24 108:18,18 155:19 163:12 169:25 clearly 36:14 169:9 click 135:24 close 46:14 48:14 74:23 closed 114:8 closest 153:15 coanda 72:9 85:11 163:6 coffee 63:7 collapse 18:21 47:9 collated 157:25 Collection 128:9 College 10:14,19 11:18 66:17,21 collisions 14:9 colours 8:2,9 combustible 18:23 19:6 86:2 91:6 combustion 105:1 come 3:5 10:18 15:25 19:16 21:22 26:1,5 27:10 30:21 31:25 39:1 40:20 45:23 49:19 58:13 72:10 76:10 76:13 78:9 90:15 101:21 103:4 111:11 117:16,19	119:5 130:5 133:3 147:19,25 149:1 149:16 156:14 157:7 comes 45:13 52:6 104:20 125:21 146:21 comfortable 1:25 2:5 110:17 169:1 169:7 coming 2:10 4:8 19:11 34:17 46:13 46:16 52:20 68:13 68:14 81:7 126:8 143:20 148:22 155:15 command 6:12 10:12 11:20 14:21 14:22,25 15:6,20 19:5 44:12,15 66:18 114:20 132:18 commander 6:4,8,9 6:19 7:14 14:14 20:12 25:16 27:22 28:19 34:6,8,22 34:24 35:1 36:9 37:15 38:12,18 40:2,6,8,16 42:5 42:12 43:4,10,20 44:14,19,22 45:3 46:17,21 47:1,6 47:11,17,20 48:1 62:9,19 66:14 68:10 75:21 90:17 90:22 91:2 121:16 121:17 141:14 155:12,12,21 164:16 commander's 24:8 42:2 commanders 17:2 17:3,17 23:22 31:8 34:18 44:23 45:16 141:8	comment 39:13,18 141:19,25 149:14 158:5,6 comments 123:22 129:9 130:5 commercial 35:23 134:22 commissioner 121:22,25 122:5 common 72:8,23 73:10 88:12,14 113:20 communal 23:13 25:2 39:4 99:19 104:17 communicate 45:14 152:15 communication 146:25 147:14 152:13 communications 43:16 68:8 117:22 147:12 community 98:25 101:6 compartment 14:4 18:25 19:8,11,12 20:25 21:10,16 42:1 54:5 67:19 67:20,24 68:16 73:23 74:1,16 77:2 85:8 88:13 88:25 89:3,7,24 104:19 compartmentalis... 116:20,23 compartmentation 22:13,17 23:3,4,9 35:12 41:9,13,22 47:22 48:2 67:23 84:13 89:13,17,20 89:22 90:24 compartments 73:21 74:21 76:21 76:22	competency 11:2 competent 9:1,12 9:16,23,25 10:4 competent' 8:23 completed 4:15 78:10 93:19 106:6 126:21 129:13 134:5 136:8 141:10,17 completion 125:12 130:14 comply 37:7 components 70:7 75:7 comprehensive 52:15 compromised 41:5 74:17 computer 11:24 13:6,20 148:16,17 157:17 159:15 computer-based 13:3 32:10 148:21 concentrate 100:20 concentration 102:5 concept 22:12 concerned 13:24 89:13 127:9 168:15 concerning 156:10 concerns 80:8 81:18 Conclusion 87:4 condition 106:4 conditions 74:1 confined 89:24 confirm 4:3 55:3 94:4 111:23 162:20 163:23 confirmation 96:18 confirmed 62:18 96:22 126:9 confirms 159:4 confused 69:19
--	--	--	---	---

conscious 94:22 112:8 168:17 169:9 170:25 consider 23:22 25:9 42:12 59:22 60:2 60:24 61:4,14,24 62:4 168:22 consideration 36:8 36:14 considerations 161:2 164:8,10,17 considering 43:5 43:12 constructed 29:8 construction 18:16 18:17,20,21,24 19:7 26:18 27:7 27:11,15,25 28:8 28:16,18 29:1 41:6 87:13,14 89:2 105:16 106:5 106:8 118:4,5,12 118:14 124:5,6,9 136:21,23 contact 125:15 126:25 159:17 166:15 contacted 147:8 contain 23:3 149:8 contained 89:2,24 108:14 149:10 contains 39:15 contemporaneous 3:2,16,23,24 content 27:9 58:4 contents 4:3 15:16 26:18 27:8 28:1 42:13 43:1,6,13 context 30:23 37:13 81:24 120:18 Contingency 162:2 162:10 continue 63:21 121:4 168:5 continues 132:6	contractor 104:13 105:4 106:13 113:8 131:18 contracts 122:5 contribute 18:24 19:7 83:12 85:23 87:7 control 20:19 29:17 44:12,21,24 47:3 61:15,25 62:5,15 62:17 108:16 115:19 146:21,22 147:1,2,10,12 148:18 149:2 154:21 158:7 159:2,4,18 164:18 164:24 controlled 148:20 convenient 1:25 63:1 126:10 conversation 33:1 80:6 96:17 114:18 116:13,13 117:4 155:25 170:15 conversely 23:24 copied 125:23 126:5 copy 162:4 core 49:12 54:16,17 64:9 136:21 corner 127:18 correct 3:18,20 5:19,22 6:8 8:25 11:12 32:1 33:10 46:1,5,12 84:17 92:9,13,16 129:15 131:6,9,10 133:6 134:19 137:25 140:15,18 143:11 144:13 145:10 146:24 148:11 151:22 152:2,22 152:25 153:3 154:6,10 161:7 corrected 78:9	correctly 137:10,23 correspond 137:1,2 137:19 corresponding 135:24 could've 113:9 Council 91:11 councils 91:4 COUNSEL 1:22 172:2 country 82:3 couple 11:17 17:1,5 21:15 27:10 51:11 51:14 89:8 117:21 124:22 164:1 course 2:17 4:16 10:12 11:11,15 12:2,9,14,16,22 12:23,25 15:5 35:2 71:14 119:4 168:15 courses 10:25 11:21 Court 72:1,3,12 79:15,19,22 81:22 81:25 82:5,18 86:8,9,21 88:10 89:12 91:13 Court's 79:15 cover 15:5 26:9 29:20 67:23 covered 32:13 33:9 113:9 127:13 143:8 covering 21:2 74:8 74:23 crew 4:22,25 9:13 9:19 10:10 14:16 14:23 58:3 76:19 120:21 130:21,23 130:24 137:16 152:8 153:18 154:7 156:5 159:10 crews 43:16,19	67:18 123:4 125:11,19 129:2 141:16 155:14,17 critically 105:21 cup 63:7 current 5:10,11 44:15 45:22 48:18 48:19 51:16 59:10 93:1,14 currently 8:4 92:23 130:10 131:18 135:21 curtains 74:20 <hr/> D <hr/> D 134:6 136:8 172:1 D-A-V-I-S 95:10 damage 86:15 Daniel 95:19 Danny 152:20 153:11,11,11,25 data 104:22 128:9 135:22 136:15 138:12 149:4 156:8,17,25 157:7 157:13 158:1,10 161:6 162:18 163:21 165:3,11 165:23 database 123:7,9 123:22 129:2 138:14 139:11,18 142:11 157:24 160:16,22 date 4:13 51:8 53:23 54:6,20 77:3 78:11 80:16 91:11 98:10 128:6 131:7 162:14,15 dated 1:15 3:19 78:6 125:9 130:2 dates 12:4 49:4 53:10 94:5 95:14 Dave 126:9 127:1	153:23 Davies 125:17 Davis 95:8,10,23 103:23,25 104:1 125:9,22 126:5 day 49:9,15 58:13 58:16 66:13,23 67:23 68:7 69:14 125:23 131:8 167:21 168:15 171:13 days 57:13,22 64:14,16 93:17 131:16 daytime 8:6 De 154:9 deal 11:7 20:17 164:24 168:18 dealing 71:8 dealings 71:7 Dean 129:14 debrief 68:22 decide 62:12 139:9 decided 136:11 decision 34:5 49:10 49:16 51:13 68:2 69:25 70:1 71:2 101:21 112:8 decision-makers 17:18 decision-making 45:5,16,21 68:17 deemed 56:9 65:17 deeper 43:22 default 93:20 defined 37:6 definitive 64:10 delay 89:6 delayed 159:16 deliver 11:4 32:19 33:12,18 56:24 71:13 delivered 11:11 53:10 57:15,21 70:11 71:22
--	--	---	---	--

delivering 56:11,16	85:5 88:3	149:22,25 150:5,6	131:1,25 133:9,12	143:12 144:2,6,9
delivers 11:3	developed 89:4	156:3 160:12	133:25 134:10	156:17 165:1
demeanour 110:7	developing 85:17	168:16,18	137:24 143:4	167:4,16 168:5,15
denote 147:22	development 4:16	difficulties 35:18	154:12 160:6,8,9	171:18 172:2
denotes 139:5	4:18 5:3 9:5,10	36:18 135:14	160:10 161:4,8,13	Dowden's 1:11
department 11:13	10:11,11,24 11:1	137:14,16	162:9,23 163:11	DowdenM 131:4
123:18 128:16	14:20 19:23 26:16	difficulty 2:14	165:1	downtime 145:7,12
129:6,10	27:5	dig 43:22 108:4	documented	145:14
dependants 100:25	devices 29:2	dimensions 138:20	162:15	downward 20:1
depending 6:22	devised 37:16	160:17 163:3	documents 1:12 3:3	Dr 113:15
138:25 143:2	38:13,19 40:3	direct 9:8 48:11	3:21 17:23 19:16	draw 13:18 31:20
150:21	59:23 166:6	directed 34:21	49:22 55:7 98:4	drill 33:25 64:22
depends 24:22	diagram 57:5	direction 20:1	113:13 128:1	65:2,6,12 66:7
deployed 151:14	dialler 148:6	123:24	161:9	67:4
deputy 121:21,24	diary 51:2 54:15,24	directly 147:8	doing 41:20 43:1	drills 64:6,7,8,12
describe 16:4 35:13	133:11,22 134:11	163:20	43:10 92:11 94:25	64:12,19,20
75:5 149:20	141:12,18 162:6	director 16:16	105:9 106:22	driven 100:13
156:24	dictates 37:18	49:25 59:18 78:4	108:7 142:21	driver 153:21
description 14:2	38:15 59:24	122:4,5,6,6 125:6	145:11 160:4	157:3
deserve 101:22	diesel 156:2	135:6 136:6 161:9	169:8	driving 152:20
design 40:24 41:4	differ 66:23,24	disabilities 36:10	don 150:19	153:1,11 154:8
136:23	difference 6:24 7:1	36:13	donned 156:1	DRM 130:13,18
designated 150:22	7:12 8:8 135:12	discretion 60:5	door 73:24 85:9	drop 117:17,18,19
designed 12:16	152:3,5,8	62:11	132:8,10,11 164:2	117:19 132:10,13
33:13 38:5	differences 89:10	discuss 63:9 96:15	doors 18:18 114:8	132:15,21 133:4
designs 42:14 43:25	different 2:17 8:2,9	170:5	116:6,10,12,15,22	164:2,5
44:4	8:11,17 11:24	discussed 4:7 53:3	164:3,4	dropping 68:19
desirable 169:7	13:10,11,14 14:4	discussion 25:16,24	Dorgu 154:9	drug 100:23
desktop 161:22	14:5,19 27:4	dissent 84:5	double 25:22	dry 52:7 92:19 93:6
162:6	28:23 34:7,9,9,12	divert 24:6	doubt 124:20	93:9,13,15,15,17
detail 26:2 29:1	36:12 43:18 51:21	document 3:6,10	Dowden 1:20,21	93:21,25 94:20,25
108:5 133:3 142:9	57:15 66:17,19	9:11 16:14,21	2:3,7,9 3:15 15:11	103:10,15 104:10
detailed 15:2 94:5	67:2 91:23 97:13	18:13 19:14 26:4	15:22 16:18 18:10	107:15,17,20
101:19 144:18	98:10 102:23,25	28:24 32:15 40:23	23:20 27:2 33:10	109:12 116:3
155:7,19	149:25 151:4	46:3,7,14 55:9,11	35:16 41:11 45:25	127:6,7,17 131:13
detailing 116:3	152:14 157:23	57:22 78:2,7,13	48:19 50:16 55:11	156:12
155:4	161:19 170:11	78:15,17,20,22,23	59:20 63:5,21	dryer 86:17
details 12:22 160:3	differentiate	82:24 86:4 88:7	64:4 69:12 84:21	Dubai 79:3,4
160:7,11 162:2	149:25	98:1,6,21 104:2	87:9,24 108:7	ducting 118:7
163:1	differentiation	112:17,24 113:1	110:11,24 111:5	due 36:11 86:18
detecting 167:19	36:2	113:12,19 120:12	115:24 119:7,15	duplicate 157:13
detector 104:17,19	difficult 22:20 25:3	122:11 125:7	119:24 120:3,10	duration 93:5
104:20	39:18,22 42:19	126:3 128:3,5,12	121:4 125:1,9	duty 8:7 64:17
develop 53:5 83:3	64:21 65:1,8	128:18,21,22,23	127:25 131:5	98:13 102:8,10
83:10,20 84:20	111:20 141:19	129:11 130:3	135:7 141:1,13	126:1 144:11,14

