GRENFELL TOWER INQUIRY

CLOSING SUBMISSIONS ON PHASE ONE ON BEHALF OF THE FIRE OFFICERS ASSOCIATION ("FOA") AND RICHARD WELCH ("RW")

Introduction

- 1. At the outset, FOA/RW would, once again, wish to express their sincere sympathy to the Bereaved, Survivors and Residents ("BSR's") for their loss.
- 2. What has been a notable feature of the hearings in this Phase is the considerable dignity shown by the BSR's who have attended on a daily basis, often in the face of harrowing evidence being heard.

The scope of these submissions

- 3. These submissions will not condescend into the detail of matters concerning the applicability of Building Regulations to the exterior cladding at Grenfell Tower/scope and extent of Approved Document B, save and insofar as such touch on matters directly relevant to the (in)ability to effectively fire fight/carry out search and rescue on the night of the fire.
- 4. In assessing the actions of all those involved in firefighting activities on the night, the following should be borne very clearly in mind;

- 4.1 Fairness requires that their actions should not be assessed with the very considerable benefit hindsight allows.
- 4.2 All firefighters who entered the Tower did so with the sole aim of saving the lives of those who were trapped in it. Many did so at risk to their own lives. In doing so, they acted with conspicuous bravery.
- 4.3. That they failed to save the lives of all those who were trapped was, and remains, a great source of sadness and regret to them.
- 4.4 Those in LFB command positions inside and outside the Tower were motivated solely by taking decisions that would, in their honestly held view, facilitate the rescue of those trapped in the Tower.
- 4.5 In considering the actions of all LFB personnel on the night, it must at all times be borne in mind that this tragedy was wholly unprecedented in its scale and complexity and the enormous challenges it posed.
- 4.6 The fire at Grenfell Tower was a multi-storey external fire that caused a multi-storey internal fire.
- 4.7 Crucially, on the night none of the firefighters (including those in command positions) had any knowledge that Grenfell Tower was clad in such highly combustible rainscreen cladding.
- 5. The evidence given by all firefighters who commented upon it, was that the fire at Grenfell Tower wholly outside the experience of all of the LFB personnel that attended that night.

6. This is illustrated by a comparison of the number of Fire Survival Guidance Calls (FSG's) recorded in respect of the incident at Grenfell Tower compared with that at other fires.¹

The condition of Grenfell Tower immediately before the fire.

- 7. Dr Lane's opinion is cogent on these issues. In her Supplemental Report, she states as follows:
 - (a) Based on the relevant test evidence, the construction materials forming the rainscreen cladding, when considered either individually or when considered as an assembly, did not comply with the recommended fire performance in ADB 2013 as applicable to Grenfell Tower; see BLAS 0000002_0014 paragraph 2.9.6.
 - (b) The entire system could not adequately resit the spread of fire over the walls having regard to height, use and position of the building. Specifically, the assembly failed adequately to resist the spread of fire to an extent that supported the required Stay Put strategy for Grenfell Tower. The assembly failed adequately to resist the spread of fire to an extent that supported the required internal firefighting/defend in place firefighting regime. Paragraph 2.9.18 supra.
 - (c) The cladding presented an extreme and primary hazard: BLAS supra _006 paragraph 14.1.34.
 - (d) In the event of any internal fire starting near a window, there was a disproportionately high probability of fire spread into the rainscreen cladding system. Paragraph 2.9.14 supra.

¹ RW; 2 or 3 (Transcript 18 September 2018 pp20 – 21). No more than two (DAC Goulbourne Transcript 12 September 2018, pp76-77).). Cdr Cotton had not been to an operational incident involving FSG's; (Transcript 27 September 2018 p27). More FSG calls were received for the fire at Grenfell Tower than in the previous 10 years in London, put together; (Transcript AC Roe 25 September 2018 p189; also p189 maximum two). In all, 344 FSG calls were received; (Jo Smith Transcript 11 July 2018 p52).

- (e) The type of materials in the rainscreen cladding and how they were arranged around the window in the kitchen, contributed to the speed at which the fire spread from the flat of fire origin to a multi-storey external fire within the rainscreen system; paragraph 2.9.18 supra.
- (f) A full geometric grid was created by means of the construction materials, which connected (in the event of an internal fire, cavity fire or external fire) every flat on a storey; and every storey from level 2 to roof level. These pathways also supported the spread of external fire back into the building, through the windows, and created a series of internal fire events; paragraph 2.9.22 supra.
- (g) The consequence of this was that any individual flat of fire origin was no longer in a separate fire rated box as required. The compartmentation required in the building was breached by the ability of the fire to spread on the external wall from that compartmented flat to the next; paragraph 2.9.23:

"... A building with this form of external wall could never provide the high degree of compartmentation required to support stay put...";

Dr Lane Transcript, 22 November 2018 p178 (1-3).

- (h) Professor Bisby said such fire spread was inevitable; see Transcript, 21 November 2018 pp147 (21) 148(7) and 150 (8-12).
- (i) The required single safety condition, stay put, was not provided for as was required as a result of the rainscreen system installed during the refurbishment; see Transcript Dr Lane pp182(21) 183(1).
- (j) Grenfell Tower should never have been handed over with this rainscreen system where a stay put strategy was in place. Transcript supra p183 (2 5) and BLAS0000002 _0021 paragraphs 2.11.12 2.11.16.
- (k) It was not possible, with the external wall construction in place, to mitigate the type of fire that those materials cause. Transcript supra p183 (9-16).

(l) Dr Lane did not consider it reasonable that, in the event of the installation of a combustible rainscreen system on a high rise residential building, the fire brigade should be expected to fully mitigate any resulting fire event. This was particularly so where the fire brigade had never been informed that a combustible rainscreen system had been installed. There are so many combinations of events, that could fall entirely outside the reach of external firefighting activity this was:

"important when only internal firefighting arrangements are made for high-rise residential buildings by statutory guidance at this time."

See BLAS supra, paragraph 2.10.1.

- (m) Her "overall conclusion" was that there were multiple catastrophic fire routes created by the construction form and construction detailing that was used: See Transcript, 22 November 2018 at p25 (5 11).
- (n) The cladding as configured at Grenfell Tower rendered it unsuitable for a stay put policy; see Transcript, supra p100 (12-15).
- (o) Once fire was within the cladding there was nothing to impede the spread of fire and smoke around the building. This:

"created the conditions for a catastrophic fire event to occur." See Transcript, supra p164.

