

FINDINGS OF THE INQUIRY

GENERAL OUTLINE

TOR 6.a

1. On Operation TELIC 1, during the night of 23-24 March 2003, 8 Troop, CYCLOPS (Squadron) of 2 RTR, a troop consisting of 3 CHALLENGER 2 (CR2) tanks and 12 crew members, was tasked with establishing a Vehicle Check Point (VCP – area Grid QU 567652 (Map Sheet AZ ZUBAYR, Edition 1-DMA, Series K941)) on a major road leading into the southern Iraqi town of Az Zubayr. The purpose of this VCP was to prevent the egress from Az Zubayr of armed civilians and Sadaam Fedayeen (militiamen), who might interdict the Coalition Forces' Main Supply Route (MSR) TAMPA, which ran close to the city, and hence hamper Coalition progress in the liberation of Iraq.

PDPH/BOI AMB/1 AMB/BOI JRK/1 D571

2. At the Troop VCP, Sergeant Roberts (the Troop Sergeant) was dismounted from his tank and deployed on the main road to stop and search traffic for militiamen and weapons. During this task, Sergeant Roberts was equipped with service helmet, Combat Body Armour (CBA, as opposed to Enhanced CBA (ECBA), which would have included High Velocity (HV) ballistic plates), Personal Role Radio (PRR; short-range tactical radio similar to a walkie-talkie) and was wearing his service 9mm Browning pistol.

MTF/2 MTF/BOI JGE/1

3. Whilst deployed on this task, Sergeant Roberts was attacked by a local Iraqi man, apparently a Mr Zaher Sabti Zaher, throwing rocks at him. In self-defence, Sergeant Roberts drew his pistol and shot at Mr Zaher before experiencing an apparent weapon stoppage. In support of Sergeant Roberts, members of 8 Troop engaged Mr Zaher with various weapon systems; Sergeant Roberts and Mr Zaher were both killed.

MTF/2 SM/2 JGE/BOI

BACKGROUND

TOR 6.a

4. 8 Troop, CYCLOPS consisted of the Troop Leader's tank and crew		
(callsign (c/s) 40 -	(commander),	
	(gunner) and (driver));	
the Troop Sergeant's crew (c/s 41 - Sergeant Roberts (commander),		
(loader/ope	erator), (gunner) and	
(driver); and the Troop Corporal's crew (c/s 42 -		
(commander),	(loader/operator),	
(gunner) and	(driver). The Troop	
(with the exception of	and had	
been together for at least 8 months, including a full training rotation at		

MTF/2 MTF/BOI GT/BOI SM/BOI



the British Army Training Unit, Suffield (BATUS) in Canada.

5. 8 Troop, CYCLOPS had deployed to Kuwait on Operation TELIC 1 in early March 2003 as part of 2nd Royal Tank Regiment (2 RTR) Battlegroup (BG), itself part of 7th Armoured Brigade; this Battlegroup included 2 squadrons of CR2 tanks and 2 companies of armoured infantry from 1st Battalion The Light Infantry (1 LI), mounted in Warrior infantry fighting vehicles.

PDPH/BOI

6. On the evening of 23 March 2003, 2 RTR BG was tasked with replacing 1st Battalion The Black Watch (1BW) BG in the task of surrounding and isolating the town of Az Zubayr. At the time of Sergeant Roberts' death, 2 RTR BG was still attempting to isolate Az Zubayr and hence (Commanding Officer 2 RTR and the Battlegroup Commander) had ordered CYCLOPS to conduct a "relief in place with A Squadron Black Watch [Battlegroup] to deny egress from Az Zubayr in order to guard the route to TAMPA, and TAMPA is the main MSR (Main Supply Route) for the Americans".

PDPH/BOI ATC/1

7. At the time of the incident, HQ 7th Armoured Brigade was formally establishing a network of VCPs around Az Zubayr, at least in part to mitigate the chances of coalition forces straying into areas which had not yet been secured (as had happened on 23 March 2003 to 2 teams of Explosive Ordnance Disposal (EOD) experts in Az Zubayr). This formal VCP network was in the process of being set up across the Brigade area during 23-24 March 2003 and 8 Troop's approximate VCP location would ultimately form part of it.

ATC/1 AMB/BOI PDPH/BOI

8. 8 Troop deployed to its VCP position to the north-west of the town at about 2330 hours (Zulu) on 23 March 2003, taking over this responsibility from elements of HQ Troop of CYCLOPS. The Troop established the VCP with the Troop Leader's tank (and crew) to the south side of the main road leading east into Az Zubayr and the Troop Corporal's tank (and crew) to the north-east of the VCP; each of these 2 crews was to provide security to the Troop Sergeant's tank (and crew), which manoeuvred as required north-south across the northern, west-bound highway to block the traffic lane and then conduct dismounted security checks on passing vehicles. From the point of establishing the VCP until the point of Sergeant Roberts' death, the Troop only stopped 2 vehicles.