144:15 145:17,22 169:12 dwelling 100:2	36:20 39:10 69:7 115:2 electronic 9:9 133:5,16 138:15 146:12 electronically 129:8 143:4 emergency 37:9,14 en 49:7 52:5 53:3 151:6 154:19 160:2 164:5,8,9 164:15,16 enable 67:8 101:20 ended 4:17 engine 151:23 156:2 163:19 engineering 127:12 engines 7:9 English 114:20 enlarging 135:4 enquiries 144:22 ensure 114:16 122:17 141:8,15 168:25 ensuring 123:1 entailed 50:22 enter 117:14 entered 137:9 enthusiasm 1:14 entitled 78:2 82:25 140:8 entrance 93:23 117:5 132:11 163:20 164:2 entrances 138:18 entries 53:22,22 98:10 142:21 entry 50:10 54:3,14 55:1,22 56:11,11 88:25 130:7 132:8 132:9,10 136:15 137:18 138:12 161:6 163:16 envelop[e] 87:6 environment 35:14	67:21 81:8 104:25 136:4 EPIP 138:15,23 156:14 equipment 25:5 28:20 52:9 53:4 56:1 58:18 67:16 109:6 150:20 154:23 156:1 errors 159:15 escalates 68:18 escalating 14:2 escape 107:5 estimate 77:17 et 35:12 76:8 122:3 evacuate 24:23 36:17 37:23 114:25 evacuation 22:3,10 23:23,24,25 24:5 24:19 25:4,10,13 31:7,9,21 32:3 34:19 35:6,17 36:6 37:10,14,15 38:12,19 40:2 59:13,21,22 60:2 60:14,17 61:1,3 69:6 112:13,15,16 112:19,21 113:4,4 114:10 115:10 127:9 166:6,10,19 evaluate 59:2 evening 144:11,14 event 37:22 45:9 46:8 54:20 72:8 73:10 88:14 89:23 98:25 99:9,14 113:24 114:17,24 132:19 events 30:23 79:5 79:12 everybody 2:21 3:8 evidence 1:11 2:10 4:7,8 9:7,8 47:21 63:9,9,12 82:15	119:16 168:23,24 169:2,11,12,24 170:1,5,9 exact 90:4 94:7,9 162:4 exactly 52:2 72:19 160:13 examine 23:17 examining 4:11 example 23:25 42:14 43:25 109:19 134:2 143:7 exceeded 94:20 exceeds 94:25 exceptional 61:14 61:24 62:23,24 exchange 126:15 exercise 34:6 49:10 49:16 51:13 66:24 68:2 69:3,25 70:1 71:3 168:16 exhibits 3:1 exist 32:11 existing 39:21 exit 88:12 exits 138:18 expanded 82:22 expect 6:3 160:11 expectation 21:19 30:16,19 31:15 76:6 89:14 116:11 134:16 138:11 139:18 155:18 expected 31:20 experience 16:5 27:23 30:10,17 31:20,25 32:1 34:15 35:7 62:12 73:19 74:14 75:6 75:18 76:12,24 86:21,22 92:1 97:5,9 114:11 140:19 experienced 7:19	experiences 30:10 73:19 expert 113:15 explain 6:24 8:1 9:1 10:7 55:22 68:9 69:21,21 121:9 122:10 128:25 129:16 133:15 135:12 158:12 explained 116:4 121:7 explore 100:9 169:21 express 117:13,16 extend 83:7 84:7 92:19 extended 93:18 extending 93:5 103:10 107:1 extends 152:10 extension 106:22 116:3 extensive 6:21 extent 134:12 exterior 21:12 76:15 77:10,20 79:2,10,15 90:19 90:25 105:19,20 106:5,10 external 21:4,21 73:22 74:9,12 83:1 86:2 87:6 89:3,5,25 91:4 externally 73:12 extra 130:11 extract 104:15 105:14 116:4 127:13 eyes 110:9
<hr/>				
F				
<hr/>				
facade 83:12 85:23 86:13 87:4,8,20 facades 78:3 86:2				

87:14	77:23 111:21	116:1,25 118:14	19:25 20:25 21:4	98:25 99:3,8,9,10
facilitate 13:10,16	136:16 143:6	127:10 130:2,8	21:9,11,16,17,20	99:14,17,22 100:2
13:17 24:19,25	fairly 16:7 81:5	131:7 132:9	22:24,25 23:3,6	100:8,11,16,17,20
25:4,25 29:5,23	103:3 113:20	fed 1:25 68:10	23:11,13 24:2,2	101:7 102:11
30:3 34:12 35:3	118:10 169:5	feedback 7:5	24:17 26:17 27:7	104:19 105:8,12
39:23 42:3 46:22	fairness 168:8	feel 2:18 63:24 71:6	28:9,9,21,24	105:21 108:1
54:12 56:9 57:3,4	familiar 15:3,4,15	71:10 169:7,12	29:15,22,23 30:13	113:6,17,24 114:6
64:23 65:7,8,14	15:23 18:5 19:17	feeling 110:11	32:6,17,18 33:4	114:9,17 115:20
65:22 66:6 67:13	48:21 79:5,12,17	168:5,12 171:4	33:13,23 34:1,4	115:21 116:10,12
100:5 145:1	79:17,18 86:7	Feltham 4:18	37:8,11,16,17,22	116:17 120:22
facilitated 9:6,8	92:4 108:25	fiats 156:11	37:24,25 38:13,14	121:6,8,14,19,19
10:14 11:12,20	113:18,19 122:11	fifth 42:9 92:25	38:19 40:3,12,18	121:20,23 122:3
13:20 14:15 17:12	122:17,21 128:23	93:14	40:24 41:3,9,18	122:12,25 124:7
20:11 21:6 25:18	133:12 140:3	fight 21:11,19,20	41:25 42:7,13,16	127:12 128:8,8,16
25:19 26:23 27:12	142:1	73:15 74:22	42:16 43:1,5,6,11	131:18 132:15,19
27:17 28:22 33:6	familiarisation	fighting 156:13	43:11,13,15,17	132:22 134:6
33:23,25 34:10	25:21,24 27:1,12	file 2:25 3:3,3,17	44:2,3,21 47:3,10	138:18 143:13
49:10,16 52:14	27:18 28:7,22	filed 129:9	47:13 48:2,3,5,7	144:21,25 145:16
53:16,24 56:18,21	29:3 32:25 33:3	files 2:25	49:11,17 50:14	146:25 147:18
58:13,19 62:9	42:22,23 43:1,4	fill 134:10	51:1 53:25 54:20	148:2,6 149:24
64:16 66:1,2	43:11 75:24 76:7	fills 133:24	56:8 59:1,3,23,24	150:8,21 151:23
facilitating 11:6	102:15,22,25	filtered 128:14	61:9,11,21 62:7	151:24 153:17
27:1 33:21 41:16	117:8 126:10	filtering 148:23	64:5 65:3,5,12	154:25 155:2,21
51:7	133:19 147:7	financial 122:6	66:16,20 67:15,19	156:13,18 157:2
facilities 67:6 76:8	165:16	find 1:24 3:8,13	67:20,24 68:3,4,7	158:7,14,14,18
115:21	familiarise 93:3	18:2 48:17 49:22	68:16,20,23,25	159:9,9,10,12
facility 13:11 39:19	103:15,18	51:19 59:12	69:1,14,15 70:3,5	162:18 164:13,15
54:16 65:4,17	family 120:13	109:20 110:17,18	70:8,17 71:8,12	165:13 166:7
66:20 145:15	fantastic 143:18	113:5 165:6	72:1,3,4,7,12,24	171:10
fact 46:6 53:22	far 13:23 41:10	168:18	73:1,9,12,15,15	firefight 52:9 56:1
78:8 103:14 107:4	65:4 89:12 107:2	finding 168:16	73:20,23 74:9,12	firefighter 4:19,21
154:24 169:9	127:8 152:22	fine 63:23	74:22,24 75:11,13	5:24 7:20 9:2,4,13
facts 86:11	fast 77:19 170:12	finish 32:21 158:23	75:17 76:13,17	9:18 11:8 14:16
fail 28:10 73:21	FBU 82:11,12	167:22,24 168:1	77:1,19 79:3,10	14:18,23 67:18
74:7 75:10 84:13	feature 113:20	finished 63:11	79:23,25 80:1,24	74:4 76:25 144:20
85:9	features 41:5	93:10	81:11,19 82:10	152:20 153:11
failed 89:23	116:21,22 117:11	fire 4:13,14,23 5:20	83:1,9,13 84:19	154:8 171:5
failing 73:23,24	118:4,8,12,15	6:10,17,19,20 7:9	85:1,4,8,24 86:5	firefighters 25:5
fails 35:12	124:5,7,12 165:13	7:13,21,22,23,24	86:12,13,14,17	26:17 28:19 29:9
failure 41:8,12,22	February 3:19 5:9	8:3,19 9:3 10:14	87:3,7,15,21	33:1,15,18 34:11
42:15 44:2,6	5:16 10:6 16:12	10:18,22 11:4,5	88:10,23 89:3,19	47:9 51:3 56:17
47:21 48:2 90:23	33:22 49:8,15	11:13,17,19,21	89:21,25 90:4,18	56:25 58:2,7,22
failures 157:18	53:13,19,20,21	12:3,12 13:13,21	90:24 91:4,13,14	73:14 74:1,14
fair 21:8 39:17,18	54:4 95:14 97:1	13:24 18:18,21,25	91:19,20 92:8,21	102:14,20 109:5
47:16 52:16 62:10	98:8 102:8 109:2	19:8,11,13,23,24	96:7 97:5,11	109:14 111:18

117:13 144:18 150:19 154:9 firefighters' 58:18 firefighting 13:1 16:3,5 22:1 23:23 24:13 25:1,9 32:8 48:16 50:15 51:5 51:18 52:23 54:2 54:5 55:13,17,20 57:8,11,25 58:23 60:25 85:7 108:1 115:22 122:13,18 127:9 132:19 Fireman's 164:2 fires 14:4,5 22:13 29:9 72:8 79:15 82:7 83:3,9,20 84:19 85:5,17 88:3,12 89:11 100:19 101:4 102:3 151:8 first 2:10 3:6,12 6:4 6:5,6 15:10 18:12 18:14 26:12,14 37:4,5 40:1 41:1 45:1 47:18 50:19 59:11 68:15 71:21 78:15,25 86:19 92:5 93:15 95:18 98:21 109:4 116:6 118:15 128:3,11 131:1 133:21 134:18 136:25 139:22 141:22 144:9 145:18 156:17 163:19 fit 121:5 168:12 171:7 five 150:13 154:5 five-way 155:25 fixed 115:19 138:18 161:1 flag 100:17 flags 47:14 Flame 83:25	flames 83:5,6,7 84:7 Flammable 136:21 flashes 158:9 flashover 83:3,20 83:23 flat 1:16 23:1,6,9 41:9 86:12 99:17 99:18 114:5,7 164:21 flats 23:12 104:18 107:12 116:15,16 130:11,12 163:2 flavour 11:16 floor 23:8 67:12,14 67:15,19 72:7 74:22 85:2 86:12 86:14,14,15 88:23 90:4 92:25 93:14 94:17 104:15,23 104:24 107:20 124:4,6,14 127:15 131:14 154:25 floors 21:17,18 35:17 36:7,17 66:4 67:11,14,18 69:8 72:7 73:9,13 73:15,18 74:15 76:14 77:18 92:18 94:16 130:16 131:16 138:19 154:25 163:2 165:25 166:3 flow 45:7,12 46:2 46:10 fob 133:5 focus 48:12 164:21 focused 38:9 focusing 51:22 156:16 follow 37:15 38:12 38:18 40:2,5,8 44:14 45:2 60:2 75:3 89:9 137:22 140:5	follow-on 31:2 following 10:19 59:22 71:17 124:25 131:12 136:2 142:16 foot 50:3 163:16 footage 1:17 football 119:18 forgive 33:16 111:11 Form 128:10 formal 32:9 103:2 103:3 formally 32:4 format 19:15 135:17 161:19 formulate 45:12 formulation 142:18 142:23 forward 82:13 forwards 52:21 found 115:10 four 4:20 8:3 53:22 96:12 97:1 121:12 121:23 150:13 151:8,13 154:1 155:25 156:6 four-month 4:15 four-pump 6:12,17 fourth 31:5 92:25 93:14 131:14 frames/panels 42:15 44:1 framing 118:6 frequency 141:4 frequently 130:15 front 2:4 3:1,13 13:8 78:5 111:16 116:15 132:8,10 132:24,24,25 152:24 155:13 170:3 FSG 61:15,25 62:13 Fulham 91:10	full 2:8 31:9 34:19 35:6 42:6 49:9,15 60:13,17 66:13,23 112:16 134:12,14 fully 76:21 82:12 88:22 functional 44:23 functionality 8:11 functions 8:8 furnishings 74:20 75:2 further 9:20 47:12 52:5 68:1 73:20 76:14 85:11 123:13 136:7,17 138:13 155:14 164:18,24 future 9:19 <hr/> G <hr/> G 151:25 152:1 G271 98:20 151:20 151:21 152:2,20 153:23 154:5 G272 98:20 154:7 Gardens 76:18 Garnock 79:15,15 79:19,22 81:22,25 82:5,18 Gary 17:12 18:4 gases 74:2 gather 102:16 117:1 123:4 148:9 gathered 108:20 123:20 135:25 137:7,8 142:15 gathering 46:7 102:4 127:19 133:17 134:15 142:8 145:19 general 30:12 87:4 87:6 88:8 99:11 150:18 generally 6:11,17 11:20 20:25 21:18	22:25 24:22 35:22 36:9 39:3,22 43:20 52:13 56:18 57:3 64:15,23 65:7 73:21 74:7 74:10,13,15,18 75:1 77:22 85:8 88:12 99:16,24 100:18,21 109:25 117:7,10,11 118:15 122:25 128:14 147:3 149:16 151:4 152:7 153:14 generated 143:7 148:17 generates 138:13 generic 16:10 28:4 91:6 120:11 122:10 getting 6:16 43:15 67:16,17 68:10 89:6 115:3 118:18 159:16 give 2:7,10 3:6 4:8 4:12 12:4 13:25 15:8 27:4 30:5,7 35:4 47:4 55:23 59:14 63:6 64:10 70:22 77:3 80:16 82:16 95:16 99:8 111:3 114:12 115:9 166:18 169:1,11,12 given 11:24 12:24 14:20 17:16 20:16 30:18 41:16 61:13 81:12,17 96:25 104:2 127:4 170:3 gives 44:16 74:21 160:15,17 170:1 giving 56:25 58:22 63:8,11 119:16 168:23 glance 141:22
--	---	--	--	--