(p) As stated above, none of these matters were matters known to LFB/those talking command decisions on the night of the fire.

- (q) As was noted by Professor Bisby when he gave oral evidence, external firefighting was likely to have had little effect.²
- (r) The single stair and lobbies and the fire safety provisions therein were not ever designed to create a safe escape route or a safe working environment in a whole building fire. The design approach for high rise residential buildings is based upon inhibiting that from occurring; BLAS paragraph 14.11.33 _0006.
- (s) As Dr Lane points out at paragraph 14.2.21, supra _0010:

"...the design of firefighting stairs in high rise buildings therefore requires the provision of a smoke control system, functioning fire resisting enclosures around the lobby and the stairs, including functioning fire doors to flats, and the stairs, any risers protected where they pass through the lobby. The system is intended to prevent smoke entering the stairs, when two stair fire doors are open on the fire floor and the floor below."

(t) The net effect of all of this is that those LFB personnel taking command decisions on the night had no prior opportunity to consider their firefighting and rescue tactics, as well as any evacuation guidance to the residents having regard to how the fire was likely to behave/spread once on the exterior of the building.

The non-compliance of the active and passive firefighting measures at Grenfell Tower.

8. These are identified by Dr Lane, BLAS supra at sections 14 and 19.

 $^{^2}$ See Transcript, 21 November 2018 p172 (3 – 8).

- 9. At paragraph 19.5 et seq of her Supplemental Report (BLAS 00000019 _0017) she identifies how the protected lobbies (and the various components within the lobbies) failed.
- 10. At paragraph 19.6 et seq, (supra _0028) she identified how the protected stair failed.
- 11. At paragraphs 19.7.1 19.7.36 (_0042 _0046) she set out a Summary of her opinions in this regard. Of critical importance to the ability to effectively firefight/carry out search and rescue are the following:
 - "19.7.5 The low Bridgehead location and large fire sector reduced the time available to conduct rescue operations at higher levels whilst wearing [BA].
 - 19.7.6 Above the Bridgehead the heat and smoke within the lobbies either prevented or reduced access to the fire main and prevented or reduced the ability to find and locate occupants."
- 12. Please note those other failures identified by Dr Lane at paragraphs 19.7.8 19.7.14 (lobby enclosure), 19.7.20 (fire lifts), 19.7.25 et seq (protected stair). On those occasions when the Bridgehead had to be moved (eg at 03.08 to ground floor level), all firefighters and therefore fightfighters' actions were temporarily withdrawn from the building: see paragraph 19.7.19 @ _0044.
- 13. The impossible scale and nature of the task facing both residents and firefighters that night is encapsulated by Dr Lane in her Supplemental Report at paragraphs 2.19.8 2.19.9;

"There were substantial signals of danger to residents and to firefighters, this included large quantities of thick black smoke which impacted sight and

breathing immediately outside flat entrance doors, intense heat outside flat entrance doors, heat and smoke in the stairs themselves, rapidly advancing fire and smoke entering flats from the external wall, and ultimately horrific and rapidly increasing number of fires for the residents to attempt to escape away from within their own flats.

It is my opinion that the conditions created difficult, and at times lifethreatening conditions, for the LFB. The conditions greatly restricted their ability to implement their standard processes and procedures, regarding firefighting once the fire spread beyond flat 16."

14. Further, as Dr Lane puts it at paragraphs 2.19.12 - 13, _0048:

"...the single escape stairs and its lobbies became the single most important life safety feature...

The failure of this life safety feature meant that after 01:40 and particularly 02:00 worsening conditions limited the ability for rescue to occur, and created more and more barriers, or perceived barriers for residents to overcome in order to self-evacuate".

The Stay Put Strategy ("Stay Put")

- 15. In her Supplemental Report (BLAS 0000003 _0010) at paragraphs 3.2.11 3.2.13, Dr Lane sets out the historic basis for the safety approach to residential high rise buildings.
- 16. The Stay Put strategy, as defined by Dr Lane is the concept of occupants in dwellings adjoining the dwelling on fire, being safe if they "remain where they are". As she points out, (BLAS supra _0011 paragraphs 3.2.15), Stay Put was a building safety condition which relies on active and passive fire protection

measures. It has formed the basis of high rise residential buildings fire safety guidance in the UK, from 1971; see paragraph 3.2.25 @ _0015.

- 17. Since the Stay Put strategy is a safety (building design) condition, LFB and its officers in command reasonably relied upon this building design condition on the night of the fire. There is no building design function in a high rise residential building provided to enable firefighters in the UK to communicate any change in their evacuation or rescue guidance from within the building.
- 18. Having regard to those matters she set out at paragraphs 3.2.15 3.2.26, Dr Lane put it in this way, at paragraph 3.2.27:

"This combination of construction systems, and early firefighting intervention, supports a stay put strategy. This is a layered safety approach for a single safety condition – occupants in adjoining dwellings safe to remain where they are; conditions provided to allow the fire brigade to access water and extinguish the fire early."

19. That the Stay Put strategy applied to Grenfell Tower at the time of the fire is clear. However, the matter is put beyond any doubt by the following. In the RBKC/TMO/Rydon Grenfell Tower Regeneration Newsletter for July 2014 (ART00002606_0002) the following appears;

"What's been happening?

...We've now put up samples of the cladding panels for the Council's planners to look at and approve; these panels overlook the walkway.

³ This is Dr Lane's definition of defend in place; see paragraph 3.2.25.

Emergency fire arrangements

Our longstanding 'stay put' policy stays in force until you are told otherwise. This means that (unless there is a fire in your flat or in the hallway outside your flat) you should stay inside your flat. This is because Grenfell was designed according to rigorous fire safety standards. Also, the new front doors for each flat can withstand a fire for up to 30 minutes, which gives plenty of time for the fire brigade to arrive."

(Emphasis added)

20. The RBKC/TMO "Fire Action – Grenfell Tower" sign which appeared by the lifts on some (if not all) floors at Grenfell Tower provided:

"There is a stay put policy for residents unless the fire is in or affecting your flat."