MTF/BOI MTF/2 SM/2 KPS/2 JRK/1

EVENTS LEADING UP TO THE INCIDENT

TOR 6.a

9. Between 0230-0300 hours (Zulu), whilst Sergeant Roberts was investigating a white pick-up truck a local man, Mr Zaher, probably in

MTF/BOI MTF/2



dark robes and with a 'white-painted' face, approached 8 Troop at its SM/2 VCP. At some stage, (the driver of c/s 41), who had LAB/BOI been armed with his SA80 A2 and providing dismounted close GT/BOI protection to Sergeant Roberts, withdrew to his tank pursuant to the GT/2 instructions from Sergeant Roberts to mount up in order to reverse the KPS/BOI vehicle back to the central reservation. At about the time that KPS/2 had resumed his driver's position, Mr Zaher approached the VCP and commenced throwing stones, initially at the crew of the Troop Leader's tank (c/s 40). Once the Troop Leader had ordered his crew to get fully inside the vehicle and close down the hatches, the local man switched his attention to the dismounted element of the VCP, by this stage just Sergeant Roberts. Mr Zaher advanced on Sergeant Roberts and started throwing rocks at him, some of which connected with his chest, stomach and head; some crew members initially believed that the object in Mr Zaher's hand might have been a hand-grenade. recalled seeing Sergeant Roberts' helmet dislodged during the incident. THE INCIDENT TOR 6.a 10. As a result of this attack, Sergeant Roberts initially raised his hand. GT/2 gesturing to Mr Zaher to stop, and drew his pistol. Mr Zaher persisted CR/2 in throwing rocks. At this point, the confrontation escalated - the Board believes the sequence of events to be as follows: a. It appears that Sergeant Roberts fired at least 1 round from his GT/2 service pistol at Mr Zaher; then, on experiencing a stoppage, he CR/2 backed away and conducted the 'immediate action' drill of dropping to one knee and attempting to clear the stoppage. Mr Zaher continued to throw rocks. (Sergeant Roberts' loader/operator). KPS/2 watching events unfold, then fired a short burst from his cupola-KPS/BOI mounted L7 loader's General Purpose Machine-Gun (GMPG -7.62mm) into the air as 'warning shots'. , the gunner of c/s 41, then KPS/2 burst with another from his L94 (7.62mm) coaxially-KPS/BOI mounted machine gun. As the senior crew member on board, immediately ordered to cease fire because he knew that had not been given any authority to engage by Sergeant Roberts and he was not clear what was firing at. It appears that neither engagement had any effect on Mr Zaher. d. then took aim and fired a short burst at KPS/2



Mr Zaher, possibly hitting him in the arm and forcing him to drop the KPS/BOI rock he was holding. e. By this time. had ordered his driver to reverse SM/2 c/s 42 closer to the VCP and into a position to support Sergeant SM/BOI Roberts; he then ordered GT/2 loader/operator, to fire his L7 GMPG at Mr Zaher. After 1 round, the CR/2 GPMG suffered a stoppage: then ordered , the gunner, to engage Mr Zaher with the L94 coaxial machine gun. lased Mr Zaher (in order to input a lased range (between the weapon and the intended target) into the fire control computer) and then fired a burst of approximately 5-6 rounds of 7.62mm at his centre of mass. Subsequently, fired 2 rounds at Mr Zaher with his 9mm pistol. SM/2 f. After had fired the machine gun, it was observed that both Sergeant Roberts and Mr Zaher had fallen to the ground. stated that Sergeant Roberts was "off to our right, certainly not in the line of fire". Based on failures in recollection, the Board is not able precisely to resolve the issue of how Sergeant Roberts came to be in the line of fire. g. Having both then fallen to the ground, Sergeant Roberts made CR/2 no further movement, though he occasionally regained KPS/2 consciousness. However, Mr Zaher continued to try to press his attack, although clearly badly wounded. h. By this point, had dismounted to CR/2 administer first aid to Sergeant Roberts, followed by SM/2 . Whilst giving first aid (supported by GT/2 saw Mr Zaher getting to his knees, possibly with something in his hands and, believing Mr Zaher still posed a threat, shot him with his 9mm pistol 5 or 6 times. , providing local security on the ground. fired one final round (5.56mm from his SA80 A2) at Mr Zaher, after which Mr Zaher succumbed. 11. Reconciliation of Evidence. During his statement to the Board of KPS/BOI Inquiry. suggested that it may have been he who fired the very first shots in this incident; is the only member of 8 Troop to suggest this (and then only 3 years after the event) and, based on the balance of probability, the Board discards this suggestion.