glass 163:6	63:5 67:15 76:4	140:16,23,25	33:23 34:1 49:10	19:23 40:24 61:10
glean 166:4	78:18,19 81:8	143:1 144:10	49:17 53:16,25	78:11
gleaned 163:13	82:16 86:9 91:23	146:5 151:14	54:10,20 66:13,23	health 91:7
glitches 157:18	94:5 95:9 102:7	160:20 162:11,18	67:7,22,23 68:6	Healy 130:21
GM 125:16	106:9,19 108:4,5	163:16 164:13,15	69:24 70:12 91:10	HealyA 130:19
go 3:6,9 6:12 10:10	108:6 110:1 112:4	165:13,17 166:6	hand 15:12 160:6	hear 2:21,23
10:23,25 11:17,23	117:16 118:20,22	166:11,16	handbook 12:18,20	heard 16:10,19
13:4 14:16 19:17	127:25 131:2	grilles 116:22	12:24	73:19 82:18 113:1
19:21 21:23 25:20	143:1 144:9 155:2	ground 6:16,23	handle 164:25	hearing 1:4 171:22
26:4 32:20,23	160:12 163:11	7:13,21,22,23,24	handouts 56:24	heat 23:11,13 37:24
43:5,12 44:10	166:25 171:17	13:15 21:11 43:17	81:12,17	70:8
46:14 48:15 53:13	Golf 5:11 151:25	58:25 59:1,3	hands 119:10	height 67:11 85:19
53:18 58:6 59:16	152:6	67:12 74:23	Hang 94:24	88:19 90:7,8,9
59:18 60:23 62:4	good 1:3 2:7 16:7	102:13 104:15	happen 20:24	94:7,9,12,13,20
63:12 65:11 66:15	25:24 63:3 91:15	117:4	21:17 58:10 88:14	111:10 112:4,7,9
69:11 71:24 73:14	110:6 125:18	ground-floor 93:18	88:15 97:11,14	160:18 165:24
74:10,15 76:5	136:15 143:9	145:4	125:18 139:14	166:3
79:9 80:5 82:20	159:16 167:3	group 6:14 98:18	150:19	held 52:3
85:3,12 92:15	168:2	98:23,23 99:23	happened 17:24	help 6:24 28:24
93:19 96:20,23	government 16:11	100:5 121:15	18:2 20:20 48:1	35:5 55:8 114:24
97:20 98:21 99:1	GRA 16:11 46:15	130:22	82:5 96:16 100:18	115:3 128:2,18
99:2,4,23 100:6	60:9 108:6,10	growth 42:16 44:2	101:24 116:8	132:13 140:2,14
102:15 106:15,15	115:17	Grozny 79:3	117:25 138:12	167:11 170:14
108:10 109:1	grading 140:10,21	GRVs 100:3	150:16	helped 66:25
112:3 115:16	great 38:7	guarantee 68:20	happens 147:3,16	helpful 16:2 40:21
123:4,10 124:5	green 5:2,8 8:5,18	guesstimate 77:17	154:18	45:18 51:19 55:7
125:3,6,22 127:25	66:2 129:18,19	guidance 29:16	happy 63:22	helping 17:14
127:25 129:2	130:21,22 134:7	61:9 62:7 68:4,7	110:24 111:5	helps 133:17
130:7 131:1,2	158:8	68:23,25 69:1	120:3 123:12,19	135:17 160:9
133:9 140:6,6	Grenfell 12:3,7	70:3,6,17 71:12	141:24	hesitate 2:15
141:2,3 142:5	17:15,18 25:2	87:23 108:19	hard 67:2	HFSV 98:18,23,23
157:15 158:3	50:25 69:5 82:3	169:6	harm 2:19	99:21
159:6 162:9,22	90:16 91:25 92:4	guide 12:18 14:1	Harrow 11:21 13:3	Hi 126:7
163:15 168:12	93:12,22 94:1,8	gym 105:10,11,11	haul 93:12	hierarchy 121:6
171:1,14	94:12 96:7,14		hazard 48:6 118:8	high 35:17 36:7,17
goes 45:7 50:2	98:20 101:8,11	H	hazardous 14:11	69:7 72:8 77:16
73:17 77:22 134:9	105:2 106:20,21	H-A-L-L-I-S-E-Y	14:12 47:7	97:9 99:3 100:7
147:1	109:10,10 111:14	95:21	hazards 18:18 48:7	100:11 101:21
going 1:10 2:24 3:4	112:21 113:17	half 89:1 97:4	142:9,12 160:19	125:13 140:13
3:9 7:19 15:1,25	116:16 117:6,12	halfway 18:15	160:23 163:6	143:2
18:9 21:22 23:17	121:8 124:10,17	19:22 55:15 98:9	hazmat 14:3,10	high-rise 13:1,4
25:5 29:5,8 36:11	125:11 126:10,17	124:3	he'll 170:4	14:3 16:3,5 19:12
36:25 37:2 44:16	127:10 130:10,15	Hallisey 95:19	head 93:24 104:17	19:25 21:1,3,5,10
47:12 50:9 55:5	131:4,12 134:5	103:21	104:19,20	22:25 24:23 26:9
58:7 59:13 61:17	138:24 139:11,16	Hammersmith	heading 18:15	26:15,25 28:6,15

28:18 32:8,24 33:25 34:3 35:11 35:17 36:7,18,22 38:4 39:6,19 48:15 49:8 50:15 51:1,5,18 52:9,23 54:3,23 55:13,17 55:21 56:2 57:5,8 57:25 58:15,22 64:7,19,20,22,23 65:2,6,9,12 66:2,6 66:20,24 67:4,9 68:15,16 69:8 72:18,19 75:15 76:9,19 77:1,14 77:15 82:7 83:16 84:2,9,11,15,22 85:6,12,18 86:6 90:9 91:5 98:14 99:1,13,16,24 100:4 101:14 102:8,12 108:20 109:25 112:10 113:20 114:12 117:3,8,14 122:13 132:17,20 133:18 138:7,8,17 139:16 143:7 149:12,16 149:17 151:8 154:22 163:1 highest 6:7 highlighted 135:21 Hill 5:5,7 hoarder 160:24 hold 95:13 holds 138:17 Holland 80:22 hollow 92:20 home 99:10,22 100:2,20 homes 39:10 honest 10:22 20:10 33:20 76:4 107:6 109:21 139:24 150:3 163:11	165:16 166:1 honestly 52:1 94:10 114:2 126:22 hope 78:14 hopefully 42:20 horizontal 20:1 42:16 44:3 hose 93:12 hotel 80:18,19,21 hour 89:1 119:13 House 69:14,15 70:3,4,10,20,25 71:18 House-related 71:14 housing 40:14 100:24 101:12,14 HSFV 101:22 Hughes 126:9 127:1 Hyde 80:22 Hydrants 163:5 <hr/> I <hr/> IC 40:6 59:14,22 60:24 61:14,24 90:23 icon 158:8 idea 27:4 47:4 77:3 95:16 110:6 167:3 ideal 24:23 identification 117:22 identified 37:11 99:2,4 100:3,7,22 101:3 102:2 134:24 135:25 141:9 151:6 identify 16:14 91:19,20 99:23 101:1,5 133:24 135:17 142:12 158:7 166:15 identifying 82:24 ignited 73:9	igniting 72:7 ignore 86:25 illness 36:11 illnesses 36:13 images 1:16 13:11 13:20 imagine 21:23 25:3 55:5 immediately 153:4 153:5 impact 24:1 26:17 27:6 42:12,25 43:6,12 122:18 implement 39:6,16 44:23 142:19 implemented 25:7 Importance 125:13 important 71:11 83:12 85:23 119:2 138:4 156:4,9 158:5 improve 73:25 74:3 incident 6:4,8,9,16 6:19,23 7:14 10:12 11:14,20 13:15 14:2,4,11 14:14,21,25 15:6 15:19 17:2,3,17 19:5 20:12 23:22 24:8,9 25:15 27:22 28:19 29:18 31:8 32:24 33:2 34:6,8,18,22,24 35:1 36:9 37:15 38:12,18 40:2,6,7 40:8,16 42:2,5,12 43:4,10,20 44:14 44:15,19,21,22 45:3,3,16 46:17 46:20 47:1,3,5,6 47:11,17,20,25 48:12 51:12 55:19 57:10 58:25 59:4 61:12,21 62:9,19 66:14,18 68:10,18	70:25 72:4,16 73:6 75:21 76:18 77:21,22,24 82:2 88:17 90:17,22 91:2 102:20 147:7 147:19 148:3,4 151:6,11 155:5,11 155:11,11,12,20 158:19,21,23 164:16 incidents 10:16 14:5 21:16 26:9 26:15 44:13 68:15 82:2 108:21 include 26:10,15 31:4 108:21 included 151:16 includes 23:25 29:16 121:18 including 116:21 inclusion 139:9 incorporated 49:11 64:9 68:3 increase 47:12 106:23 increased 41:4 increasingly 168:14 independently 50:19 97:23 Indicated 84:5 individual 23:5 28:2 35:9 49:4 62:19 116:16 137:6,7,8 155:4 individual's 60:5 influencing 142:9 inform 113:23 informal 81:16 information 24:10 29:17 40:10,18 42:21 43:17,19,21 44:20,24 45:8,10 45:13 46:8,8 47:2 47:5,19 48:9	68:10 70:5 71:9 101:19 102:4,16 108:20 109:14,23 111:16 117:1 123:5,8,13,19,24 127:19 131:20,23 133:18 134:13,15 134:15 135:25 137:3,7,9 138:15 138:17 140:8 141:23 142:8,15 143:9 145:19 146:10 148:2,8,25 149:7,9 151:16 156:9,10,12 157:12,24 159:3 161:15,16,18 163:9,13 164:23 165:10,18 166:13 166:18 168:4 information-rich 161:4 informed 131:17 informing 61:14,25 62:5 initial 4:18 10:12 11:3 46:20 73:4,5 initially 10:9 14:16 45:12 114:7 inlet 93:21 131:13 input 10:18 13:11 14:20 26:22 35:8 45:6 46:20 51:5 51:17 56:13 64:24 102:17 141:23 inputted 149:4 inputting 135:22 INQ00000055 1:18 inquest 71:17 inquiry 1:17,22 2:7 2:11 4:3 63:10 81:6 113:15 119:17 170:2 172:2 inside 73:16 101:18
--	---	---	--	--

Inspection 128:9 installation 115:20 installations 138:18 161:1 installed 18:19 109:25 131:14 instructions 12:21 104:3 intend 95:13 interacting 115:13 interaction 113:8 interested 116:23 interfere 171:9 internal 20:24 32:7 35:10 41:9,12,22 74:19 75:2 92:21 108:13 122:15 132:11 133:22 164:3,4 internally 11:19 17:14 18:13 19:13 19:19 21:20,20,25 26:3 40:23 42:8 74:22 91:8,14 108:11 134:2 140:11 141:5 interpretation 22:19 62:8 70:24 interrogate 157:20 157:22 interrupt 110:5 interruption 121:1 investigate 114:15 114:19,23 115:2 investigation 17:15 investigations 2:11 invited 80:5 involve 13:1 20:9 89:16,19 involved 13:23 23:13 28:9 47:7 48:10 51:17 65:24 66:11 68:21 69:18 75:13,16 76:20,21 76:25 77:1 80:8	81:10,19 involvement 57:4 involves 10:8 14:11 issue 29:8 74:2 85:12,19 88:24 91:7 issues 69:7 80:7 83:2 89:6 142:9 item 115:17 136:12 136:14 items 109:3 136:19 137:4 138:5 <hr/> J <hr/> Janice 125:15,23 125:24 126:5,14 jet 21:2 74:8 jets 74:23 86:16 Johnson 96:3,4,8,9 joined 4:14 8:15 10:1 12:10,11 joining 12:21 juggling 69:2 July 78:6 125:10,23 126:5,17 June 1:1,15 4:14 5:12,21 12:12 16:4,10,25 24:12 48:18,20,21,24 50:14 59:10 64:5 64:19 65:21 75:5 75:19 76:12 79:20 82:18 83:15,22 84:1,21 85:25 87:9,24 88:5 90:8 90:18 91:3,18 92:2 95:17 97:2 120:22 138:24 144:11 145:23 146:5 162:8 171:22 junior 51:4 58:3 111:19 120:21 121:7 129:21 Justin 154:9	<hr/> K <hr/> KCTMO 126:6 keep 2:20 65:3 171:11 keeping 114:8 Ken 81:3 95:14 111:25 Kensington 5:11,15 5:16 12:10 64:5 64:20,21 65:1,3 65:25 81:9 92:10 95:3 97:7,9 98:12 103:20 120:20 121:8,13,17,18,19 121:20 122:25 129:18 134:6 141:14,15,16 144:16 145:3 149:23 150:7 Kensington's 117:4 151:13 kept 132:21,22 key 17:17 108:16 117:13,17,17,18 117:19,19 132:10 132:14,15,15,21 132:23 133:4 164:2,6 keys 132:23,23 kind 47:4 54:23 64:2,13 71:22 72:17 75:23 77:13 96:18 101:9,19 133:13 134:9 161:16,18 kindly 49:21 kinds 76:1 Kingston 76:19 knew 16:1 62:10 81:6 109:8 know 2:12,19,24 12:16 13:13 16:18 17:23 18:10 19:11 19:13 22:20 24:18 27:11,19 28:7,20	29:6 30:9,19 32:23 35:11,21 36:9 41:25 44:4 47:11 48:3,5,9 50:23 51:1,2,8 57:3 58:15,21 62:16 66:6 67:15 68:11 70:6 71:5,7 71:13,19 73:19,21 74:5,8,10,14,17 74:19 75:10,11,13 75:14,15 76:5 81:9 82:1,11 85:8 87:1 88:16 91:7 91:21 99:9,11,12 99:14,25 100:24 101:11,12,13 107:2 108:7,8 109:11,24 111:8 112:10 113:7 116:12 117:9,15 120:6 124:15,19 127:18 134:12 136:6,25 138:23 141:25 142:22 145:11 146:19 149:23 150:7,18 150:23 151:5 155:4,10,18 156:3 163:10,23 164:17 164:18,20,21,24 165:16,18,21,22 166:22 170:17,18 knowing 169:16 knowledge 16:5 26:16 27:6 30:12 30:17 58:18 71:19 71:20 75:6,9 79:21 89:14 91:15 141:13 149:3 160:13 known 37:17 38:14 40:4 70:25 72:8 75:20,22 76:1 124:19	knows 146:22 <hr/> L <hr/> lacking 123:24 ladder 65:7 133:1 151:14 152:6,9,9 152:11,14 156:22 158:13 ladders 156:21 Lakanal 69:14,15 70:3,4,10,20,25 71:14,18 landline 147:14 landlord 40:15 Lane 113:15 larger 99:24 late 50:20 59:4 76:17 layman 84:25 layout 26:18 27:7 27:17,25 28:16 29:1 76:8 106:18 107:11 116:20,23 127:15,19 156:10 165:13 layouts 124:4,6,14 leading 116:15 learn 71:4 105:6,16 165:23 166:5,14 learning 53:6,8 70:2,14,19,23 learnt 88:10 103:7 165:12,15,19 166:9,12 leave 23:6,7,14,19 34:17 54:17 55:9 61:16 62:1 99:18 125:17,20 143:19 167:11 leaving 1:16 59:3 lectern 2:4 63:25 lecture 56:16,23,25 57:15,22 58:7 lecturer 55:19 56:3 56:5,6,14 57:10
--	---	---	--	---