- 21. As described by Dr Lane, compliance with both active, passive and other fire protection measures was another layer of required safety activity to support the stay put strategy.
- 22. She sets out these measures in full, at paragraph 3.2.28; see also Table 3.1:
 0024 and paragraphs 3.4.15 3.4.20 0023 to _0025
- 23. Section 2.1 of BS CP3 stated that there is no intention to rely on the fire brigade during evacuation:

"...where escape routes are adequately protected, safety may be reached within the building, or in the open air clear of the building, by the occupants' own unaided efforts and without reliance on rescue by the fire services;" See Dr Lane, supra _0015 p 3.2.32.

24. However, see Dr Lane, paragraph 3.2.48 (_0017 - _0018 and the reference therein to BS 9991: 2015 p18) which defines the Stay Put strategy. She notes that this is a departure from CP3 1971. She goes on to state that she has not identified any active and passive fire protection features in the current guidance which would assist in supporting a change from the Stay Put strategy, or from a "defend in place" firefighting strategy. Therefore, she opines:

"In the light of the above, high rise residential buildings are handed over for occupation on the basis of a stay put/defend in place strategy and without active or passive protection measures to support a change in that strategy. As a result, this is how the fire brigade encounter these buildings in the event of a fire."

See para 3.2.51 _0018.

- 25. The Stay Put strategy requires compliance by the building owner with the active/passive and other fire protection measures within a high rise residential building.
- 26. Where a Stay Put strategy is in place:
 - additional protection to the staircase should be provided in the form of a smoke control system; Dr Lane para 3.2.43, _0016 - _0017
 - External walls should be constructed using a material that does not support fire spread and therefore endanger people in or around the building.

- Flame spread over or within an external wall construction should be controlled to avoid creating a route for rapid fire spread bypassing compartment floors or walls.
- Combustible materials should not be used in cladding systems and extensive cavities.

See Dr Lane para 3.2.45 _0017.

Fire Survival Guidance

- 27. At Appendix 3 to LFB Policy 539. "Emergency Call Management" (LFB 00000 737, reviewed as current 28 March 2014), an FSG call is defined as being a call to Brigade Control where the caller believes that they are unable to leave their premises due to the effects of fire (smoke or heat).
- 28. In such circumstances, a Control Room Officer will remain on the line providing appropriate advice until either the caller is able to leave by their own means, or is rescued by the fire brigade or the line is cleared.
- 29. It goes on to provide that a resident in a high rise residential building would usually be safest to remain in their premises unless affected by fire, heat or smoke.

Events that had already taken place by the time RW booked Status 3.

- 30. The LFB Operational Response for Grenfell Tower of 11 October 2018 (LBF 00024348 _0006 _0117) is most helpful in providing a chronology of events from _0050 01.57.21 (when RW booked status 3).
- 31. Of particular note, by the time RW had booked status 3 are the following (from Short Incident Log: (MET 00013830)

- Make pumps 15 aerials x 2, 01.27.59 (_0017)
- Make pumps 20 FRU x 2, 01.30.00 (_0018)
- Make aerial ladder 2 requested 01.31.21 (_0018)
- Make pumps 25: 01.31.48 (SI Log _0018)
- Make FRU 2, requested, 01.32.54 (SI Log _0018)
- 32. It is also entirely clear from reading the SI Log that, over the period from 00.50 until 01.57.21, that there were already many reports of persons trapped on floors 10, 12, 14, 16, 17, 18, 20, 22 and 23, with smoke/flames reported as coming into flats on those floors.
- 33. Heavy smoke logging was noted on the fifth floor at 01:20 (see LFB Op. Response supra _0034).
- 34. By 01:21 fire had reached the 11th floor.
- 35. There was heavy smoke logging on the 8th floor lift lobby at 01:23; per F/f O'Beirne with the lift lobbies getting smokier as he ascended. (See LFB Op.Resp_0040).
- 36. At 01:26 there was thick black smoke from floor to ceiling on the 10th, 11th, or 12th floors per O'Beirne; see _0045 supra .
- 37. See also the following (LFB Op.Resp);
 - F/f Badillo at 01:28*, 15th floor lift car filled with black smoke (0051)
 - 0128* Thick black smoke and down to the ground on the 5th floor (-0052)

- 01.44.58* F/f Cuthbert in BA goes up to 5th floor where the heat and the smoke is "crazy" and the smoke logging in the stairwell was getting increasingly worse; (-0098)
- 01.48.00* BA Team Five enter the 20th floor lobby. Visibility is poor and they cannot see the door numbers (-0155)

F/f Mills 01.51.56* "we got to the 9^{th} floor, it was mega hot, when you went past it there was like a heat barrier..." (_0109)

01.56.09 First EDBA crew report to Bridgehead (_0015).

- 38. Between 01.39 01.58 the rate of evacuation from all floors was 72% less than before 01.38; see Dr Lane's Supplemental Report paragraph 2.15.1 d) i) _0036.
- 39. It was described as becoming increasingly hot below level 20. The lobbies on levels 5 6, 9 12 and 20 were all described as being filled with thick black smoke; Dr Lane's Supplemental Report paragraph 2.15.1.d) _0036. Some lobbies, in particular at level 10 were described as "incredibly hot" with thick heavy smoke and severe heat reported between levels 2 to 20; paragraph 2.15.1.f _0036.
- 40. By 01.58 the number of lobbies reported to be affected by smoke had increased to 15 out of 20; in 10 of those smoke was described as thick and black; paragraph 2.14.37 _0030. Firefighter evidence described thick black smoke in the stairs, from level 3 to level 21; 2.14.39 supra.
- 41. By the time RW entered Grenfell Tower at approximately 02.10, 34 flats were affected by flame fronts; see Table supra at paragraph 2.11.7 _0020.

RW's qualifications and experience

- 42. RW made 2 witness statements, 5 July 2017 MET00007525 and 30 March 2018, MET 000013007. He gave oral evidence to the Inquiry on 18 September 2018.
- 43. At the time of the fire, he was Borough Commander for Lambeth. Following the fire (on 1 November 2017), he was promoted to Deputy Assistant Commissioner.
- 44. He had been a front line firefighter for 22 years and had a lot of experience of firefighting high rise fires.
- 45. It is respectfully contended that he was clearly both an honest witness and an committed officer who displayed considerable knowledge of his work.
- 46. Other than at Grenfell Tower, he had no prior experience as an operational front line officer of any occasion when the Stay Put strategy was no longer effective; see Transcript of his evidence, 6(1-3).
- 47. He had never had more than 2 3 FSG calls from a single incident; see Transcript 20(23) 21(4).
- 48. He was qualified to train firefighters in the use of both SDBA and EDBA; Transcript 6(21) 7(4).
- 49. The initial short chronology of events leading up to his arrival at Grenfell Tower is as follows:
- 51. He was paged and informed of the incident at 01.19.27. He understood that he was to attend the fire in the role of Bulk Media Adviser (Tactical Adviser Bulk) with responsibility for the large delivery/removal of water at the incident.