TREATMENT OF THE CASUALTY TOR 6.a 12. was the first person to reach Sergeant CR/2 Roberts and administer first aid; on opening Sergeant Roberts' CBA KPS/2 and flame-retardant tank coveralls, immediately noticed 2 bullet holes, 1 to the lower left abdomen and the other to his chest. He applied his field dressing to Sergeant Roberts' abdominal injury, at which point arrived in support. 13. As this incident unfolded, a US Marine Corps (USMC) 'firepower MM/1 patrol team' which had been assigned to support 1BW BG, came across 8 Troop at its VCP. On the patrol's approach to the VCP the patrol team officer. . observed that Mr Zaher's actions were 'not submissive' before he was shot. then dismounted and supported and in attempting to resuscitate Sergeant Roberts: administered Cardio-Pulmonary Resuscitation (CPR) for approximately 3 minutes, at which point he realised that Sergeant Roberts was dead and reported this to 8 Troop Leader. 14. The Regimental Medical Officer (RMO), MD/2 arrived at the scene at approximately 0350 hours (Zulu). pronounced Sergeant Roberts dead at 0402 hours (Zulu). MR ZAHER SABTI ZAHER 15. Although there is no absolute corroborating evidence, it is accepted JGE/1 by the Board that the local man killed at the VCP was very probably Mr JGE/BOI Zaher Sabti Zaher. recovered an identity (ID) card MD/3 belonging to Mr Zaher from his body at the scene of the incident; NST/1 - 2 (the RMO) subsequently stated that a passport LJH/1 photograph of Mr Zaher (as opposed to the ID card photograph) was TMC/1 "similar in all respects to the Iraqi male I certified dead on Monday 24th PV/1 - 2 March 03 at Az Zubayr". Mr Zaher's family claimed that his death had occurred during this incident and, as a result, the body was exhumed in November 2005 (some 30 months later). Whilst essentially only skeleton and clothes remained, the forensic evidence established that the DNA profile obtained from the exhumed body was approximately 126 million times more likely to have been from a biological son of and (Mr Zaher's parents) rather than from an unrelated Arabic individual. Forensic examination of the clothes revealed extensive gunshot damage. Although the Board is satisfied of the link between the skeleton and the Zaher parents, there is no irrefutable connection between the Iraqi killed during the VCP incident of 24 March 2003 and Mr Zaher Sabti Zaher.



THE DETAILS RELATING TO THE INCIDENT

TOR 6.a

<u>DETAILS OF THE ORDERS FOR THE TANK VCP AND WHETHER</u> THEY WERE IN ACCORDANCE WITH SOPs

TOR 6.c.(3)

16. Although some members of the Troop (principally the commanders) had experience of conducting VCPs in a peace-keeping environment such as the Balkans or Northern Ireland, the concept of using CR2 to establish a VCP during warfighting operations was novel. Troop Leader's Orders for the VCP were given to the commanders before they deployed, and confirmed on arrival in the area where they had been ordered to set up.

SM/BOI MTF/BOI PDPH/BOI

17. Although there were no SOPs to refer to, his Troop on:

briefed AMB/BOI MTF/BOI SM/BOI

a. The general threat that they faced, although this was 'still quite vague'.

MTF/BOI

b. The laydown and responsibilities of the vehicles and crews at the VCP.

MTF/BOI

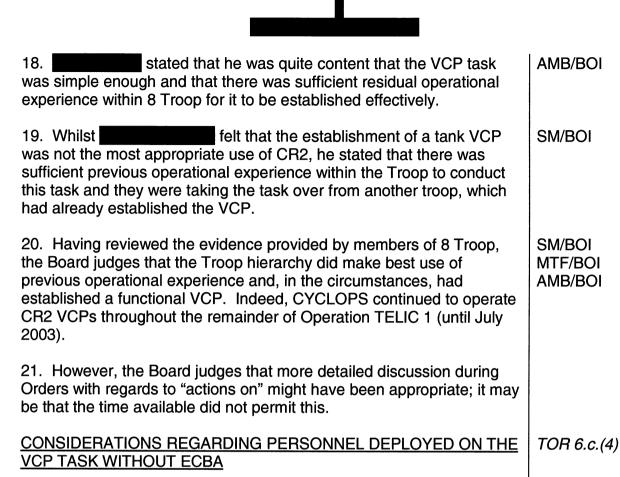
c. The conduct of the VCP, insofar as Sergeant Roberts (as the commander of c/s 41) was to run the dismounted check-point and to be supported by his driver (); this was both because was armed with an SA80 A2 (long-barrelled weapon) and because, as the driver, he played no part in the crewing of the various vehicle weapon systems. Thus the vehicle could continue to function to a degree against a range of threats.