57:17	LFB00001255	21:24 26:2 43:22	long 3:7 49:23	43:18 46:24 51:21
lectures 58:21	16:17	57:7 61:7 70:19	96:10 97:15 111:3	52:7 61:23 76:5
lecturing 57:25,25	LFB00001256	75:3 91:24 92:10	118:10 119:14	83:14 85:21 94:16
left 29:2 62:11	48:17 59:10	100:9 108:4 110:9	122:19	94:17 101:3 108:6
93:22 169:23	LFB0000129	112:14 120:15	longer 1:6 111:3	109:23 110:2,7
left-hand 93:11	124:24	126:3 135:5 136:2	119:13	115:25 116:19
107:17 127:17	LFB00003111 98:5	136:18 141:2	look 18:14 19:9,10	124:1 126:15
length 93:12	LFB00003116	149:8,8 165:20	20:7,13 23:20	127:7,15 138:25
lessons 88:10	128:21	live 13:12 101:18	26:4 28:5,15,17	142:14 144:21
let's 21:23 23:19	LFB00003521 78:4	lobbies 106:18	28:25 30:22 31:5	165:1
53:18 61:8 64:8	LFB00003571	107:11,15 116:7	35:6 36:25 37:3	looks 57:21 78:11
83:18 86:4 87:4	49:25	116:16	38:10,16 41:11,21	110:9 130:5
98:21 114:3 119:6	LFB00003596	lobby 104:15,18,20	41:23 42:4,24	lot 8:16 24:10
140:5 141:2 143:3	133:10	107:17,21 113:22	43:23 48:5,6	39:14 45:6 56:14
158:3 161:10	liaising 104:12	127:16,19 132:11	49:20 50:13,17	65:17 66:4 134:12
162:22 167:6	131:18	132:12	51:20 52:4,19,21	134:15 167:21
letter 91:10,16	life 48:4,5,6 160:18	local 25:16 26:23	53:17 55:10 61:7	171:1
letters 22:3 85:21	163:4	30:3 31:16 40:15	61:8,18 62:22	Lots 46:9
level 7:15 9:14	lift 127:16 132:12	46:22 49:14 56:20	69:12 71:25 76:2	low 74:18 75:1
10:17 20:12 25:16	132:23 164:2	65:15,23 91:9	78:1 79:1,14 86:4	139:5,6,12,19
25:17 26:23 30:3	lifts 24:1,2 107:23	113:21 123:3	86:23 87:4 90:16	140:17
30:4 31:16,17	107:24,25 108:1,1	located 72:21	94:5 98:3,7 99:10	lower 57:7 61:7
41:3 46:22,23,23	112:12 113:16,23	105:14 154:25	100:13,18 104:3,9	75:12 92:10
49:6,14 56:9	130:18 132:19,23	location 93:10	105:11,19,21	112:14
65:10 67:3 93:18	138:19	115:19 118:5	108:16 109:7,15	lunch 111:2 119:5
122:4 123:21	light 39:2 45:13	156:11	112:6 113:12	119:12,13 124:3
128:15 129:6	lights 147:19	log 146:12	114:3 115:17	lunchtime 63:12
135:18 145:4	limited 87:14	logbookings 144:22	116:6,25 117:24	
148:24 162:6	163:19	logged 148:18	118:11,14 123:2	M
levels 141:3 154:15	line 124:2 132:25	149:14	124:11,17,18,23	machine 150:22
LFB 15:5,6 17:14	146:25 155:13	London 4:13,14	126:19 127:8	main 70:16 88:18
20:24 22:22 45:23	167:22	5:25 8:3,18 9:3	128:3 130:2 134:2	93:22 105:13
48:16 49:21 65:19	lines 151:13 156:6	11:4,13,19 19:13	136:3,10 140:5	109:12 117:5
71:13 78:2,6,8	linked 55:2	29:22 30:13 32:6	141:6 142:5	127:6,8 152:18
91:3,8 102:18	list 30:25 96:25	32:17,18 33:4,13	154:17 157:1	163:20 164:2
125:11 128:22	98:4 108:8,14,22	34:4 40:18 41:18	161:8	mains 115:22
LFB00000048	109:1,3 111:9,18	48:3 56:8 65:5	looked 46:19 93:25	maintained 38:6
15:10	112:3 115:16	67:6 80:18,20,21	105:20 116:2	maintenance 37:10
LFB00000144	117:20 118:10,19	91:4,14 97:5,11	122:14 124:20	maisonette-style
128:4	122:16,19,21	102:11 121:5,14	131:8 154:12	118:5
LFB00000164	123:2 124:1,4,15	121:23 122:12,25	161:10 165:12	major 130:10
15:21	149:8 153:9	128:8 147:1,17	looking 21:18	majority 132:19
LFB00000178 59:9	listed 137:4 154:7	150:9 151:24	27:15 29:14 31:2	makeup 101:20
LFB00000238	literally 159:21	156:18 171:10	32:12 39:17 40:1	making 112:8
45:23	little 14:6 20:21	lone 100:24	42:1,9,10,17	126:24 144:22

man 144:25	63:21,24 64:3	64:12 77:13 92:7	messages 13:18	Mm-hm 96:24
manage 10:21,21	84:24 110:11,13	109:16 116:11	met 106:13	mobile 147:5 148:5
68:25 73:14	110:16,24 111:2	137:5 150:17	MET00010915	156:8,17,25 157:7
154:16	118:18,22,25	153:9 154:11	3:14	157:13 158:1,10
managed 70:16	119:4,11,24 120:3	means 9:1 23:7	MET0005453 3:16	158:22 159:1,5
113:21	120:6,9,25 139:4	52:20 100:14	method 87:13	162:17 163:21
management 11:14	143:16,19,23	137:6 147:5,15	methods 28:8	165:3,11,23
29:15 37:10 55:19	144:2,8 166:25	152:9 158:17	136:23	mobilisation
57:10 137:2 140:8	167:3,6,9,16,20	measures 18:19	metres 90:13,14	146:15 147:21
manager 4:22,25	167:25 168:6,11	40:25 105:13	94:17,18,19,25	150:2,24 151:2,5
5:2,4,10,18 6:3,5	168:21 169:15,19	108:16	152:10	151:9 158:17
6:6,11,14,14,25	169:23 170:10,14	medical 160:24	Michael 1:21 2:9	mobilisations
6:25 7:3,7,8,15,16	170:17 171:3,20	medium 139:5,6,12	126:7 172:2	150:4
7:18,23,23 8:24	masochistic 171:4	139:19 140:16	middle 1:6 30:25	mobilise 148:19
9:4,4,13,14,19	master 3:2	meet 87:22	31:5 53:20 114:4	mobilised 77:21
10:2,2,3,7,10,10	material 3:21 14:12	meeting 79:23 80:1	119:7 120:10	148:5
10:13,17 11:3	18:23 19:6 87:13	80:4,9,10,17 81:3	154:1,1,4	mobilising 146:11
14:16,23 19:4	91:22 171:1	81:5,11,13,16,21	midnight 145:8,23	146:12 147:16
29:4 56:7 76:20	materials 14:11	82:9,14,16 126:23	Mike 125:14	148:23 157:11
95:3,8,8,17,18,19	32:15 42:13,25	melting 74:18 75:1	Millett 1:9,10,20	mobility 35:18
96:2,6,8,10,15,20	43:6,13 47:8	75:6	2:3 35:16 50:9,13	36:18 69:7 115:5
103:19,25 104:12	56:23 75:12,16,20	member 82:12	63:1 64:3,4 85:15	model 45:5,16,21
105:3 120:17,19	77:10 81:12	147:8 152:1	111:4,5 118:20,24	45:25
120:21 121:11,16	105:17 136:24	members 34:10	119:2,6 120:1,9	Modern 136:23
123:11,12,18	matrix 134:4 136:8	56:12 144:22	120:10 121:2,3	moment 7:4 26:6
129:5,10,17,23,24	137:21 140:10,21	154:20 156:5	139:21 144:8,9	30:22 49:19 51:20
130:21,22,23,24	141:10 143:2	memory 15:11,12	166:22 167:2,18	51:22 59:14,19
134:5 141:14,21	Matt 80:25 81:23	16:20 51:5,16	167:21 168:3,7,14	63:1,23 72:11
152:5,8,23 153:18	matter 72:13 96:12	52:13 66:12 67:13	168:20 169:14,18	78:14 90:16 94:6
154:8	matters 24:12	67:25 76:20 93:9	169:22 170:4,11	94:11,22 107:22
managers 58:3	26:21 27:5 29:19	94:16 97:24 98:2	170:16,21 171:19	110:14 111:12
95:6 97:1,7 141:8	29:25 31:13,19,21	103:19 104:8,11	mind 85:10 126:16	118:23 141:6
manages 148:22	32:2,12 33:9,19	107:16 127:14	149:19 165:17	149:20,22 156:16
managing 8:10	34:25 42:18 61:5	160:5	minimise 44:23	165:15 166:17
70:4	87:25 115:25	men 31:22 32:14	minimum 12:7,8	167:17 169:4
manned 145:14	119:16 167:1	33:12,15	139:14	Monday 1:1
manner 170:1	maximum 140:1	mention 53:19	minute 74:25 90:3	monitor 21:3,11
manually 148:18	152:10	72:12 140:2	103:4 143:20	month 5:7
map 161:14	MDT 156:8 157:3	mentioned 8:1	156:15	months 5:7 72:3
March 50:11,13,20	158:8 159:4,23	13:20,21 15:1	minutes 23:2 63:6	96:12
51:22 53:7	161:16 165:18	80:8 81:21,24	110:8,14,19 111:6	MOORE-BICK
markers 139:7	166:8,9,18	92:17 127:11	143:16,20 167:7	1:3,19,23 35:4,15
MARTIN 1:3,19	mean 15:12 19:10	Merton 147:13	misuse 100:23	50:5,7,12 63:3,16
1:23 35:4,15 50:5	20:23 21:13 22:18	message 147:21	mitigate 142:20	63:21,24 64:3
50:7,12 63:3,16	28:25 36:8 38:25	148:16	Mm 138:2	84:24 110:11,13

110:16,24 111:2 118:18,22,25 119:4,11,24 120:3 120:6,9,25 139:4 143:16,19,23 144:2,8 166:25 167:3,6,9,16,20 167:25 168:6,11 168:21 169:15,19 169:23 170:10,14 170:17 171:3,20 Moreton-in-Marsh 10:15 66:16,20 morning 1:3,7 2:7 91:25 98:11 108:24 124:11 125:16 126:1 127:5 131:9 168:10 170:25 mounted 118:7 move 6:13 63:25 93:25 97:13 moved 130:13 moving 13:11 82:13 166:25 multiple 7:10 70:5 155:16	34:20 35:6 37:9 60:13 170:19 need 2:18 12:23 24:5,22 37:3 48:11 87:19,25 108:16 111:13 114:24,24 115:3 120:6 135:19 139:9 142:8 158:16 161:3 168:24,24 169:5 171:11 needed 52:9 56:1 67:16 109:11 needs 37:7 47:11 neighbouring 159:5 never 21:5,6 28:11 59:1 69:9 71:7 78:21,22 92:4,8 94:24 new 44:20 45:13 47:2,4 48:9 53:6,8 87:13 110:20 newspaper 91:9 nice 110:12 Nicholas 125:9,22 126:5 Nick 95:8,23 103:23,25 104:1 night 5:20 8:6 64:17 81:11 88:18 92:2 107:14 128:1 143:13 146:22 149:19 154:5 157:16,18 160:13 160:14,14 161:16 162:24,24 163:8 165:4 nights 64:15 Nodded 97:3 non-ambulant 36:10 non-existence 41:8 noon 102:8	normal 114:11 normally 31:11 34:21 41:10 60:15 132:21 133:4,7,8 150:4 North 5:11,15,15 12:10 64:5,20,21 65:1,3,25 81:3,9 92:10 95:3,14 97:7,9 98:11 103:20 111:25 117:3 120:20 121:8,12,16,19 122:24 129:18 134:6 141:14,15 141:16 144:15 145:2 149:23 150:7 note 50:3 106:17 107:4 137:2 139:7 140:24 noted 38:4 notes 3:2,16,23,24 notice 105:24,25 107:8,11 noting 106:17 112:10 notionally 170:24 November 4:17 45:22 57:8 128:7 number 3:7,7,10 7:2 10:20 15:19 33:4 48:5,6,10 50:4 64:11 69:4 91:4 108:5 117:3 128:1 135:24 138:19 144:23 148:5 150:5 156:11 159:21 165:24 166:3 numbers 136:25 137:19	98:11,12,17,22 167:24 observation 9:8 observing 41:24 obstruct 114:20 obtain 133:18 obvious 78:14 obviously 6:15 7:10 39:21 51:14 56:7 58:2 62:7 65:19 67:2 81:19 85:12 85:19 89:4 96:19 104:22 105:12,14 106:21 107:14 109:9 113:23 116:4 117:2,9 141:24 155:7 165:6 occasions 76:13 157:16 occupant 26:19 27:8,19,20 100:13 occupant-driven 100:12 occupants 1:16 22:6,9 23:23 24:1 24:5 25:10 37:21 37:23 occupier's 59:23 occur 94:19 131:16 occurred 79:25 96:25 occurs 131:17 October 55:16 78:11,13 162:15 off-side 153:20,20 off-site 158:25 off-station 65:14,22 offered 61:11,20 officer 6:7 9:18,20 11:8 14:18 29:4 30:16,20 31:14 40:17 41:15 45:6 56:8,21 58:6,12 62:16 66:9 74:4	76:25 139:8 144:15 152:7 159:12 169:10 officers 6:16 13:14 13:16 29:23 41:17 43:16 51:4 58:3 74:14 97:10,12 111:19 120:21 149:6 offices 130:17 official 78:6 oh 32:18 111:11 129:25 140:12 153:18 168:6 ok 125:25 okay 2:6 12:1 16:9 18:1,8 19:18 23:16 25:22 26:1 27:2 29:7 32:12 33:1,7 51:19 52:4 55:5,8 59:6 67:7 72:14 80:23 94:5 96:9,13,23 97:17 103:4,13 108:3 110:12 114:3 115:15 127:4 132:5,21 133:15 133:24 136:16 146:3,14 147:11 148:15 149:18 150:10 155:17 158:2,11 162:22 163:15 165:6,8 167:8,11 on-arrival 51:14 52:6 56:1 93:20 155:8 once 3:9 10:25 93:19 123:8 170:18 one-appliance 7:8 open 135:23 opening 73:24 83:7 84:7 104:24 openings 85:9
<hr/> N <hr/> N 172:1 naive 155:19 name 2:8 18:5 105:3 127:2,3 137:17 146:17 153:6 162:11 names 95:9 96:25 national 24:13 32:13 44:15 108:18 nature 166:5,10 near 52:21 76:22 nearside 153:2,3 necessarily 32:20 134:14 necessary 31:9				
		<hr/> O <hr/> o'clock 1:7 98:11		