- 52. His recollection was that he left home at about the same time as he recalled make pumps 10, i.e at 01.24.34 (or thereabouts).
- 53. En route he heard the make-up of pumps from 15 to 20 to 25. It was therefore clear to him that the Incident Commander ("IC") was dealing with a serious fire that was growing quickly. He also recalled hearing control room staff inform officers at the scene that they were receiving FSG calls.
- 54. He travelled along the A40 towards Grenfell Tower. As he did so, he saw the building aglow. In common with some other officers who gave evidence he thought that it might be scaffolding netting that was on fire. This burnt spectacularly, but not for very long.
- 55. He was status 3 at 01.57.21. On arrival, he went to CU8 which was positioned on Bomore Road. At that time, a glimpse of the Tower suggested that the East side of it was alight. However, he was unable to see at that time whether the fire had penetrated from the exterior back into the flats; see Transcript 27(15 16).
- 56. He was followed on to the CU by Matthew Cook, Mick Mulholland and Steve West. WM Kentfield was on the CU at the time, sitting at the front end. RW was recorded as IC. This is recorded on the Short Incident Log at 02.04.20 (See MET 00013830 _0021).
- 57. As the fire was by then a 25 pump fire and he was, so he understood at the time, the senior officer present he took over as IC. He sent a message to this effect; Audio file and transcript GTIRT17-02621 and SI Log as per paragraph 56 above.

- 58. He requested that a message be sent to;
 - Make pumps 40 (incorrectly recorded on the Log as make pumps 25) at 02.03.41; Audio file LFB00002946.
 - Declare a Major Incident; see Log 02.06.38; Audio file LFB00002507.
 - Make CU's 4 see Log 02.05.05.
- 59. RW explained his rationale for these decisions when he gave oral evidence to the Inquiry; see Transcript 18 September 2018 pp46 (19) 47(9) and 48(22) 50(19). At p49(15) he stated:
 - "... Life will always come first, so the priority was to get the people."
- 60. The decision as to the sufficiency of resources (in particular EDBA wearers) was one that RW would consider when he actually entered the Tower and was able to obtain "a much better situational awareness of where we were, what the aims were, what our difficulties were…"; see Transcript supra p52 (21-25).
- 61. At the point when RW requested make pumps 40 he still thought that the fire was on the exterior face; see Transcript supra 55(4-19).
- 62. RW asked Steve West for a METHANE message to be sent.⁴ He also called for a dangerous structure engineer. He gave his reasons for doing this in his oral evidence, see Transcript p211 (15) 213(9).

⁴ This message was not transmitted.

- 63. Also, when on CU8, RW asked SM Walton to find a suitable rendezvous point for oncoming appliances. He also asked another SM to begin the process of establishing BA Main Control. The decision to set up FSG on CU7 was to ensure a dedicated command unit to deal solely with FSG's. This was the CU nearest the Tower.
- 64. His strategy as IC was "to reach FSG [callers] as quickly as possible and remove them from the building or get them to a safe place." Transcript supra pp72(4 7) and $111 (11 15)^5$
- 65. In the short time he was IC, RW did not have thoughts that the stay put policy should be revoked or changed to an all-out. In his oral evidence he explained his thinking;

"I had no reason to think that the building compartmentation would be failing and that fire would be spreading across that way because it's not something that we see. The stay put policy works time and time and time again, so I believed in that policy."

See Transcript supra p72 (21 – 25). See also pp73 (19 - 23) and 109 (10-18).

66. While RW was on CU8 he was informed by DAC O'Loughlin that DAC O'Loughlin was IC. RW informed him of the messages he had requested be sent. DAC O'Loughlin agreed with what RW had done and informed RW that he would have sent the same messages. DAC O'Loughlin assumed the role of IC by about 02.08; see LFB Op. Response.

⁵ See also Transcript p93 (13 – 16) "... no matter what we're confronted with we're never not going to try, so they [firefighters] will always do what's trained in all of us, to rescue people at whatever cost."

67. RW was given the role of Fire Sector Commander and directed by DAC O'Loughlin to go to the Bridgehead. While the fire sector is ordinarily regarded as the floor below the fire, the fire floor and floor above, in the case of Grenfell Tower it was comprised of the entire building.

The evidence given by WM Norman Harrison

68. It will be recalled that this witness gave oral evidence on day 45, 19 September 2018. The salient features of his evidence can be summarised in this way (from the Transcript for that day):

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- When he returned to CU8, WM Meyrick, Peckham and a GM were present. He believed the GM was RW.
- SM Egan arrived very shortly afterwards.
- He claims to have stated that he "announced to all of them that he believed the advice our operators were giving out to the people trapped in the building needed to be changed. I suggested that someone tell our control operators to change that advice as soon as possible. I recall that some discussion took place."
- WM Meyrick and Peckham were at the Communications Area, on the telephone or on the main scheme radio.

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- He did not tell anyone present what he had witnessed from the North East corner of the Tower.
- He did make a point that cladding may be engaged on the exterior.

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WM Harrison said that he spoke these words when he was stood on CU8.
He said he was directing his words to the senior officers on CU8. He also said he was blocking the staircase so no one could leave and no one could go onto the CU.

- He claimed neither of the 2 WM's or GM present engaged in conversation with him.
- A person who was behind him outside CU8 engaged with him, he believes this was WM Pat Delaney.

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- WM Delaney said there was going to be hose in the single staircase and it was smoky.
- WM Harrison then stated that he asked whether emergency air supply equipment could be used.
- No one responded to this suggestion.
- WM Harrison claimed that all of his comments were directed to the two
 WM's and GM present and no one responded.
- He claimed that he knew "I'd made my point" (p112; (11))

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• He claimed that he made his comment "quite loud, very direct, unequivocal and emphatic."