MTF/BOI

d. The communications plan, insofar as he and Sergeant Roberts were both equipped with Personal Role Radio (PRR), in order that they could communicate with one another when Sergeant Roberts was dismounted at the VCP. Although unavoidable, due to the PRR and the vehicle communications system (VRC 353) being incompatible, this required to monitor 2 frequencies (Squadron and Battlegroup) on the VRC 353 and, when Sergeant Roberts was dismounted, to communicate with Sergeant Roberts on the PRR also.

MTF/BOI

e. No member of 8 Troop recalls any detail with regards to actions to be taken in the event of a hostile act against the VCP ("actions on"), nor do they recall conducting any rehearsals.



22. At the Battlegroup level, identified with his staff that the Battlegroup was 30% short of complete ECBA sets for his 1000 troops before they entered Iraq (HQ LAND ECBA Report states that 2 RTR BG was 40% short of ECBA for 1015 troops). The Board is satisfied that there was a significant shortfall in ECBA in theatre at the time and that this shortfall resulted in Sergeant Roberts not being appropriately equipped with ECBA at the time of his death. The Board does not consider it necessary to pursue this discrepancy further.

PDPH/BOI NAA/BOI JGE/BOI NCS/BOI

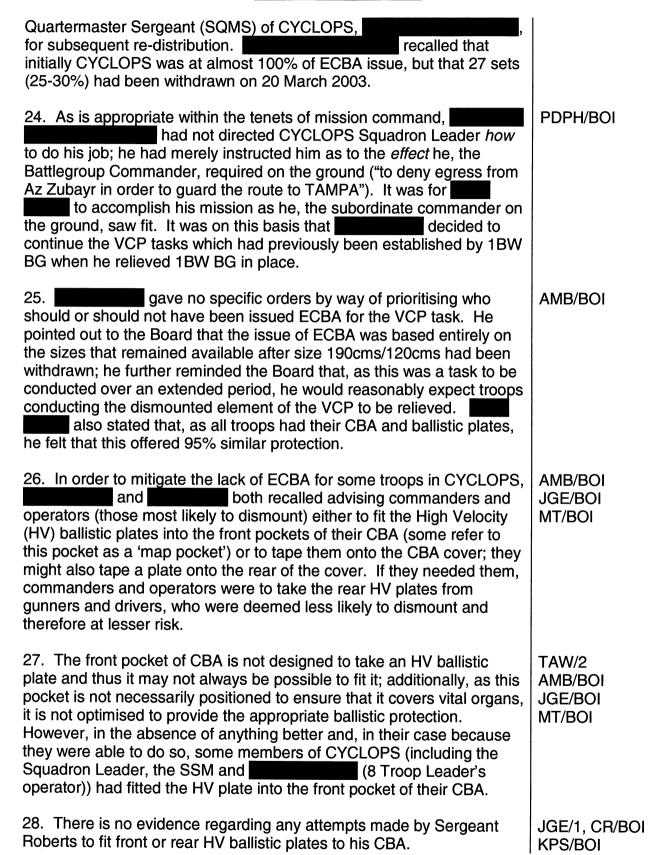
PDPH/BOI

NAA/BOI

RFAC/2

had therefore prioritised which troops should be issued ECBA and which would have to accept the risk of only wearing CBA. His priorities were firstly for dismounted close combat soldiers to receive ECBA (infantry primarily), and secondly soldiers mounted in 'soft-skin' unarmoured vehicles (for example quartermaster and supply echelon staff). Thus, mounted armoured soldiers who, at the time of the decision were not expected to dismount and conduct VCPs, were considered at the lowest risk and hence were only permitted to retain their issued ECBA as the lowest priority. Thus, some soldiers who were of above average size, including Sergeant Roberts, had their ECBA (size 190cm/120cm) withdrawn on 20 March 2003 (whilst 2 RTR BG was still in Kuwait) by the Squadron







29. There is no suggestion from any members of 8 Troop that the presence/absence of ECBA was a factor in any considerations regarding who should deploy onto the dismounted VCP task. Some members of the Troop had difficulties recalling whether they had even retained their ECBA after the initial recall of the specific size, but some stated that the issue and withdrawal of ECBA had drawn adverse comment from them at the time.