opens 164:2 operate 10:17 105:15 operated 105:15 116:5 operation 25:25 162:2,10 operational 31:18 32:1 54:13 92:5 123:6,9,21 125:11 129:2 137:3 138:14 139:10,17 140:8 142:11,19 149:24 155:6 157:24 158:14 160:16,21 161:2 163:6 operationally 28:20 71:8 159:8 159:19 operations 22:2 122:6,19 operators 62:15 148:19 opportunity 125:18 options 10:20 14:19 ORD 123:6,21 128:22 129:1 131:20,23 132:2 133:23 138:14 139:9 142:7,22 143:10 157:25 158:3 161:10,13 165:18 order 37:8 50:2 142:18 169:15 171:9 ordinary 64:12,14 169:13 organise 66:25 organised 66:9,10 orientation 138:19 origin 18:25 19:8 19:12 67:24 original 42:1	ought 50:9 outcome 170:17 outcomes 70:23 outlet 93:15 107:18 107:20 127:17 outlets 107:15 outside 41:15,25 42:6 56:21,22 60:19 62:15 74:16 89:4 93:11 98:13 102:8,10 107:12 130:13 163:20 outsourced 11:7 overload 44:25 overloading 99:11 overnight 170:6,13 override 117:14 overriding 123:15 overview 28:4 160:15 owner 114:16 owns 40:14 oxygen 160:24	71:25,25 78:5,6 79:2,9,14 82:21 82:21,23 86:4 87:2 92:3,6 98:9 98:14 108:12,12 108:12,13 115:17 122:15 125:3,8,21 125:22 126:4 128:5 130:3,7 131:1,2,3 132:6 134:2 135:2,4,7 140:11 141:4 142:5 146:4 151:12 153:10 154:17,18 156:7 160:4 161:12,24 161:24 162:23 163:15 pages 26:5 79:1 86:10,19,23 87:1 108:15 panel 104:14,15,22 105:15 136:21 panels 44:5 91:6 118:6,20 124:8 paper 148:1,1,9,10 paperwork 99:6 Para 59:14 paragraph 22:4 23:21 24:10 37:3 37:5 38:3,11 41:1 42:9 43:23 44:18 45:17 46:24 59:12 60:11 62:7 72:1 72:10 92:6 112:24 141:3,7 142:6 153:10 paragraphs 37:2 41:2 pardon 14:9 17:20 parent 100:24 Park 80:22 part 17:19,21 19:2 20:4 22:14 24:12 37:16 38:13,19	40:3 43:23 49:13 50:8 59:23 80:15 90:22 129:1 140:19 142:24 151:16 155:21,23 168:17 169:12 partial 31:8 34:19 60:13,17 particular 26:25 28:14 29:1,24 50:8 60:6 63:10 70:1 90:16 92:16 100:3 101:9 102:13,14 113:19 115:9 123:11 136:12 137:20 149:14 167:22 particularly 20:13 35:11 64:21 71:2 75:14 85:17 103:6 113:21 127:16 164:15 partitions 18:18 parts 39:16,16 78:19 142:4 pass 9:5 31:20 32:2 passage 108:15 passing 29:17 pause 7:4,6 61:17 120:2,24 143:22 144:5 168:3 pausing 22:14 132:13 PDA 123:14,18 129:10 141:24 151:7 people 23:8,8 30:9 34:11,13 35:17 36:3,11,17 39:11 48:9 69:6,7 70:6 81:10 99:4 100:4 100:14,21,21 101:5,17,17 102:5 102:22 115:3,5 126:6 132:2	152:19 153:9 169:24,25 170:19 171:3 people's 39:10 performance 10:21 period 4:15 8:6,7 9:6,11 12:7 54:12 95:7 97:4,7,10,15 131:16 150:12,14 person 36:13 37:6 39:3 40:13 56:9 56:16 91:16 111:24 166:15 personal 9:9 35:7 44:24 92:1 150:20 155:13 156:1 personally 33:21 71:10 personnel 7:1,11 24:3,6 122:17 123:23 141:23 154:16 persons 36:7 47:7 47:13 48:1 68:24 100:14 114:19 155:16 163:4 phase 4:18 9:2,5 10:11,11 11:1 18:21 phased 112:16 phenomenon 85:6 phone 159:17 phonetic 151:24 photograph 113:13 113:14,16 photographs 79:2 physical 67:8 physically 135:23 pick 19:21 37:13 126:1 picked 137:23 picking 124:1 picture 86:6 piece 47:18 148:1,1 148:9,10 163:13
---	--	---	--	--

pieces 43:18	120:1 122:15	26:24 28:3 29:6	posting 5:11	160:24
piled 130:6	128:25 135:2	29:11,20,24 30:11	potential 47:9	premises 33:4
pipe 88:20 92:20	143:23 161:12	31:10,15,25 32:6	81:10 99:3 100:8	35:23 37:7,16
place 22:12 31:11	167:5	32:7,8,11,13,16	100:11	38:13,19 39:2
34:21 37:11,20	plug 93:21	32:21 34:21 35:11	potentially 28:8	40:3,10,12,17
38:6 40:9 41:5	plus 156:12	36:1,25 37:20	40:11 64:17 65:16	49:8 66:17 98:15
42:3 60:15 102:10	pm 110:21,23	38:6,23,25 39:4,5	101:6,17	102:9,12 109:23
107:21 114:18	119:21,23 143:24	39:6,12,14,16	PowerPoint 70:11	128:9 138:8,15
169:4,5 170:12,20	144:1,12 167:13	40:6 44:11 45:2,4	PPE 150:20	143:8 149:7,9,16
plan 23:25 24:8	167:15 171:21	45:7,24 46:19	practical 20:16,17	156:9 166:7
37:10,14,16 38:13	pod 13:15	48:15,16,22,25	21:6 25:8,11,12	prepare 32:18
38:19 40:3 44:20	point 2:1,18 5:12	49:2 50:15,20	25:14 26:22 28:11	prepared 32:15,16
44:23 45:13,14	26:13,14 29:14,24	52:4 53:15 55:14	33:17,21,25 35:19	presence 75:19
46:17 47:2,6,17	31:6 32:13 33:9	55:24 57:2,2,6	49:9,16 55:2	118:5
47:20,23 59:23	34:16,17 42:2	59:8,8 60:3,4,15	58:14 60:20 64:15	present 40:11
60:2 93:4,8 141:4	66:4 70:12,19	60:19 61:3 62:8	65:13 66:3,12,22	41:25 118:8
142:18,23 143:3,5	73:1 74:18 75:1	62:10,15 64:25	67:25 68:6 69:2	145:15 156:18
143:6,9 160:3,7	76:16 84:18 91:21	99:16 108:11,25	practical-based	presentation 70:11
160:11 162:1,1,2	93:1,5 97:8	112:16,23 120:12	64:22 65:2 67:22	presented 91:6
162:3,4,10,11	105:22 107:6	122:12,13,22	practice 159:16	press 70:18 91:9
166:6,7,10	112:14 116:19	137:2,20,21 139:7	practices 99:11	136:16 159:20
planing 163:6	120:7 123:23	139:25 140:3,3,7	practise 64:6,20	pressed 158:16
planned 41:10	124:4 127:23	140:24 141:1	67:8 69:6	pressing 159:4
planning 108:17	142:17 145:9	142:1,10,23 143:8	practised 64:18	pressure 34:8 68:5
161:2	148:17 150:25	160:25 164:11	69:9	71:6,10 167:21
plans 109:20	151:7,9 155:5,5	poor 18:23 19:6	pre-empt 27:21	presumably 98:17
plastic 42:14 43:25	162:8 165:15	populate 143:5	pre-June 16:22	presume 12:12
44:5 74:17,25	points 26:11 31:1,2	populated 39:22	pre-planning	18:4 71:16 128:13
75:7,19	35:21 70:2,14	54:22 129:10	155:22,23	128:15 165:4
plastic-type 75:19	108:14 123:17,18	population 101:20	preceded 98:18	pretty 52:15 53:24
plate 138:16	139:3 156:11	position 9:22 42:5	predetermined	prevent 44:24
play 17:19,21 27:10	policies 3:3 12:22	153:16 157:2	123:14 129:5	previous 27:22
140:19	15:1,2,4,9,12	169:10	151:8,19 164:19	31:25 52:2 79:20
please 2:8,15 3:12	27:10 30:23 41:18	possibility 90:20,24	predictable 20:2	90:13 100:16
16:15 18:12,14	45:20 108:6	169:20,21	preformed 143:4	101:4 102:3
19:19 21:25 26:3	122:14 140:6	possible 142:15	preliminary 86:25	134:24 137:17
30:24 36:24 37:3	154:23	169:1 170:15	premise 39:21 48:8	160:13
40:22 43:8 44:10	policy 14:22 15:6	possibly 171:13	56:2 57:5 65:20	previously 82:3
46:2,15 59:11	15:14,16,19,21	post-February	70:7 99:5,24	126:24
63:17 69:11 78:1	16:6,8,16 18:9	12:25	102:12,17,19,20	primary 144:20
78:25 79:9,14	19:2,13 20:5,14	postcode 100:15,17	109:25 117:14,15	163:16
82:20,21 98:7	20:24,24 21:3,23	postcodes 100:14	123:4 129:3	principle 85:25
108:11 110:12	22:11,14,16,18,19	101:1,4 102:1	134:19 138:18	87:6,10
111:9 112:16,23	22:20,22 23:5	posted 4:18 5:4,8	139:19 149:12,14	principles 44:14
115:17 119:20,25	24:13,16,18 25:7	5:10	149:17 160:19,23	print 99:6 162:7

<p>printed 160:3,6 162:3,17 163:14 printing 163:10 printout 57:2 prior 12:2 14:19 48:24 50:25,25 52:18 91:25 92:2 165:13 prioritise 71:11 priority 48:3,4,5,6 48:10 100:15 private 40:15 probably 20:10 26:1 119:8 145:13 158:11 167:3,4 problem 89:16 90:5 171:5 procedure 52:10 procedures 12:22 15:20 19:5 37:11 42:3 67:9 142:19 proceeding 158:18 process 5:3 37:12 45:8 48:8 58:11 68:25 71:9 74:6 80:7 81:7,18 82:13 101:2 102:15 103:3 123:3 134:13,25 142:8 147:4 processes 28:23 81:20 102:19 160:25 processing 70:5 133:17 produced 78:2 productive 100:1 products 23:11 87:20 105:1 professional 171:7 profile 160:17 programme 67:22 141:11,17 148:18 160:22 promote 124:7</p>	<p>promoted 4:24 5:9 9:12 10:3,9,13 97:12 promoting 42:15 44:2 promotion 4:22 5:1 11:1,5 prompt 125:1 126:16 prompted 71:13 141:11,17 properly 65:12 properties 134:21 property 23:6,7,10 23:15 37:21,25 38:1 61:16 62:2 76:8 90:1 99:19 139:16 142:13 160:21 proposed 102:14 protected 107:4 116:7 133:5 166:19 protection 18:19 protective 104:25 150:20 156:1 protocols 112:13 112:15,19,21 113:4 prove 9:7 11:1 proved 9:11,22 10:4 provide 11:18 18:17 30:17 provided 98:5 115:21 provisions 37:8 public 66:21 136:4 144:22 147:9 152:1 published 16:11 pull 163:20 pump 77:21,23 86:5,16 132:25 133:1 151:14,21</p>	<p>152:6,9,11,14,14 156:18,21,22,22 158:13,13 pumping 132:25 151:9,10 155:13 pumps 73:2,3,6 151:20 152:19 purpose 116:2 purpose-built 67:10 purposes 140:20 pursue 76:10 push 136:18 put 2:16 13:12,13 13:13 15:8 32:4 34:7,8 49:21 54:18 59:7 68:4 69:4 70:9 86:2 88:7 120:18 130:19 131:20,23 139:10 147:10 150:5 154:11 160:9 169:5 170:12,19 put' 22:11 31:10 37:20 38:6 60:14 61:3 112:16 164:11 putting 42:2 67:17 106:23</p> <hr/> <p style="text-align: center;">Q</p> <p>QA1 125:16 quality 18:24 19:7 58:4 122:3 123:12 123:19 129:4 141:21 quarter 22:2 26:7 question 2:16 12:5 19:1 20:4 24:11 24:15 26:20 27:3 31:12 36:5,5,16 38:8,17 39:25 41:11 42:17 43:8 45:1 48:21 60:1</p>	<p>60:16 61:19 62:4 73:17 78:15 89:18 106:3 112:12,25 116:14 118:13 119:8 120:10 121:4 122:21 127:7 128:11 139:22 151:1 156:17 questioning 57:3 questions 1:22 2:13 15:2 18:9 30:22 34:7 39:9 81:18 88:8 89:8 106:9 119:3 122:9 124:2 124:22 125:19 128:17 142:3 157:21,22 165:21 172:2 quick 74:6 143:14 quickly 60:22 78:18 86:10 141:2 169:5 quiet 150:12 quite 33:16 39:22 51:9,12 56:14 60:22 65:8 68:21 74:17,18 95:6 97:9 109:16 119:2 119:14 138:3 141:19 158:12 161:4,6 171:1,15</p> <hr/> <p style="text-align: center;">R</p> <p>radio 68:13 117:23 147:14 152:16,18 154:21 156:4,5 raft 11:8 rainscreen 105:24 105:25 106:2 raise 169:19 range 10:16 66:17 148:8 rank 120:21 129:22 ranking 6:7</p>	<p>ranks 6:14 121:9 rapid 18:20 20:2 86:13 124:7 rate 74:11 97:6 rated 116:12,17 rating 116:10 re-enters 83:9 84:19 85:4 re-entry 85:16 re-evaluate 45:14 61:20 re-evaluated 61:12 reach 99:25 reaction 169:16 read 1:13 4:1 38:7 41:1 44:18 50:5 reading 1:11 98:14 ready 157:14 158:14 159:8,19 real 7:12 27:20 28:10 65:9 76:24 88:24 89:5 90:19 97:15 152:8 155:6 really 28:2 36:4 50:6 58:3,24 59:1 60:8 68:12 103:11 107:3 108:8 112:25 124:13 138:7 142:4 150:1 150:2,24 155:6 164:25 168:6 rear 154:2 reason 17:12 18:4,6 18:6 108:7 138:11 164:22 171:12 reasons 78:13 92:5 120:24 recall 29:10 36:19 38:21 43:3 44:7 50:21 53:1 57:1 60:6 61:22 62:20 77:24 78:17,23 94:22 96:21 97:23 98:2 105:18 106:16 107:3,24</p>
---	---	---	---	--