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- He knew that GM Welch would have "my opinion" at the forefront of his
 mind when he came to formulate his plan... "is it impossible [for him] not to
 have heard it."
- 69. For the reasons set out at paragraphs 99 to 108 below, even had a remark concerning abandoning stay put been made and steps taken to attempt to implement it, at that time, sadly it would not have affected the outcome. However, the Chairman may consider he needs to make findings of fact in relation to this evidence. If so, in particular, was WM Harrison accurate in his recall about changing the stay put advice?

- 70. We contend that the probability is that WM Harrison is wrong in key elements of his recollection. That is for the following reasons:
 - (a) In his contemporaneous notes made on the same day, 14 June 2017 at 15:05 (MET00005271), WM Harrison makes no reference whatsoever to any conversation in these terms. Had he made the comments claimed, it is most likely he would have recorded it when making these notes.
 - (b) A reference to such a conversation does appear in Notes made on 15 June 2017 at 13:00; MET 00015872. However, in these Notes he does not say he was ignored, he states he was asked to go to CU7 to deal with FSG. In addition, in his second set of notes (MET00015872) WM Harrison refers to a "possible" GM and in his witness statement (MET00007885) he states that the third senior officer "I believe was a Group Manager".
 - (c) In his Statement, WM Patrick Delaney⁶, states that at some point during the incident he returned to another CU. While there he had a brief conversation with WM Harrison, who asked WM Delaney whether the stay put advice should be changed and residents evacuated. He answered WM Harrison's question by describing the conditions in the Tower.
 - (d) WM Delaney had been in and out of the building many times and had been up to the 9th floor. He described that the stairway was very small, there was a lot of firefighting equipment and personal belongings on it. The conditions were changing rapidly and there was smoke logging. A deceased resident on or near the 9th floor was blocking the stairway. The LFB Op. Resp. shows that WM Delaney first entered the Tower at

⁶ LFB Statement (LFB 00024415).

03.01.23 (p256). Assuming these times are correct, his conversation with WM Harrison must have taken place after this.

(e) Chronology

Time	Event	Reference		
01:23:00	Harrison status 2 from Wembley on CU7	LFB Op.Resp		
	Transon status 2 from Wembley on Co7	("OR") Pg40		
01:30:48	CU8 arrives - Kentfield says he rigs in firegear and	OR Pg 63		
	goes looking for IC			
01:32:00	Turntable ladder A213 arrives at GT	OR Pg 65		
01:36:48	Kentfield enters GT	OR Pg 77		
	Harrison status 3 - he says he goes to CU8 and			
01:42:04	immediately told by Kentfield to accompany him to	OR Pg 92		
	tower. As he arrives he sees TL and tells them "just			
	fucking put it up"			
	Note: Time is taken from GPS on MDT and is not			
	confirmed			
01:42:39	Turntable ladder is pitched (CCTV)	OR Pg 93		
01:57:21	RW is status 3	OR Pg 117		
02:03:13	Radio Message (CU7) MP40			
02:03:44	Radio Message (CU7) GM Welch is now IC	OR Pg 130		
02:06:03	Radio Message (CU8) Declare MI	OR Pg 137		
02:06:45	Turntable ladder is now at ground level	OR Pg 137		
02:07:22	Kentfield enters GT	INQ00000357		
02:07:38	Kentfield removes aluminium plaque	INQ00000358		
02:07:43	Turntable ladder elevates back up after being	OR Pg 139		
02:07:43	repositioned			
02:10:38	Welch enters Grenfell Tower	INQ00000355		
02:13:07	Turntable ladder reverses away from falling debris	OR Pg 153		

- (f) The TL was up at 01:42:39 and was back down by 02:06:45. It was then moved and elevated up again at 02:07:43. If the MDT Sat Nav timings are right, then WM Harrison must be referring to the second elevation at 02:07. This would make sense because in his evidence he was asked (regarding his observations of the fire) did he pass his thoughts on to Kentfield and he said that he did not as Kentfield was not with him. It is known that Kentfield entered the Tower at 02.07.22.
- (g) Therefore, WM Harrison would have had to return from the Tower to CU8 to be involved in the alleged conversation with RW. By the time he got back there it is most likely RW was present as he entered the Tower at 02:10; see CCTV still; INQ00000354
- (h) In his evidence to the Inquiry on 18 September 2018, RW was asked about Mr Harrison's account. He said (Transcript pp97 98):

"I've got absolutely no recollection of that, and I think if I'd have heard that conversation, that is something I would have been able to recall."

- (i) This was powerful and cogent evidence. As can be seen from the chronology above, RW was on CU8 for a maximum of 13 minutes, less the time taken to rig into fire gear, get from his car to CU8 and subsequently to get from CU8 to the Tower.
- (j) In his witness statement (MET00007948), Matt Cook who was on CU8 at the same time as RW and GM makes no reference to any discussion concerning the stay put policy.
- (k) In his witness statement, (MET00007515), SM Egan records that he left the CU with WM Harrison having been directed by RW to undertake FSG duties on CU7. It is known that, from the time when he entered the Tower until after his finished his duties RW did not return to any CU that night.
- (l) While SM Egan does recall a conversation concerning changing stay put on CU7 after Goodall arrived, RW was no longer on any CU at this

time and therefore RW could not have heard this conversation. In his contemporaneous notes⁷ SM Egan stated this:

"These are a true record of my actions during the incident and have been written up at the earliest opportunity whilst fresh in my mind."

- (m) The notes are detailed. However, there is no reference in them to any discussion concerning stay put advice.
- (n) SM Mulholland was on CU8 when RW was present. In his witness statement (MET00007865), he makes no reference to discussions concerning stay put when on CU. In his oral evidence to the Inquiry (1 August 2018), he described a conversation with DAC O'Loughlin when on CU8; see Transcript pp40 and 47. There was no discussion then between them as to what to do about the stay put policy. He did subsequently learn from GM Cook that the stay put policy had been changed; See Transcript p75.
- (o) DAC O'Loughlin did not recall WM Harrison being on CU8 when RW and Dean Meyrick were present; Transcript 24 September 2018 p186.
- (p) Others who were likely present on CU8 at the same time as RW, were SM Loft (Witness Statement MET00007518 and Contemporaneous Notes; MET00005295), temporary GM West (Witness Statement MET00017073), SM Gareth Cook (oral evidence 24 July 2018 Transcript p171). None of these witnesses make reference to any conversation concerning stay put such as WM Harrison claims to have sought to initiate.
- (q) When he gave oral evidence to the Inquiry (26 July 2018) WM Peckham was specifically asked whether he recalled, when he was on CU8, any discussion concerning stay put such as WM Harrison claims. He