MTF/BOI SM/BOI GT/BOI CR/BOI MT/BOI KPS/BOI

THE SITUATION, THREAT, TASK AND TROOPS AVAILABLE THAT LED TO 8 TROOP BEING DEPLOYED TO A VCP

TOR 6.c.(1)

30. As they advanced north towards Baghdad, US forces' east flank was under potential threat from regime loyalists. Interdiction of the Main Supply Route (MSR TAMPA – running to the west of Az Zubayr) was to be prevented by the establishment of 7th Armoured Brigade's VCPs. Whether the BG Commander specifically ordered VCPs to be established (as suggested), or whether this was both implied by the BG Commander's orders and reinforced by virtue of the fact that the previous troops in place (A Squadron SCOTS DG; 1 BW BG) had established VCPs and CYCLOPS had merely relieved them in place, seems immaterial. The establishment of VCPs to achieve the BG Commander's intent was a logical solution and 7th Armoured Brigade intended the establishment of a matrix of VCPs across the Brigade area in the immediate future (7th Armoured Brigade's Operational Overlay dated 23 March 2003 specifies serial numbers and locations for a number of VCPs that were to be established).

PDPH/BOI AMB/BOI ATC/1 RSS/2

THE DECISIONS TAKEN, AND BY WHOM, THAT LED TO 8 TROOP BEING TASKED TO CONDUCT A VCP WITH CR2

TOR 6.d.(4), 6.d.(5)

and recalled having infantry troops from the Light Infantry companies (who were part of the 2 RTR BG) operating nearby; they further recalled that they were sniper teams and therefore had specific tasks of their own to fulfil. was not in a position to task them to support his VCP operations but, as the Board has heard from him already, he had no specific concerns about the effective running of the VCP anyway and thus had no reason to call for support from infantry troops.

AMB/BOI JGE/BOI

32. reminded the Board as to the circumstances at this early stage of TELIC 1:

PDPH/BOI

a. His Battlegroup, with one fewer sub-unit than 1 BW BG (an infantry BG having a Support Company with reconnaissance, antitank and other assets), had relieved the 1 BW BG in place; thus 2



RTR BG was somewhat stretching itself.

- b. As the BG Commander, he had been given 2 priorities; the first of these was deemed a Corps objective (the "Crown Jewels") and was an oil and gas terminal near Az Zubayr; therefore, the BG Commander was clear as to its priority. He allocated one of his 2 infantry companies to secure this significant asset.
- c. The second priority task was the security of one of the 5 significant bridges across the Shatt-Al-Basra waterway into Basra City; this was allocated to the second of the 2 infantry companies.
- d. The BG's remaining significant task of securing routes into and out of Az Zubayr was therefore allocated to one of the CR2 armoured squadrons.
- e. It is the judgment of the Board that, whilst the infantry companies would have been more suitably employed conducting dismounted VCPs than CR2-mounted tank soldiers, they were also significantly more appropriate for the task of guarding the "Crown Jewels" and this was a much higher priority.
- f. The Board judges that the BG Commander's prioritisation and allocation of available troops to required tasks was entirely appropriate.

8 TROOP LEADER'S RESPONSIBILITIES

TOR 6.c.(6)

MTF/BOI

commissioned in December 2000, served briefly in the Balkans in a headquarters function before attending his Young Officers' Course in 2001 and was 8 Troop Leader during 2 RTR's training year (including live-fire training at the British Army Training Unit, Suffield (BATUS) in Canada) in 2002. Based on lack of anv operational experience in command and the relative inexperience of his Troop Corporal (had qualified as a CR2 commander in 2002 and hence this was his first operational experience as a tank commander). ultimately selected his most experienced commander, Sergeant Roberts, to run the dismounted VCP and specified that he should be supported by the driver; this would ensure that dismounted security could be provided by a soldier armed with an SA80 A2 and also ensured that the turret weapons could still be operated. This left , the troop leader, to direct the overall execution of the Troop's activities, including the security of the general area of the VCP, to maintain communications with the dismounted VCP (he and Sergeant Roberts each had Personal Role Radio (PRR) and were in contact by this means whenever Sergeant



Roberts was dismounted) and between his troop vehicles and his superior (Squadron) headquarters.