109:21 112:22 113:7,10 114:2,18 114:22 115:11 116:8,18 117:25 118:16 126:22 140:24 receive 14:13 25:8 26:20 29:19 31:12 34:24 35:16 36:6 36:16 38:17 61:19 62:3 145:19 147:18 150:1 155:5 158:17 received 42:19 60:20 62:20 145:17 149:20,23 157:10 158:17 164:17,21 receiving 44:7 56:13 60:6 69:2 144:21 recollection 55:5 115:24 124:13 125:1 126:16 140:14 150:7 152:22 160:10 163:12 recommendations 71:17 record 1:12,13 9:10 15:21 51:6 56:15 57:19 72:13 142:8 recorded 10:20 142:7 recording 29:16 112:9 records 49:20 red 4:22,25 5:5,8 5:11,18 8:1,4,16 8:18 12:10 18:15 19:24 22:4 44:11 56:19 81:3,9 97:18 98:7,12 111:14,25 140:13 145:11	reddened 110:9 reel 111:17 refer 3:10 41:19 46:2 69:17 72:1 102:23 123:20 140:9 151:25,25 reference 14:21 15:9 18:14 20:13 21:3 22:16 26:24 28:3,6 29:6,11,24 32:7,9 39:8 41:14 45:4 49:5,24 52:22 54:9 57:2 59:9 76:16 85:7 88:16 100:15 101:23 103:9 108:13 113:14 124:4,24 141:20 146:8 160:12,25 161:25 referenced 35:14 38:25 51:3 146:11 161:6 references 1:18 25:6 34:16 55:12 referencing 20:23 24:17 35:10 41:17 55:24 57:6 64:25 91:12 99:14,15 139:24 referred 3:9 15:13 54:2,6 102:21 126:24 142:2 referring 45:25 46:4,13 52:11 56:4 69:24 145:24 153:8 refers 23:5 36:1 56:3 57:17 131:3 Reform 37:8 refresh 15:11 16:19 154:12,14 155:17 refresher 11:9,11 11:14,21 12:2,9 12:13,25 15:5,13	refreshment 143:14 refuge 35:21 refurbished 104:7 refurbishment 41:6 92:12 105:7 115:12 126:20 130:11 131:13 regarding 125:15 regardless 83:8 84:8 Regards 126:13 regular 135:19 Regulation 128:9 regulatory 37:8 82:23 reinforced 116:22 relate 35:9 related 139:15 155:10 relating 45:8 82:2 148:2 relation 28:16 60:11 82:1 84:22 108:20 118:11 149:11 154:20,22 relationship 165:2 Relativity 3:7 18:14 49:24 108:13 161:25 relaxing 110:18 relay 159:3 release 132:11 relevant 12:22 41:17 87:23 105:8 123:5,10 135:24 138:7 remain 6:9,18 23:10 37:21 130:18 remember 12:20,23 13:23 20:23 35:1 49:3 50:19 51:25 52:25 53:8 57:14 57:21 63:14 68:2	68:13,18,22 70:14 72:15,16,19 73:5 77:10,13,19 80:14 80:23 81:21,24 86:20 91:8,11 92:14 93:24 95:7 96:7,17 101:2,8 101:24,25 103:6 103:11,24 104:5,6 104:11,13 105:3,9 105:9 106:17,19 106:21,24 107:2 107:13,13,14,19 108:2 109:23 110:1 111:24 112:8 115:7,13,25 116:12 119:15 126:23,24 127:1,3 127:16,23 132:4 145:23 146:1,6,16 146:19 150:1,17 152:21 153:12 154:11 155:1 160:4 161:15 163:8,10,21,24 164:5,12,14 165:2 166:1,1,20,21 remind 169:23 reminded 98:1 154:21 170:4 removal 31:7,21 32:3 remove 2:4 rendered 42:21 rendezvous 156:11 renumbered 59:16 repaired 86:18 repeat 2:16 36:5 43:8 repeating 27:3 40:1 replicate 65:5 67:3 67:4,20 70:2 71:2 93:13 replicated 70:15,20 121:13	replicates 34:3 report 17:23 reported 47:13 48:1 68:24 reporting 144:14 155:16 reports 47:7,7 representative 126:25 representatives 79:23 80:1 request 96:20 125:15 requested 159:2 require 47:5 61:13 required 38:23 61:2 114:10 118:11 154:23 requirement 139:15 142:22 170:5 requirements 142:10 rescue 22:2 24:2,25 25:25 66:7 115:21 122:18 research 30:10 residential 22:11 31:10 34:20 35:22 36:22 38:5 60:14 91:5 92:18 93:1,6 106:23 107:1 117:10,15 131:15 132:18 134:21 residents 13:13 24:20,23 25:4 34:13 36:10 99:7 100:23 113:6,23 114:12,17 115:9 115:14 resource 54:12 68:17 74:5,11 resources 6:22 45:10 46:9 48:11 61:2 71:11 149:5
---	---	---	--	---

resourcing 24:8 28:21 45:10 47:12	15:1,15,25 18:5 19:16 27:14 28:25	risers 94:20 103:15 104:10 156:12	68:9 144:19 145:1 145:1,2,14,16,17	105:8,13,22 122:7
respect 42:25 58:11 60:17 61:4 121:16	29:13 30:9,15,25 33:16 36:23 39:24	rising 109:12 115:22 127:6,7	145:18,22 146:16 146:18 147:2,12	128:8,16 131:19
respectively 1:18	44:9 45:18,18	risk 16:10 37:11,16 38:13,20 40:3,12	147:25 153:15,16 159:13	165:13
respond 28:20 68:16 158:14 159:9	46:12,13 47:21 49:15 50:4 51:19	41:3 45:10 59:23 65:18 75:20,22,23	rooms 34:9	sandwich 118:6,20
response 53:6 125:21 126:2,4	52:18 53:11 54:2 56:4,6 59:15,17	76:1 83:22,23 84:1,9,15,22,23	rostering 171:8	124:8 136:21
responsibilities 7:24	63:4 65:21 66:8 69:1,10 70:14,18	84:24 85:2,15,16 85:16 90:23 98:18	rota 171:6	save 48:4
responsibility 155:14	73:5 77:6,19 78:24 82:20 86:4	98:23,23 99:3 100:5,7,11,12	roughly 4:17 64:12	saw 17:1 91:19
responsible 7:19 34:13 37:6 39:3	90:2,15 91:15 95:22,24 96:13	101:7,10,16,21 102:2,6,14,19	94:13,14,18 95:13 139:20	103:7 124:10
40:13 121:12 123:1 141:15	103:4 104:1,1 110:1,19 111:23	120:11 122:10 123:6,9 129:2	round 25:12 53:20 106:12	134:25 141:6
166:15,16 168:22	113:25 115:15 116:9 119:8,19	134:4 135:18,18 136:4,8 137:3,20	53:3 107:5 109:9 151:6 154:19	165:3
rest 58:2 93:6 145:11	120:3 122:8 123:23 125:7	137:21,22 138:14 139:10,12,19	160:2 161:1 164:5 164:8,10,15,16	saying 33:10 54:25 91:4
resting 145:8,13	127:4 128:17,20 129:25 132:3	140:8,10,20 141:3 142:20 143:1	routes 166:19	says 18:22 22:1,3,5 26:14 31:6 32:13
result 37:25 91:5 131:24	134:8 136:2,10 137:4,11,19 139:2	157:24 160:16,19 166:7	routines 99:12 RTC 14:3,8	34:18 37:5,14,19 38:3 41:7 42:11
resume 119:12 168:10 171:18	143:12,23 144:2,6 145:6 147:11	risks 33:4 47:9 83:16 102:18	run 10:16,22 14:23 124:24 125:3,7	43:24 44:18 50:17
retired 95:18	150:15 151:20 152:3,12 153:1,22	142:7 163:4	133:12 135:2 157:11	51:23 55:1,18 56:14 60:12
reverse 50:2	154:5 156:23 157:4,20 158:2	road 14:9 109:10 130:15 163:16,17	running 121:12 147:4 156:2	111:22 114:3 128:22 130:9
review 44:19 46:17 47:1,6,17,20,23	160:1 161:4,5,20 161:23 162:9	roads 163:5 robust 16:7 51:12	runs 88:21 92:20 130:4	131:11 132:7 134:3 135:7,9,20
123:21 139:17 142:11 160:21	166:5 167:23 rise 72:8 110:19	65:9 134:14 161:6 role 4:21,24 5:10	Rydon 92:11 105:4 105:7 113:8	136:3,5 142:6,14 162:1
reviewed 48:18	143:20 171:17 riser 52:7,8 88:20	5:15,20 6:7,11 7:13,19 8:23 9:12	126:23 131:17 Rydon's 104:13	scale 69:5
revisit 90:15	95:1 103:10 107:15,18,20	9:17,20,24 10:9 10:10,13 11:2	126:25 Rydons 126:8	scan 138:3
Ricketts 129:14 134:6 136:8,11	92:19 93:6,9,14 93:15,15,17,21,25	144:21 roles 13:10,16,17	safe 23:7,9,15 37:21 52:11 67:21	scenario 13:4 31:18 35:20 65:9 66:3
rickettsd 129:14 132:9	116:3 127:17 131:13	34:9,12 155:4 room 2:21 11:23	99:18 114:7 safely 99:19 114:5	66:15 67:5,11 68:21 70:24
rid 74:2		13:8,17,19 62:17	safety 37:8 40:24 91:7 98:25 99:8	scenarios 11:24
ride 150:22 152:6			99:10,22 100:2,20	scene 6:4,5,6 40:19 161:3
rider 153:14				schedule 131:9 171:11
ridership 154:14				scheduled 125:17 130:14
right 1:8 2:22 6:18 7:18,25 8:8,15,20				scheme 10:2 152:18
11:10 12:1 14:6				scientific 75:9
				score 139:6,8
				scored 139:11 140:24
				scores 140:9,12 143:2

scoring 140:20	112:17,23 113:25	seriously 169:10	167:6,14	119:24 120:3,6,9
screen 13:8 15:8,22	117:21 122:19	serve 168:9	shorten 120:14	120:25 139:4
16:15,18 45:23	124:3 125:1,8	service 5:12,13	shortly 117:19	143:16,19,23
50:5 98:6 122:19	126:12,19 128:2,7	10:14,19 11:17	shout 149:20 157:5	144:2,8 166:25
133:21 136:5	129:1,13 131:1	66:16,20 75:11	show 17:24 22:4	167:3,6,9,16,20
161:11	133:2,20 134:3	92:22 132:15	41:2 78:1,18	167:25 168:6,11
screens 3:5	135:6 136:18	services 122:6	81:15 82:20 86:24	168:21 169:15,19
screenshot 133:16	137:13 138:9	session 20:11,18	104:22 106:12,13	169:23 170:10,14
133:21 134:25	139:11 140:2	21:7 32:22 49:6	107:23 108:5	170:17 171:3,20
139:1	141:5 149:18	50:22 51:13 52:14	122:12 124:25	sit 1:24 2:3 63:24
screenshots 133:11	153:18 157:14	52:19,25 54:9	159:20	171:17
133:13 135:3,7	160:9 161:13,23	55:25 56:12 58:17	showed 105:10	site 52:6 96:19,21
screwing 163:24	162:15,22,23	59:2 67:25 71:3	showing 55:7 60:9	104:12 105:3
search 66:7 122:18	163:1,15 164:8,10	147:7	161:21	106:13 109:8,11
seat 2:1	171:13	sessions 52:3 53:5	shown 19:1 45:19	125:19 126:8,23
seats 154:2,3	seeing 78:17,23	56:10 64:17 155:8	46:2 81:15 82:21	130:15,17,17
Seaward 110:5,13	91:8 114:2 135:14	set 24:12 57:6	107:24 140:11	131:3,12 160:17
170:8	162:23 163:8,21	86:11 97:13	shows 139:12	161:1 162:2 163:1
second 26:12 37:2	164:5,12	132:22 143:8	sic 59:9	163:18
38:10 67:14 94:24	seeking 164:25	setting 104:2	side 52:3 93:11	sites 11:19
153:10	seen 16:21,23 19:14	shaft 105:1	107:17 168:1	siting 109:5
secondary 83:9	59:5 78:15,21	shafts 115:22	sign 54:24 113:25	sits 153:14
84:19 85:5,16	98:1 113:20	shan't 171:15	signal 104:21	sitting 2:22 64:1
seconds 164:3	122:23 128:11	Shanghai 79:11	170:24	110:17 119:14
Secrett 154:7	158:3	sheet 146:9,10	significantly 41:4	153:19,24 156:24
section 75:25	selected 1:17	148:10,25 149:7	83:13 85:24	situation 37:17
108:17 123:14,15	self 37:23	149:10,11,13,15	signs 19:10 41:24	38:14 59:24 157:3
142:12 164:9	self-mobilise 147:9	151:17 157:12	42:4 47:10	six 50:25
sector 44:22	send 104:21	sheets 81:12	similar 53:2,9 71:1	size 67:5 77:22
secure 110:10	senior 58:12 97:12	sheltered 39:8,10	81:20 82:1 162:7	116:20,24
117:9,15 132:17	111:24 129:21	Shepherd's 72:21	simple 2:13 24:11	skill 97:13
secured 22:12	144:15	72:22,23 86:5	54:25	skills 8:13 26:16
security 116:22	seniority 120:17	Shepherds 72:1,3	simulation 11:23	27:6 49:12 54:16
117:11 133:5	121:5,9	72:12 86:8,9,21	simultaneous	54:17 64:9 66:18
see 16:14,25 17:16	sent 12:20 65:11	88:10 89:12 91:13	147:18	slide 78:1 81:15
17:19 19:22 22:7	91:10,13	shift 150:12	single 7:16 25:23	82:20
22:20 26:11 28:13	sentence 38:16 40:1	shopping 108:8,22	100:2 107:4	slides 56:24
30:25 31:6 32:18	61:23 73:11 88:2	109:1,3 111:9	135:20 163:12	slight 134:20
40:20,23 43:15	92:6 156:6,14,16	112:3 115:16	Sir 1:3,19,20,23	slightly 1:6 11:16
44:11 52:22 54:25	separate 3:3 54:14	124:1	35:4,15 50:5,7,12	27:3 36:12 106:3
55:15 57:7 58:14	69:20 70:9 85:6	short 2:13 4:12 5:5	63:3,16,21,24	119:12 161:19
58:25 78:5 86:11	September 52:19	44:18 63:19 93:16	64:3 84:24 110:5	168:1
86:23 87:2 98:9	52:22 53:6	110:6,22 119:22	110:11,13,16,24	slip 145:20
98:14 108:22	series 34:7 133:10	126:15 143:25	111:2 118:18,22	slower 14:6
109:1,17 112:14	serious 6:21	144:3 166:23	118:25 119:4,11	small 49:13 128:1