⁷ MET00005263

- specifically stated he did not recall WM Harrison saying he thought the stay put advice being given was wrong; Transcript for that day p142.
- (r) WM Dan Kipling was also asked about this subject when he gave oral evidence to the Inquiry; on 10 July 2018. He was asked about whether, when he was on CU8 with RW, he heard any discussion concerning the continued application of the stay put policy or the need for an evacuation, whether full or partial. He said he did not; Transcript for that day, p147.
- (s) WM Harrison claims that he communicated the need to change the stay put advice over the telephone to SM Wolfenden. However, in his Witness Statement, MET00017428, the only reference SM Wolfenden makes to a discussion of the change in stay put was when he and SM Egan discussed it after 03.10am at a point in time when the Bridgehead was on the ground floor.
- (t) In his very full witness statement concerning events on CU8 when RW was present, WM Kentfield (MET00023051 pp16-17) makes no reference to any change in stay put such as that which WM Harrison refers.

Conclusion on this issue

- (u) WM Harrison's evidence on this issue is not reliable. It is, we contend, inconceivable that if WM Harrison had informed persons present in an emphatic manner (as he claimed), that his view was that the stay put policy ought to be changed then, given the potential importance of the subject;
 - (i) all present on CU8 at that time would have heard and recalled it;

- (ii) it would most likely have prompted a response from one or more of those present, even if only to engage in a discussion with WM Harrison on the issue.
- (v) Insofar as the Chairman needs to make a finding of fact on this matter, it is not disputed that WM Harrison made a remark to WM Delaney concerning stay put. However, we respectfully submit that WM Harrison's recollection is incorrect and he did not voice his opinions on the need to change stay put advice when he was on CU8 in the presence of RW as he claimed.

RW as Fire Sector Commander

- 71. RW entered the Tower from the south side under a covered walkway at 02.10. He went there having taken between 60 -90 seconds to walk from CU8; Transcript p125 (22 24). He went to the Tower with SM Mulholland, GM Matthew Cook and SM Gareth Cook.
- 72. On his approach to the Tower (from the east or south-east), on this occasion he appreciated that it was the exterior of the Tower which was alight.
- 73. He appointed SM Walton as BA resources officer. He also gave an instruction to make space on the mezzanine level so that causalities could be brought down and out of the building quickly. On occasions, RW assisted in the process of evacuation.
- 74. RW arrived at the Bridgehead at about 02.16. It was on the second floor at the time RW spoke with WM Brian O'Keefe who was (along with WM Louisa De Silvo) coordinating search and rescue and firefighting. RW ascertained from him what his plans were. RW was satisfied that these plans were the correct strategy and appeared to be operating successfully. WM O'Keefe requested

- RW to obtain all available EDBA resources. This RW did by communicating via fire ground radio with CU8. See FRU's 10 02.09 in the Short Incident Log and Transcript, supra 136 (4 17).
- 75. RW recognised, rightly, that it would be necessary, if conditions permitted, to keep moving the Bridgehead higher up the Tower. This would shorten the distance crews could travel without the need to use BA.
- 76. While the Bridgehead was still on the second floor, and within 5 10 minutes of his arrival there, RW directed WM O'Keefe to stop using the Forward Information Board to record FSG's and to write those details on the wall.
- 77. RW was aware that a WM in the lobby on the ground floor was shouting flat and floor numbers (FSG information) to the WM on the balcony on the second floor. The WM on the ground floor was recording FSG information on the wall on the ground floor.
- 78. As the telemetry data shows, crews were being committed having been briefed before deployment and again on their return. The level of detail in those briefings/debriefings was sufficient in RW's opinion; see Transcript supra p146 (14 25).
- 79. Firefighters (some of whom were suffering the effects of metabolic heat stress) were reporting "horrendous conditions" up the Tower; see Transcript supra p148 (1-3).
- 80. When the Bridgehead moved to the third floor, (at about 02.20 and again when it was the ground floor), RW designated runners to take information dealing with operational matters out of the building to the IC. This included

information as to where crews were getting to in the building; see Transcript supra p151 (17 - 25).

- 81. RW ensured that when the Bridgehead moved to the third floor, FSG information which had been collated on the second floor/results of FSG calls were transferred to a wall on the third floor.
- 82. While the Bridgehead was on the third floor, RW briefed GM (now DAC) Patrick Goulbourne who acted as a Search Sector Commander. The briefing he gave was, according to GM Goulbourne "definitely clear"; see Transcript, 12 September 2018 pp132 133.
- 83. There was, according to GM Goulbourne a system in place to ensure BA crews could be committed. There was a pool of 20 SDBA wearers and 30 EDBA wearers waiting to be deployed at all times and he ensured that these numbers did not fall below those levels. Transcript 12 September 2018 pp146 147.
- 84. In GM Goulbourne's view, RW was doing "an amazing job... a real balancing act." Transcript 12 September 2018 p133.
- 85. RW satisfied himself that the flow of information re FSG calls was being processed properly and when sufficient information was to hand, prioritisation was given to the rescue of the young and the elderly; see Transcript pp155(25) 158 (11).
- 86. According to RW there was not a point when there were insufficient numbers of EDBA wearers to be deployed safely into the Tower; See Transcript; pp160(22) 161(7), 163(1) 164(6) and 167(18) 168(3).

- 87. From the point in time when RW was Fire Sector Commander there were frequent difficulties in firefighters being able to reach higher floors. It was this which caused RW to think that stay put should not be abandoned at those times. The conditions would have been "unsurvivable"; see Transcript pp169 (18) 170 (3). Further, conditions were getting "worse by the minute"; p171 (16-20).
- 88. When the Bridgehead was at the third floor, it became compromised by smoke and there were reports of a fire on the second floor/mezzanine level. In consequence, it had to be moved to the ground floor. In addition, the emergency button on the BA Control Board would not send a signal to the BA; see Transcript, pp177 (25) 178(17).
- 89. There were difficulties with communication and the repeater requested by RW did not assist; Transcript pp178(24) 179(18).
- 90. When the Bridgehead was on the ground floor, RW ensured that FSG calls were processed effectively by e.g SM Peter Wolfenden; see RW Transcript pp181(19) 186(25). Further, he ensured that GM Goulbourne briefed and debriefed crews sent to deal with FSG.
- 91. The decision to abandon stay put was communicated to RW by GM Cook at a point in time when the Bridgehead was on the ground floor; and so after 03.08am. It could have been dangerous to change that policy sooner for the reasons RW gave; Transcript pp213(22) 214(3).
- 92. When the Bridgehead was at the ground floor and at about 4.00am or thereabouts, RW and GM Goulbourne devised and implemented a plan for

systematic searching. This involved committing SDBA wearers for firefighting starting on the floor of the fire and then pushing EDBA wearers to get as high as they could in the building.