8 TROOP'S ACTIONS ON BEING APPROACHED BY IRAQI LOCALS TOR 6.c.(8) 34. From the members of 8 Troop, there is little coherent recollection of what were the actions (actual or ordered) on being approached by MT/BOI locals from Az Zubayr. The Troop had experienced a very quiet night. MTF/BOI only checking 2 civilian cars and, at the time that Mr Zaher approached the VCP shortly after first light, there had been no contact with the local operator) recalled that he had seen a few locals starting to go about their daily business, but none had left the area of their houses to the south of the VCP. recalled wanting Sergeant Roberts to return to the safety of his vehicle when Mr Zaher attacked; he can not recall if he actually gave an order for Sergeant Roberts to do so. DEPLOYMENT OF SERGEANT ROBERTS ALONE OUTSIDE HIS TOR 6.c.(2) **TANK** 35. Although there was limited traffic during the night of 23-24 March 2003, the procedure that 8 Troop had adopted during the night was as follows: a. Once one of the observing tanks (c/s 40 or c/s 42) identified a civilian vehicle travelling on the main road. Sergeant Roberts' crew MTF/BOI would be alerted and would pull c/s 41 forward from the central reservation onto the northern (westbound out of Az Zubayr) carriageway to stop the vehicle. b. Once the vehicle had been stopped, Sergeant Roberts and his MTF/BOI , would dismount from their tank; Sergeant LAB/BOI Roberts would approach the vehicle and conduct any necessary AMB/BOI search, while (armed with his SA80 A2) would provide protection. Both and made it clear to the Board that this task was always to be conducted with at least 2 soldiers dismounted. c. Once the vehicle had been checked, the process would be MTF/BOI reversed, with c/s 41 returning to the central reservation and thus allowing the civilian vehicle to continue on its way. 36. However, as the incident with Mr Zaher was about to unfold. LAB/BOI

Sergeant Roberts and

check. Sergeant Roberts then instructed

order to reverse the tank back to the central reservation.

had just completed a vehicle

to mount up in

MTF/BOI



stated that it took longer to stow all of his equipment in his driver's compartment, and to get ready to reverse his vehicle, which explained why Sergeant Roberts had sent him ahead. was not aware of this decision at the time. 37. Having remounted his vehicle, stowed his equipment and closed LAB/BOI his hatch in preparation for moving, was aware of Mr Zaher approaching the front of his tank from the west. However, as he was closed down by this stage, Mr Zaher and Sergeant Roberts soon moved out of his field of view. Thus was unaware of the unfolding incident and saw no reason to dismount again. ORDERS GIVEN, AND BY WHOM, ONCE MR ZAHER APPROACHED TOR 6.c.(7) THE VCP 38. Although members of 8 Troop shouted warnings to Sergeant MTF/BOI Roberts, the incident happened over a very short period (between '10 SM/BOI seconds' (), 'a couple of minutes' () to '4-5 minutes' ()) and CR/BOI few orders were given. In summary, the Board concludes that the SM/BOI following orders were given: a. ordered his crew to close their hatches once MTF/2 Mr Zaher started throwing rocks at them. MTF/BOI GT/2 ordered his driver (b.) to reverse CR/2 away from Mr Zaher "just to give them a bit of space". The Board LAB/2 recognises from this action that intended to be KPS/2 non-confrontational. SM/2 RHT/BOI c. Sergeant Roberts gestured to Mr Zaher to stop his advance and may have verbally instructed him to do so. d. (loader of c/s 41) ordered to cease firing his machine gun. ordered to open fire on Mr Zaher with his loader's L7 GPMG. f. Once this action had failed to stop Mr Zaher, ordered to fire on Mr Zaher with the L94 machine gun. g. When Sergeant Roberts was hit, ordered to cease firing and ordered

to go to Sergeant Roberts' aid.



h. Having been injured previously, Mr Zaher attempted to get to his feet again: then ordered to shoot Mr Zaher.

DISTANCE OF SERGEANT ROBERTS FROM THE NEAREST CR2 WHEN ATTACKED BY MR ZAHER

TOR 6.c.(5)

39. Sergeant Roberts was returning to his vehicle when attacked by Mr Zaher; initially, he was approximately 4-5 metres from c/s 41, but as Mr Zaher pressed his attack, Sergeant Roberts backed off to the east into an area covered by the fire of all 3 tanks; throughout the whole incident, Sergeant Roberts remained within the security ring provided by the 3 tanks. Based on width of road measurements taken by the Royal Military Police (RMP) Special Investigations Branch (SIB) and Scenes of Crime Officer (SOCO) who visited the VCP site on 29 March 2003, the Board is satisfied that Sergeant Roberts was never more than 20 metres from the nearest CR2 throughout the incident.