smoke 18:25 19:8 19:10,24,25 21:9 23:11,14 37:24 41:25 47:10,13 48:2 70:8 104:15 104:19,25 105:14 116:4 127:12 snapshot 160:15 social 100:24 101:12,14 sockets 99:12 software 133:22 148:20,21 149:3 154:16 sole 7:1 solutions 127:12 somebody 56:4 soon 73:5 170:15 sorry 7:4 18:5 19:20 27:2 36:4 39:25 59:20 89:18 103:23 110:5 111:11 119:7 121:1 sort 6:11,13 9:6 10:20,21 11:23 12:24 14:1 20:16 20:18 21:4 25:25 26:22 27:19 28:6 28:10 29:10 32:22 34:1,7,15 36:12 39:10 41:24 42:1 45:7,11 48:11 49:7,9 51:10,16 54:1 59:2 64:10 64:16 65:6 66:6 66:21 68:3,11 70:10 74:11 75:8 76:23 80:6,7 84:25 93:19 99:11 100:18 101:5 102:3 104:11 106:24 111:17 123:3,15 133:17 139:8 141:22	146:12 147:3 148:8 150:6,24 161:22 163:13 sound 39:25 147:21 sounds 39:13 52:15 source 43:17 south 5:25 6:1 Southwark 4:16 14:24 southwest 121:24 space 93:16 163:19 spans 44:24 speak 39:2 99:7 170:7,18 SPEAKER 110:20 speaking 104:14 115:13 special 28:8 specific 12:4 14:13 21:1 28:2 29:10 30:23,23 32:3 36:16 45:4,8 51:9 58:15 66:5 68:14 75:9 80:16 84:11 96:17 97:15 99:1 101:13 102:11 109:18 116:21 117:6,11 118:8 122:1,3 132:16 135:8,10 136:4,14 138:17 146:17 149:22 150:12 151:17 155:3 160:20 165:21 specifically 28:15 39:15 44:8 56:23 68:22 99:13 150:17,18 163:24 specifics 13:25 49:4 50:22 53:1 55:23 70:22 speed 156:2 spell 95:20 spelt 95:10 spent 5:7,25	spoke 25:19 49:5,8 84:12 88:17 99:15 105:4 157:23 spots' 117:23 spread 13:13,21,24 18:21,24 19:7,11 19:24,25 21:4,4,9 28:9 42:13,16 43:1,7,13 44:3 47:10,13 48:2 67:24 68:3,21 72:5 73:12 74:9 74:12,24 77:19 83:1,5,13,25 85:24 86:13,14 87:8 88:3,13 89:3 89:5,25 90:18 91:5 124:8 spreads 73:13 spreadsheet 49:23 50:1 51:21 52:20 102:1,7 sprinklers 107:9 St 154:9 staff 136:4 stage 10:24 14:20 115:12 126:19 stages 6:10,19,20 72:11 83:18 stair 106:18 116:7 staircase 24:25 25:1,2,5,22,23 106:22 staircases 24:24 166:19 stand 1:24 148:12 159:1,2,5 standardised 12:13 standing 2:1 15:4 63:22 103:7 107:16 113:6 stands 164:14 StARS 154:15 start 1:10 2:20 4:11 32:20 50:9 59:13	64:8 72:4 125:4 145:19 157:5 170:24 171:12 started 38:1 63:8 86:12,17 92:23 93:2 145:8 starting 1:5 26:7 98:22 starts 50:1 108:15 130:3,7 state 75:5 statement 3:1,12,19 3:22 4:1,7 8:21 11:10 19:2 60:7 69:11,20 71:24 73:8 74:6,13 92:3 92:17 94:2 97:17 103:14 109:16 126:18 145:7,24 146:4,6 153:8 154:11 160:2 station 4:23 6:14 7:8,10,17 8:12 9:4 10:22 11:21 26:23 29:23 33:23 34:1 49:11,14,17 53:25 54:14,21,24 64:5 65:4,5 95:3,6,7,8 95:17,18,19 96:2 96:6,8,10,15,20 97:1,6,15 102:1 103:19,25 121:11 121:19,19,20 123:10,11,12,18 123:20,23 129:5,6 129:9 132:22 133:11,22 134:7 134:10 135:18 141:8,9,11,13,18 141:21,23 145:2 147:1,6,17,20,22 148:23 149:24 151:17 155:9 157:10 158:14,18 158:24,25 159:3,5	159:9,10 162:6 station's 102:13 station-based 7:14 20:12 30:4 46:23 49:6 50:18 51:23 52:19,24 53:15 54:4,7 55:1,16 57:14 65:10 67:3 128:15 161:22 162:5 stations 121:14 122:1,3 150:9 status 115:19 158:11,13,16,20 158:22 159:1,6,11 159:18,20 statuses 159:24 stay 22:11 31:10 37:20 38:6 60:14 61:3 97:14 112:16 114:7 164:11 stay-put 22:16,18 22:19 25:6 32:5,6 32:11 34:20 39:5 39:6,12 99:16 step 62:15 120:14 stepping 41:15 steps 168:25 Steve 80:25 stick 101:15 117:20 sticks 165:17 stood 150:2 stop 21:4 74:9,11 119:11 168:9 stopped 120:11 stopping 111:2 story 168:18 strands 33:24 strategic 45:12 54:12 strategy 22:10,21 31:9 34:19 37:10 Stratford 146:23 147:13 street 17:8,9 91:16
---	---	--	--	---

structures 55:20,20 57:11,11 67:8 stuck 150:24 studies 73:20 study 86:5,11 stuff 64:15 68:23 subject 42:15 44:1 44:5 56:16 70:18 113:4 125:11 160:21 submitted 9:7 123:9,13 141:24 substantive 5:4 9:13 substantively 4:24 success 59:2 successful 5:3 suffice 74:24 suggest 139:1 162:20 167:23 suit 171:9 suitable 37:9,14 summarise 5:14 Summarising 127:4 summary 4:12,12 86:20 summer 94:3 97:20 125:2 superior 58:6 supervising 57:24 58:4 supervisor 51:8 58:1 supervisory 11:14 supplement 93:13 supplies 67:17 160:19 supply 88:24 89:6 92:22 109:12 163:5 support 61:2 supportive 82:12 suppose 27:22 28:21 58:24 71:6	71:9 85:10 153:2 supposed 2:13 suppress 74:24 suppression 115:20 Surbiton 5:2,8 66:2 67:1 sure 16:1 21:22 92:24 117:2 145:18 159:17,18 160:8 170:4 surface 118:7 surrender 65:15 surrendered 65:23 survival 29:16 61:9 61:11,21 62:7 68:4,7,23,25 69:1 70:3,5,17 71:8,12 susceptible 101:6 switch 157:8 symptoms 41:24 47:10 system 40:9 44:15 52:11 87:20 102:10,18 104:16 105:14 115:20 116:5 123:3,6,22 127:13 129:8 132:2 133:5,17,22 133:23 134:13 135:1,17,23,23 137:10,23 138:25 139:12 146:11,13 147:17 148:6,7,15 148:20,22 154:15 154:16 157:11,17 158:6 159:15 systems 28:23 115:23 118:6,21 136:14	113:13 122:14 128:21 133:9,10 135:8,10 138:14 140:6 158:10 161:8 table 141:5 tackling 28:20 29:9 tactical 34:5 49:9 49:16 51:13 68:1 69:24 70:1 71:2 93:4,8 142:18,23 143:3,5,6,9 160:3 160:7,11 161:25 162:1,3,4 tactically 20:19 tactics 20:19 23:23 23:24 25:9,13 31:7,21 32:4,24 49:7 51:14 52:6 53:2 56:1 60:25 93:20 154:22 155:2,8 156:10 take 1:6 2:1 3:12 9:21 13:17 15:15 59:7 60:22 72:11 83:18 91:1 99:6 105:1 120:14 127:21 131:25 141:1 142:17 144:20 167:25 168:25 170:8,22 take-away 21:8 70:20 82:9 taken 82:23 113:15 113:16 139:1 154:2 164:22,23 takes 45:11 169:10 talk 13:7 25:22 49:7 82:15 92:1 97:8 119:16,17 138:1,4 166:14 169:24,25 talking 16:1 68:23 91:24 154:18 Tall 78:2	Tamweel 79:3 target 100:1 101:13 task 45:9 46:8 task(s) 24:6 taught 27:24 28:2 28:15,17,25 39:14 teach 30:9 team 14:25 56:22 57:4 58:20 115:8 154:20 teams 10:21 technical 120:24 170:19 technique 18:16 teleprinter 145:21 147:24 tell 18:10 20:21 28:17 31:1 69:17 80:6 97:6 128:6 139:25 144:15 151:2 155:1 160:10,11 165:12 temp 131:13 temperature 75:10 temporary 4:21 5:1 9:17,21,22,23,23 ten 150:11,14 tend 97:14 tendency 145:16 term 37:6 terminal 156:8,18 156:25 157:7,13 158:1,10 162:18 163:22 165:3,11 165:23 terminology 148:14 terms 6:12,14,15 7:12 14:18 17:14 20:16,18 23:2 25:11,17,24 27:11 28:11,18 29:11 33:8 34:16 35:13 35:20 41:14,21 43:14,15 45:8,9 45:15 49:4,6 50:1	50:15,22 52:11 53:3 54:25 55:25 58:15 60:5 64:24 66:22 67:7,16 68:5,7,12 69:20 69:24 70:3,23 71:1 73:23 75:9 82:13 99:3,14 100:7,11 102:18 103:5,11 105:12 109:11 111:18 112:8,19 117:5,10 120:17 123:24 126:20 127:11,19 129:4 141:20 145:20 147:12 149:5 150:23 152:13,15,16,19 153:5 154:14 155:3,15,15,17 160:17 164:18 165:10,11 166:2 170:6 terribly 50:11 test 10:16 58:17 165:20 tested 66:18 testing 86:25 text 38:7 thank 1:19,23 2:2 2:10 4:6,10 5:14 15:18 18:8 23:16 26:1 35:15 40:21 46:13 48:13 63:16 63:23 64:2 82:22 88:7 110:13,20 120:8,25 122:8 123:25 124:21 125:7 127:24 129:12 133:2 138:22 143:12,21 144:7 159:6 160:1 165:9 171:20 thanks 96:13 126:8 theoretical 27:5,9
---	--	---	---	---

50:18 51:23 52:18 52:24 53:15 54:4 54:7 55:1,16 57:14 theories 56:10 theory 20:11,21,21 21:8,13,14 24:19 24:21 32:22 49:6 52:3,14 55:25 56:13 64:16,17 155:8 theory-based 20:18 24:18 35:20 51:17 56:12 58:17 64:24 70:10 thin 2:25 3:13 thing 24:23 73:25 92:16 101:23 103:11 105:9,13 106:1 127:11 133:13 151:4 158:5 168:2,23 170:7 things 28:4 35:6 51:21 69:21 102:23 103:18 115:25 118:10 120:15 122:16,20 123:2 134:20 137:6 146:9 164:1 166:2 think 5:7 13:2,4 14:10 16:7,16 23:17 27:10 33:10 33:20 35:8,12 36:1 39:24 46:6 46:14 49:3 50:7 50:14 51:10 53:19 56:3 59:9,14 60:22 63:13 69:19 70:16 80:15 81:5 82:1 88:7 90:5 91:12,18 92:24 93:17 94:1 97:17 102:22 103:10	105:13 106:7,7,13 106:19,22 107:6 108:12 109:21 110:16 117:2,4 118:25 119:8 129:14 140:9,11 143:17 144:18 145:7 146:22 148:14 150:7 151:4,21 152:20 152:23 153:13 155:3 166:12 167:16 168:1,4,7 169:4 170:14,22 171:12 thinking 7:18 46:7 116:9 third 22:4 37:4 38:3 92:6 142:17 161:12 Thomas 2:9 thorough 67:3 thought 94:23,24 three 1:12 21:18 33:24 37:1 42:10 53:21 76:21,21 79:2 93:17 96:12 110:8 139:13,20 150:13 151:10 156:6 throw 16:15 Thursday 1:13 tie 54:23 timber 118:6 Timber-frame 18:20 timber-framed 124:8 time 3:6 5:5 8:6 9:6 9:11 10:4 12:8,11 14:22,25 17:1 23:2,18 35:1 39:7 39:20 48:14 51:10 54:1,13 62:17 63:3,6,22 65:24	65:25 66:1 71:21 74:21 76:20 77:25 93:1,17 94:7,9,11 94:22 95:4,5 96:6 97:16 103:19 106:1,4,19 107:6 107:19,22 119:14 120:22 121:8 126:22 134:18 144:3 146:7,10 147:24 150:1 151:7 155:6,20 157:10 166:17 167:25 timelines 13:18 times 98:10 timescale 77:4 tip 146:9 148:10,12 148:12,25 149:7 149:10,11,13,15 151:17 157:12 tired 167:19 title 18:15 today 2:11 4:8 168:5 told 78:8 105:6 108:24 168:7 tolerance 75:12 tolerant 75:16 Tolworth 66:3,7,25 Tom 154:8 tomorrow 168:10 170:9,25 171:13 171:18 tools 13:25 top 22:1 37:1 44:17 46:16,24 76:23 93:24 105:2 108:23 125:8 128:7,22 129:1,13 130:6 132:7 139:5 150:8,8 154:18 156:7 162:1,9 topic 16:3 59:13 79:10 91:23	topics 26:5 83:14 total 130:12 totality 127:22 totalling 5:12 totally 11:6 touch 169:20 touch-screen 159:23,25 tower 1:16 12:3,7 17:15,18 25:2 33:2,3 51:1,12,15 66:3,7,25 67:10 67:12 69:5 72:4 76:15 79:4,10 82:3 88:17,19 89:9,11,16,19 90:16 91:25 92:4 92:8 93:22 94:1,8 94:12 96:7,14 98:20 101:8,11 103:16 105:2 106:15,21 107:3 109:10 111:14 112:21 113:17 116:16 117:6,12 121:8 124:10,17 126:10,17 127:10 130:10,16 131:4 131:12 134:5 138:24 139:11,16 140:16,23,25 143:1 144:10 146:5 151:14 160:20 162:11,18 164:13,16 165:13 165:17 166:6,11 166:16 towers 34:2 65:6 traffic 14:9 52:5 68:13,14 154:21 155:15,15 156:4,5 164:18,24 train 14:17 30:19 31:16 34:4 39:20 42:24	trained 15:4 19:4,9 19:10 20:7,22 22:15 24:15,21 31:19 33:12 39:15 40:5 41:11,21,23 42:18 44:4 45:1 47:25 62:23 trainee 4:19 trainer 13:9,9,14 trainers 34:11 training 4:15,16 10:7 11:3,6,8,8,9 11:9,13,18,22,25 12:13,19 13:3,7 13:23 14:13,23,24 14:25 15:5,13,16 19:4 20:9,16 21:6 21:8,12 25:8,12 25:14 26:6,8,9,20 27:5,9,20 28:11 28:11 29:10,19,23 29:25 30:3,5,7,7 30:18 31:3,12,25 32:2,9,10,14,14 32:16,19 33:8,12 33:18,22 34:2,23 35:2,13,16 36:6 36:17 38:18,24 41:14,16 42:19 44:7 46:18,19 48:24 49:2,12,13 49:20,25 50:18,20 51:2,6,7,23 52:2 52:24 53:15 54:4 54:7,11,16,17,20 54:23,24 55:2,17 56:10,15 57:14 58:12,16 59:2 60:1,6,16,20 61:4 61:20 62:3,6,21 64:10,24 65:6,8,9 65:14,22 67:10,12 67:23 68:1,6 69:2 69:14,17,23 70:9 70:13,15,21 71:4
--	---	---	---	---