- 93. At about the same time, RW had asked SM Wolfenden for a list of FSG calls above the 11th or 15th floor. This he received, likely in the form of WM O'Keefe's slips of paper. See LFB 00001929 and RW Transcript, pp201(6) 202(17).
- 94. By about 04.45, crews were informing RW that they could not get past the 11th floor; Transcript p194 (6-11). Shortly, before that, at 04.25, so far RW was able to recall, BA crews were being committed as far as the 15th floor; see MET00015936 and RW Transcript pp194 (17) 196(9). This was because it was too aggressive to send firefighters into that "heat barrier"; see Transcript, pp197(12) 198(9).
- 95. This however did not mean that firefighters would not attempt to push beyond the 15^{th} floor; see Transcript, p197(2 20) and p206(18 23).
- 96. RW attempted the use of positive pressure ventilation, however this did not work; see Transcript RW pp215(15) 216(17).
- 97. The use of secondary BA sets was not a viable option to assist residents who needed rescuing and with assisting in evacuating from them the Tower. This is since;
 - (a) These were not designed for that purpose.
 - (b) They are for use in firefighters emergencies. Three were declared that night; see RW Transcript pp 218(23) 219(7).

(c) There was an insufficiency of secondary sets.

Viability of self-evacuation

- 98. FAO initially make this point. While Professor Purser has opined on the stair capacity at Grenfell Tower to accommodate the number of residents seeking to leave, and the rate at which they could leave, the following must be borne in mind concerning this evidence;
 - (a) he had at no time considered the firefighters evidence (either written or oral) dealing with conditions on the stairs (and in the lobbies). In particular, those areas being heavily smoked logged and equipment thereon, which compromised those conditions further;
 - (b) some of the residents in Grenfell Tower were simply not able to selfevacuate by using the stairs, by reason of their disability;
 - (c) those residents who might otherwise have been physically able to use the stair would be terrified about the conditions they faced in the lobby and on the stairs in deciding whether to use the stairs as an escape route (eg because of smoke logging with consequent lack of visibility, the effect on the ability to breathe and extreme heat);
 - (d) therefore, there would not, as Professor Purser seems to contemplate have been an orderly movement of residents willing and able to use the stairs in a routine, progressive manner.
 - (e) As was put by Professor Terrero in his oral evidence, there is no time limit to the time stairwells needed to be safe for; Transcript 20 November 2018 pp10(2) – 11(13);
 - (f) Dr Lane was right, the stair capacity was a very simple capacity check to show the capacity of the staircase area; Transcript 22 November 2018 pp 181(2) 182(3);

- (g) further, "so I don't think, based on the stair width, it was primary problem okay? What was happening on the staircase in terms of smoke and heat and other things is the dominant parameter"; Transcript supra p182(16 19)
- (h) this single capacity check, if viewed in isolation, would ignore "all the realities of evacuation"; Dr Lane, Transcript, supra p181 (4 9)
- respectfully, those matters set out by Dr Lane in section 19 of her Supplemental Report (BLAS 000000 19 _0014 _0015, paragraphs 19.3.38 19.3.46) are important when considering the ability of residents to self-evacuate:
 - (i) poor visibility in the lobbies and stairs reducing the speed at which people could travel and increasing the time needed to escape. This would increase the duration of exposure to harmful fire products. This is in addition to the difficulties in finding the escape and in search and rescue presented by reductions in visibility;
 - (ii) the effect of temperatures in excess of 150°C within all lobbies on Level 5 and Levels 7 23; see BLAS, 19.3.41 (_0014).
 - (iii) the effect of toxic fumes and gases and sensory irritants in the smoke filled lobbies and stairs.
- (j) all of these factors might act as a disincentive to residents seeking to leave their flats and ascend into such conditions in the lobby and stairwell.
- (k) there were no viable means of communicating a need to self-evacuate with residents. Dr Lane was of the opinion that the intercom/use of loud hailers was not viable;

Was it practically possible for firefighters to have searched for and rescued all residents in Grenfell Tower within the window of opportunity for so doing ie 00:58-01:40° or even up to 02.00

- 99. It must at once be noted that the following was required in the stair and lobbies for firefighting operations at Grenfell Tower:
 - (a) the firefighting stair and lifts were required to provide a safe air environment to reach the Bridgehead located two floors below the fire floor.
 - (b) The lobbies below the fire floor were required to provide a safe air environment to act as the Bridgehead.
 - (c) The stairs above the Bridgehead, accessed by crew in BA, is required to provide tenability for crews to work including finding and connecting hoses to fire mains⁹ and the carry down of any residents rescued.

Those failures of active and passive fire protection measures identified by Dr Lane are of real importance here also; see paragraphs 8 – 14 herein.

100. In order to be viable and given the short window of opportunity (aforesaid), an adequate number of firefighters would have to be sent to each floor to alert residents to the fire, to assist them through the lobby into the stair on their floors. Firefighters would then need to assist in evacuating them/others who needed assistance down the stairs into safety.

⁸ Per Dr Lane, Transcript 22 November 2018, 177(12) – 178(20).

⁹ Complicated at Grenfell Tower by the presence of dry rising mains in the lobbies on each floor and not in the stairwells.