LAB/BOI MTF/BOI SM/BOI GT/BOI CR/BOL LAB/BOI RHT/BOI MT/BOI JRK/1

THE APPROPRIATENESS OF THE L94 COAXIAL MACHINE GUN AS A WEAPON SYSTEM USED IN THIS VCP

TOR 6.c.(9)

40. The situation around Az Zubayr on the night of 23-24 March 2003 was far from benign. 2 EOD specialists were missing (subsequently confirmed killed) and a soldier from 1BW BG had been killed in an ambush in the city; it remained unclear to 8 Troop what form the most likely threat would take, though they were to be prepared for anything from attacks from regular forces supported by armoured vehicles, through to small groups of militiamen with Rocket-Propelled Grenades (RPG), or suicide bombers. The Board therefore judges it entirely appropriate that all crew-served weapons were at a state of readiness at the time of Sergeant Roberts' death.

ATC/1 PDPH/BOI AMB/BOI MTF/BOI

41. Coincidence – L94 Coaxial Machine Gun. Accurate use of the L94 coaxial machine gun at very close range is problematical. Due to the lateral and vertical offsets between the gunner's sight (what he looks through in order to point the L94 onto the intended target) and the L94 machine gun itself (which is seated approximately one metre to the left and 41 cms lower than the sight), an optical correction of 2.5 mils is introduced into the fire control computer and ensures coincidence between sight and weapon: This then means that the rounds fired strike at the point at which the gunner is aiming. This coincidence is achieved at a range of 400 metres; at any range above or below 400m, the gunner must observe where the rounds strike (his 'fall of shot') and must then adjust his aim accordingly.

MAW/1 TAW/3

42. At the Armoured Fighting Vehicles (AFV) Gunnery School, student | MAW/1



gunners are taught about the effective ranges of the L94 in their lessons on 'techniques of shooting' and are also taught alternative methods of aiming if the fire control computer fails.

43. Student gunners learn that, if they use the laser sight to gain a range to an intended target which is less than 200m away, a default range setting of 400m will automatically be accepted by the fire control computer.

MAW/1

44. From the observations above, it is clear that the L94 will not be accurate below 200m if the laser sight is used. As the L94 is seated to the left of the sight, it will therefore fire to the left of where the gunner is aiming through his sight; this will occur up to ranges of 400m (at which point coincidence is achieved). Thus someone standing to the left of an intended target at the short ranges involved in the 8 Troop VCP incident (approximately 20 metres), would be unintentionally endangered.

MAW/1 TAW/3

45. At the time that the gunner of c/s 42 () attended his gunners' course at the AFV Gunnery School, students were not taught about minimum safe distances and the lack of coincidence, nor were they taught what type of weapon should be employed in close-quarter battles. Indeed, reinforced this point by stating that he, as a gunnery instructor, did not appreciate the significance of the lack of gun-sight coincidence at short ranges.

MAW/1 GT/BOI SM/BOI

- 46. As neither nor appreciated the significance of the lack of coincidence at close range, the Board deduces that it is unsurprising that therefore ordered the use of the L94 during this incident.
- 47. With regards to the use of the L94 coaxial machine gun against Sergeant Roberts' assailant, 2 further aspects were considered by the Board:
 - a. Sergeant Roberts was by far the most experienced member of 8 Troop. If he considered his life to be under threat, which the actions of drawing and firing his pistol at Mr Zaher suggest he did, it must reasonably be deduced that other members of the Troop would consider his life to be threatened and would reasonably apply lethal force.

MTF/BOI JGE/BOI SM/BOI

b. The L94 coaxial machine gun was not the weapon of first choice in this incident, but rather the ultimate weapon in an escalation of force. The failure of other weapon systems either to have the desired effect on Mr Zaher or to function effectively left the

SM/BOI SM/2



commander of c/s 42, see that his Troop Sergeant was in mortal danger and to use whatever remaining weapon system he had to hand.

CAUSE OF DEATH

TOR 6.b.

48. Sergeant Roberts died from internal haemorrhage as a result of a 7.62mm gunshot wound to the abdomen (midline of the mid-chest). A second 7.62mm gunshot wound to his left abdomen was considered not to have contributed materially to his death; assuming appropriate medical assistance had been provided within the requisite timeframe, Sergeant Roberts would have survived the second, abdominal wound.

JJC/1 NCAH/1-2

49. The bullet which caused Sergeant Roberts' death was recovered from his clothing and was therefore subjected to forensic scrutiny (as was the second, non-fatal bullet); the fatal bullet was confirmed as a 7.62mm tracer bullet, its construction entirely consistent with its having originated from a British Service L5A3 7.62mm x 51mm tracer cartridge. Rifling impressions imparted to the body of the bullet were consistent with it having been fired from a British Service machine gun.