71:22 78:19,22 88:9 90:22 147:7 transcribers 2:22 transport 14:5 trapped 70:7 travel 21:17 23:11 23:14 Trellick 51:1,12,15 72:4 88:16,19 89:9,11,16,19 trends 100:19 Trial 16:16 49:25 59:18 78:4 125:6 135:6 136:6 161:9 triggers 148:15 trip 111:15 trouble 82:24 true 4:4 136:13 trunking 118:7 try 21:4 23:18 70:1 74:8 85:7 120:14 164:1 170:12 171:11 trying 68:9,12 69:21 71:1 101:4 Tuesday 125:16,25 126:1,9 171:22 tumble 86:17 turn 16:3 18:12 19:19 21:25 26:3 30:24 36:24 40:22 59:11 78:25 82:21 86:9 87:1 91:23 108:11 122:15 125:3 135:2 143:13 161:12,24 turned 6:20 turning 45:9 86:19 86:23 turnover 95:6 97:6 97:10 twice 54:3 two 2:25 5:7 7:9,15 11:11 12:8 21:18 24:24 39:9 41:2	47:13 51:4 53:10 55:12 64:14,15 67:14,18 69:19,20 73:13,15,18 76:14 89:10 93:17 97:4 98:10 103:24 108:15 110:8 120:21,22 123:17 132:15 137:4,6 138:4,12 142:3 144:18 146:9 150:11 152:19 154:25 164:17 167:17 two-page 98:5 two-thirds 44:11 two-year 12:7 type 128:11,23 types 14:4 20:3 37:7 141:3 <hr/> U unburnt 74:2 unchecked 135:8 135:13,20 136:3 136:11 137:5 138:5 uncommon 21:15 74:10 89:23 undergoing 130:10 underneath 19:24 61:9 98:17 135:9 understand 14:10 20:15 22:21 23:16 24:16 27:25 31:8 33:8 34:18,22,24 36:14 38:8 48:18 56:15 75:11 82:4 87:19,25 89:10 102:24,24 108:25 146:24 152:2 166:13 171:4 understanding 2:14 16:7 23:17 26:17 27:6 29:7	31:16 35:5 39:5 40:16 42:7 45:15 55:4 69:25 87:15 89:21 101:15 104:16 112:10 114:21 115:11 understood 114:17 undertake 24:7 60:13 undertaken 40:13 undertaking 60:17 undertook 42:21 underwrite 149:13 unexpected 41:8,12 41:21 84:14 unfair 106:3 unfortunately 12:6 88:23 113:10 136:14 137:9 138:20 Union 17:8,9 79:24 80:2,24 81:11,19 82:10 unlocked 164:4 unoccupied 66:5 unpack 23:18 Unpacking 27:24 unusual 73:22 136:23 151:1 update 155:14 updated 135:1 154:20 162:19 updates 156:4 uploaded 123:5,8 160:16 uPVC 72:6 73:8 upward 20:1 upwards 73:13 130:4 use 21:2,3 24:1,2 39:21 44:22 65:7 65:16 67:11 93:9 133:3 151:23,24 useful 81:5 156:13 usefulness 165:10	user 131:4 uses 132:16 usher 167:11 usual 1:5 119:13 146:25 usually 73:13,17 113:22 <hr/> V vacant 154:3 vague 150:6 160:5 166:2 various 148:2 vary 6:15 vehicles 130:16 vent 104:24 105:2 ventilation 115:23 verbally 96:21 verification 123:11 versa 61:1 version 161:22 162:7,13,17,19,19 162:21 vertical 42:16 44:2 vice 61:1 view 42:2 101:21 105:22 views 107:19 visibility 74:3 Vision 146:12,14 148:21 149:4 157:12 visit 27:1,13,18 28:7 39:2 42:24 43:5,11 75:24,24 76:7 92:11 93:25 94:5 96:20 97:21 98:8,18,23,24 99:22,23 100:5 101:22,25 102:15 102:22,24,25 103:2,5,8 104:4,6 104:11 105:7 106:4 107:14,20 109:2,19,24 110:1	111:10,13,25 112:6,20 113:5 114:1,15 116:1,3 116:25 117:7,24 118:13 123:4 124:16 125:2 126:16,18 127:5 127:10,10 129:3 130:8 131:3,8,8 131:12,24 133:19 134:9,10 135:19 136:1 137:8 139:12,19 147:8 158:25,25 165:17 visited 92:5,8 96:19 97:20 111:14 134:18 visiting 76:3 visits 25:21,24 28:23 29:3 32:25 33:3 42:22 43:2 76:1 91:25 95:4 96:14 98:4 100:2 100:20 115:8 122:17,24 123:2 124:10,22 127:5 127:14 129:6 141:4,9,11,16 142:21 visual 42:5 43:18 visualise 68:11 visually 43:14 visuals 81:15 vital 44:21 voice 2:21 voids 18:23 19:6 118:7 124:9 vulnerability 100:4 vulnerable 18:20 39:11 99:4 100:23 101:5,9,17 <hr/> W wait 45:22 144:3 167:17
---	--	--	--	--

walk 13:8 14:1 93:12 106:20	145:2,11,14,15,17 145:18,22 146:16	161:21 165:1	witnesses 171:5	X 172:1
Walsh 170:7	146:18 147:2,25	we've 39:16 42:10	wonder 110:5	<hr/> Y <hr/>
Walton 95:8,11,25	150:12 152:5,23	46:19 82:2 91:24	135:4	yard 68:1
96:2,11 103:25,25	153:15,16,17	98:4,6 100:3	word 26:7 58:5	yeah 101:3
104:1	159:13	101:4 135:25	88:21 99:25	year 66:5 80:11,12
want 2:3,12 22:4	watch-based 25:17	153:9,10 155:17	151:23	80:14,15 94:1
26:6,12 38:16	31:17 46:23 56:8	158:3,7 166:22	wording 108:22	years 4:20 11:11,17
50:23 58:5 72:11	56:21 66:15	week 10:15,18	words 37:13 38:10	12:8 97:4 139:13
76:2 88:21 92:1	watch-by-watch	64:12,14 150:4,10	61:18 72:10 90:4	139:20
99:25 109:1 111:8	92:14	weeks 17:1 50:25	work 2:24 52:11	years' 5:13
119:17 124:25	watches 8:4,7,11,12	51:4	64:14 65:7,18	yellow 140:17
134:8 143:13	8:14,16,17 81:4	welcome 1:3 119:1	68:4 109:19	young 36:3,3
151:2 168:11	81:10 92:11,15	170:2	121:24 130:14	younger 36:11
169:15	93:3 121:12 123:1	welfare 82:13	147:13 149:2	<hr/> Z <hr/>
wanted 15:25 18:2	water 67:17 88:22	168:22	157:9	<hr/> 0 <hr/>
50:12 55:10,12	88:24 89:6 92:22	went 5:2 10:14	worked 31:24	00.55 146:5
76:10	160:19 163:5	14:22 66:16 73:2	104:16	00001135.1 125:4
wanting 9:19 140:9	way 2:17 8:10 22:2	73:3 95:23 103:5	working 43:19 62:4	<hr/> 1 <hr/>
warning 147:20	22:23 25:12 28:21	103:9 106:16	works 17:5 32:19	1 3:13 4:18 8:22
wasn't 33:3 54:8	35:9 40:8 44:12	107:2 111:10,22	104:18 125:12	15:20 48:5,6,10
69:4 70:11 80:5	58:24 62:22 70:4	118:13	126:19,20	48:18 78:6 86:16
81:8 86:1 88:6	75:15 77:23 88:3	weren't 31:19	worry 3:4	100:15 122:16
105:25 122:11	88:21 99:19 100:1	39:15 84:4 107:9	would've 12:6	158:13 159:6,11
124:18 139:1	108:8,17 127:7	wet 52:8 88:20,25	24:17 52:14 53:9	159:18,20,21
watch 4:19,22,25	134:24 135:4	90:5,6,9	96:18 105:20	162:13 172:2,2
5:1,2,4,6,8,9,10	137:24 141:20	whilst 76:17	112:1 124:20	1.00 119:21
5:11,18,18 6:3,5,6	144:3 147:6	White 8:5 80:25	153:13 154:2	10 18:13 53:13,21
6:11,25,25 7:3,7,8	153:16 158:23	whiteboard 13:18	161:17	54:4 57:13,22
7:15,16,18,23,23	162:18 164:12	32:22 33:17 57:5	wouldn't 12:4,5	78:3 130:8 141:3
8:1,4,5,5,5,9,23	168:23 169:11,13	window 42:14 44:1	28:17 44:6 50:21	167:7
9:4,14 10:1,2,2,7	Wayne 96:2,4,8,9	73:24 74:7,19	52:1 53:1 55:23	10.2 141:7
10:10,13,17 11:3	we'll 1:6 19:16 26:1	75:2,7 83:7 84:7	58:1 65:3 70:22	100 55:3 68:20
12:10 19:4 29:4,4	30:21 32:23 40:20	windows 44:5 72:6	75:8,8 84:23	92:24 94:11
30:16 31:14 34:10	49:19 63:5 76:10	73:9 74:20 75:20	91:20 94:9 139:25	100% 141:9
40:16 56:7,13,19	90:15 100:19	83:4,21 84:13	145:24 160:15	10th 86:14
56:20,22 58:2	103:4 111:2,11	85:8 89:22 114:8	162:20 169:15	11 1:7 15:9 19:19
62:16 66:2,9 80:5	119:11,12 143:20	wise 171:12	Wrack 80:25 81:23	21:25 98:3,11,17
81:1,3,9 97:18,18	144:3 167:6,17	wish 169:11	Wray 125:15,23	98:22
98:7,12 111:14,25	170:12,22 171:13	witness 2:2 63:15	126:5	11.05 63:18
120:17,19 129:17	171:18	69:11 71:24 110:7	write 95:9	11.15 1:7
129:18,19,23,24	we're 23:16 32:25	110:12,15 111:1	written 91:3	11.20 63:17
130:21,22 134:5,7	34:17 45:9 54:13	118:25 120:5,8	wrong 33:11 53:25	11.25 63:20
139:8,15,18	68:12 91:23 94:5	143:18,21 144:7	78:9	
144:18,21 145:1,1	108:4 141:1 147:8	167:5,8,19 169:13	<hr/> X <hr/>	
		171:2		

11.30 126:9 11.30hrs 125:25 11th 86:15 12 98:11,12 113:13 12.37 110:21 12.45 110:23 129 130:12 13 45:20 78:6 128:21 134:2 144:11 161:8 13.5 152:9,10 13/14 145:23 14 1:15 5:12,12,21 12:12 48:24 50:14 52:19,22 59:12 79:20 92:2 133:9 146:5 15 86:4 87:2 130:2 132:9 159:1,4 15/02/2017 134:6 136:9 150 139:8 16 1:16 108:12,12 108:13 115:17 164:21 17 140:11 18 55:10,12 108:12 19 26:3 72:13 122:15 1999 79:16,25 <hr/> 2 <hr/> 2 46:3 69:12 79:1,2 86:12 92:3 98:8 102:8 125:4,4 128:4 140:10 144:23 146:4 151:12 153:10 154:17 158:16 2-3 130:16 2.15 119:12,20,23 2.52 143:24 2.55 143:23 144:1 20 30:24 31:5 44:10 53:13,18,19 63:6 	77:18,22 86:5,16 94:16 111:6 125:10 163:2 2003 4:14 2005 37:9 2006 90:13 2008 77:5 2009 69:14 77:5 162:15 2009/2010 5:1 2012 50:2 2014 16:12 45:22 2015 5:9,16 10:6 12:11,25 48:18 55:16 57:8 59:10 79:11 95:14 97:1 130:8 140:7 2016 33:22 49:8,15 52:19,22 53:6,12 53:13,19,20,21 69:13 71:14,21 72:13 78:6,11,13 94:3 97:20 98:8 102:8 109:2 111:13 114:1 116:1,25 118:14 124:11 125:2,10 125:23 126:17 128:7 130:8 131:7 2017 1:15 5:21 16:4 16:10,22,25 24:12 48:20,21,24 50:11 50:13,20 51:22 53:7 64:5,19 65:21 69:13 71:15 71:21 75:5,19 76:12 79:20 82:18 83:15,22 84:1,10 84:21 85:25 87:9 87:24 88:5 90:8 90:18 91:3,18 92:2 95:17 97:2 120:23 130:2 132:9 138:24 144:11 148:17 	162:8 2018 1:1 3:19 171:22 21 44:17 46:15,16 46:25 53:12 125:23 22 1:18 52:20 126:5 23 3:19 50:11,13 51:22 23/10/15 130:14 238 15:19,21 25 1:1 50:10 87:2,3 140:7 26 142:5 171:22 27 5:11 124:23 271 152:3,4 272 151:20 152:3,4 152:6 27th 88:23 90:4 28 36:24 51:10 55:16 59:12 2m 83:7 84:7 2nd 131:15 <hr/> 3 <hr/> 3 46:6 50:2 79:1 94:17 128:7 131:7 131:16 154:18 156:7 158:20 160:4 3.2 16:11 60:9 108:6,10 120:12 122:10 3.30 166:22 3.33 167:13 3.40 167:10,15 3.49 171:21 30 40:22 162:15 300 139:6,11,22 140:16 331 151:13 341 45:24 46:19 360 42:3 3rd 131:15 <hr/> 4 <hr/>	4 46:7 48:17 59:8 79:1 122:14 134:2 161:24 167:24 4.27 112:24 400 163:4 403a 138:9 403b 138:9 405 136:19,21 137:1 407 136:19,23 137:1 43 1:18 431 15:6 <hr/> 5 <hr/> 5 46:8 82:21,21 86:16 110:14,19 142:5 143:16,20 150:8,8 50 90:13 94:25 504 137:14 505 137:16 5454 3:16 <hr/> 6 <hr/> 6 46:9 57:8 140:6 158:22 6-7 72:3 60 23:2 90:14 94:18 94:19 60-minute 116:12 633 48:16 50:15,20 51:21 52:23 53:15 54:3 55:14,17,21 55:24 56:23 57:6 57:9,12 58:7 59:8 60:19 64:25 122:13,22 663 108:6 <hr/> 7 <hr/> 7 16:17 46:15 71:25 108:11 7(2)d 75:25 98:15 102:9,15,22,24 103:2,5 109:2 	118:13 122:16,24 123:1,3 124:16 131:8 134:9,13 160:22 7.4 142:6 7.45 59:12,14 7.49 59:16,21 7.5 142:14 7.50 60:11 7.51(a) 60:23 7.55 61:8 750 140:13 793 54:6 7th 86:12,14 <hr/> 8 <hr/> 8 18:12,13 141:4 144:12 800 137:2,20,21 139:7,25 140:3,7 140:25 <hr/> 9 <hr/> 9 19:20 49:23 130:11 135:2 9-metre 152:11 9.30 1:2 170:25 171:18,23 90 164:3 999 147:1
--	---	--	--	---