- 101. 20 floors would need evacuating ($4^{th} 23^{rd}$). A conservative assumption is that a minimum of 1 BA crews (comprising of 4 firefighters) per floor would be required. Therefore, 20 floors = 80 BA wearers.
- 102. Assume an average of $4 \times BA$ wearers per appliance = 20 pumps (some pumps carry 4, some carry 5 (see 103(a) below) It is clear from the table below which shows the arrival of appliances that at the time RW was at CU8 and declared a Major Incident¹⁰ that he had at least 20 appliances at the scene.
- 103. However, it does not take into account the following:
 - (a) Some pumps only carry 4 x firefighters one of those (either CM or WM) would have to be involved in a supervisory role. For example Policy 466 Respiratory protective equipment breathing apparatus operational procedures (LFB00000173) indicates:
 - i. BA emergency teams must be led by a minimum of Crew Manager (Para 29.37)
 - ii. At stage II BA deployment- the ECO must be a minimum of a Crew Manager (Para 30). State II comes into effect when various situations arise including:
 - The incident is likely to be protracted; (Para 30.1 (b))
 - More than one ECB required (more than 10 BA wearers committed Para 30.1 (h))

 $^{^{10}}$ However, this was recorded at 02.06.38, see paragraph 58 above, and so already outside the 'window of opportunity'.

- (b) 80 firefighters would therefore require 9 ECB's and a number of supervisory staff.
- (c) By the time of arrival of RW many of the crews had already been committed into the building to deal with firefighting or FSG. According to telemetry data, by 01:57:28, 14 x BA crews had been committed (34 x firefighters).
- (d) Many of the firefighters going up the tower early on had to assist residents coming out.
- (e) Many firefighters were outside the building dealing with other matters;
 - Hose management
 - Escaping residents
 - Aerial platforms
 - Ground monitors
 - Extinguishing of fires caused by falling debris
 - Lookouts for crews entering and exiting the building
- (f) Given the communication difficulties in the Tower, how could crews communicate that more BA were required for a particular floor, where for example there are;
 - Residents with mobility issues
 - Higher numbers of residents and 4 firefighters is not sufficient
 - Poor conditions i.e. smoke and heat dictate that more firefighters are required.
 - That firefighting is required for evacuation / rescue.
- (g) How long would it take to commit 20 x crews of 80 x BA wearers in terms of:
 - Getting into the building with falling debris.
 - Briefing each crew.
 - Logging onto ECB's
 - Communications checks

- (h) Where would the bridgehead be located?
 - It could not be on the 2nd or 3rd floor due to a lack of space for 9 ECB's and supervisory officers, so there would be some delay whilst it was moved to the ground floor.
 - Is the ground floor large enough to accommodate 80 BA Crews, plus Supervisory staff? Even if it was, there wouldn't be sufficient space for a staging area
- (i) Most firefighters have described poor communications either due to lack of signal or increased radio traffic. Bearing in mind we now know from Dr Lane that there were a maximum of 28 BA wearers committed in the building at any one time, what would the situation have been in this regard had there been 80 wearers committed?

Green - Make Up

Red - Appliance arrival

Blue - RW's arrival

				OP
	Time arrival /		Appliance	Response
Call Sign	Status 3	Make up	Туре	Page No.
	00:54:29	MP4	1st Call Kabede	7
G271	00:58:44	MP4	PL	9
G272	00:59:24	MP4	P	10
G331	01:02:43	MP4	PL	14
G362	01:02:43	MP4	P	14
	01:13:29	MP6		23
	01:20:57	MP8		35

	01:24:09	MP10		41
G361	01:25:06	MP6	PL	43
A212	01:26:56	MP6	P	48
	01:27:26	MP15		49
	01:29:11	MP20		55
CU8	01:30:48	MP6	CU	63
A211	01:31:29	MP8	PL	64
	01:31:30	MP25		64
A216	01:35:18	MP10	FRU	72
G261	01:35:31	MP8	PL	73
G341	01:39:13	MP15	PL	87
G371	01:39:21	MP10	PL	88
G281	01:40:01	MP10	PL	88
CU7	01:42:04	MP6	CU	92
H331	01:42:38	MP20	PL	93
H271	01:44:34	MP20	PL	98
A411	01:45:02	MP15	PL	99
A231	01:45:04	MP15	PL	99
G351	01:45:27	MP15	PL	99
A241	01:46:23	MP20	PL	102
A242	01:47:05	MP20	P	103
G291	01:49:44	MP15	PL	107
E109	01:57:21		RW - Status 3	117
G251	01:57:33	MP20	PL	118

104. Firefighters on higher floors would likely need a constant supply of additional BA crews to replace those committed due to the amount of air used

in ascending and descending the stairs. This would severely limit any time on their designated floor.

- 105. Further, what has not been factored in here is that, on Dr Lane's own account, at 01.26 the flame front was unstoppable (Transcript 22 November 2018 p168 (9-15). This would give only a further 14 minutes (to 01.40) to secure the requisite number of appliances firefighters/equipment and deploy them into the Tower with all that entailed to search and rescue on designated floors.
- 106. Clearly this could not be achieved. To suggest that, at some point before that, the LFB ought to have appreciated the need to fully evacuate the Tower, resource and achieve that, is with respect, an assessment with the wisdom of hindsight and is not at all realistic.
- 107. Dr Lane herself recognised in oral evidence that a total evacuation would require firefighters to have knocked on all doors. This itself would have required significant resources/numbers of firefighters deployed to all floors; Transcript, 26 November 2018, p84(14 19). Additionally, this method supposes that:
 - Flats and lobbies are not compromised by fire or smoke
 - Residents are awoken by those knocks (if asleep) and open their front doors.
 - Residents do not have mobility issues and are physically able to exit the building via the staircase.

If this was not the case then clearly additional firefighters would be required for firefighting, assisting in rescues, forcing entry to flats and searching.

108. After 01.30 when the conditions in the Tower deteriorated, given the resources required at each floor/the very poor conditions on those floors (see Dr Lane's summary BLAS 0000002 _0029 _0031 paragraphs 2.14.27 – 2.14.53) tragically, it was simply never practicable to have been able to achieve a full

evacuation of all residents from the Tower.

109. That some residents were able to self-evacuate later in the night can be

attributed to the rapidly changing conditions in the Tower over time

affording certain residents on certain floors a better opportunity to escape.

See also RW Transcript pp 217(2) - 218(1).

Conclusion

110. RW was correct when, at the conclusion of his evidence to the Inquiry, he said

this:

"I would just like to say to the families that we're very sorry for the amount of

people we lost that night. We couldn't have done any more. We did

everything we could, and every one of us that went into that building were

willing to lose our own lives to save your loved ones. We didn't let you down,

the building let us all down, and I'm sorry for your loss."

LOUIS BROWNE QC

(Exchange Chambers)

JONATHAN WALL

(Burton Copeland)

6 December 2018