TAW/1

50. Subsequently, firing tests were conducted by (a firearms consultant) on various machine gun barrels (L7 and L94 from c/s 42; L94 from c/s 41) which fired both 7.62mm ball and tracer rounds; these tests allowed for the elimination of other barrels and enabled a positive association to be made with L94 coaxial machine gun barrel (Serial A3442A) which had been issued to c/s 42, leading to the conclusion that it was this L94 barrel that was responsible for firing the round which killed Sergeant Roberts.

TAW/3 NCS/7

of CYCLOPS, subsequently confirmed that the L94 barrel (SQMS) and had not been withdrawn until after Sergeant Roberts' death.

NCS/BOI

52. The above evidence, combined with statements from members of 8 Troop, leaves the Board in no doubt that the fatal shot was fired from c/s 42.

also assisted during the post-mortem examination of Sergeant Roberts. stated in his expert witness statement of 24 April 2003 (TAW/1), that the 2 rounds recovered from Sergeant Roberts were in a significantly different condition; whilst the round that killed Sergeant Roberts (the tracer round) was 'relatively undamaged', the other (ball) round was 'an impact-ruptured jacket and fragments of

TAW/1



core material' which had 'struck some hard object or surface, and had thus been deflected, so as to hit his (Sergeant Roberts') side when its outer jacket was already ruptured'.

postulated that one reason for the significantly different condition of the 2 bullets was that the second, non-fatal bullet might have been damaged by ricochet or when penetrating the flexible body armour (the inner filler of the Combat Body Armour (CBA)). Sergeant Roberts' CBA was destroyed at the Dressing Station on the day of his death, and thus could not be inspected.

TAW/2 JPA/1

went on to suggest that, as a result of the small circular bullet hole in the front of Sergeant Roberts' coveralls, the nature of the entry wound and the minor impact distortion on the recovered bullet which had killed Sergeant Roberts, he might not have been wearing his CBA properly fastened at the time of his death.

TAW/2

and (a medic and the Clinical Manager for the 2 RTR BG Regimental Aid Post (RAP) during TELIC 1) that Sergeant Roberts' Personal Role Radio (PRR) had been damaged at the time of his death by what they both thought was a bullet, and because of evidence provided by (the first soldier to provide medical aid to Sergeant Roberts) that he had 'ripped open his (Sergeant Roberts') body armour and his overalls', the Board requested supplementary evidence from

JGE/2 KLPC/1 CR/BOI CR/3

57. The Board asked to give an opinion on the following:

TAW/4

- a. Whether the damage to the second, non-fatal bullet might have occurred as a consequence of its contact with Sergeant Roberts' PRR.
- b. Whether the differences in impact distortion between the 2 bullets might be as a result of the second bullet making contact with the PRR.
- c. The likelihood/possibility that the fatal bullet passed through Sergeant Roberts' flexible body armour (the CBA filler).
- d. The likelihood/possibility that the flexible body armour was fastened at the front.

58. responded that:

TAW/4



- a. It was reasonable to assume that the intervening object which damaged the second bullet was Sergeant Roberts' PRR.
- b. He was unable to determine the damage or distortion that might be caused by a tracer bullet's impact with the flexible body armour without conducting firing tests.
- c. He was unable to rule out the possibly that Sergeant Roberts' CBA was correctly worn at the time of his death.
- 59. As a result of the conclusions from and the clear-cut first-hand evidence of the second term of the Board judges that Sergeant Roberts was wearing his CBA correctly fastened at the time of his death.

LEVELS OF TRAINING AND QUALIFICATIONS

TRAINING FOR VCP OPERATIONS

60. Although some crew members had previous experience of operating VCPs during peace-keeping operations in the Balkans or Northern Ireland, these VCPs were established based on a differing threat, in quite different circumstances and using different vehicles and equipment. There were no written techniques or procedures for the establishment of tank VCPs in a warfighting scenario such as experienced during Operation TELIC 1. 2 RTR BG had not practised VCP operations in any detail, since their principal mission (as an armoured battlegroup) was the destruction of armoured formations of the Iraqi Army; in the little training time available before deployment, 2 RTR BG had more pressing priorities than practising VCP operations.

RESPONSE TO THREAT AND COMPLIANCE WITH EXTANT RULES OF ENGAGEMENT (ROE)

61. All troops deployed on Operation TELIC 1 were operating under the Law of Armed Conflict (LOAC) at this stage of the operation. Commanders were specifically briefed that this was war, not a peacekeeping or peace enforcement operation. They were briefed as follows: "The Law of Armed Conflict allows attack on the armed forces (combatants) of the enemy at will; in this conflict some forces may not be in uniform. In addition, 80% of the population possess weapons. If you are not sure whether an individual is a civilian or a combatant, you can use force up to and including lethal force in self-defence to defend yourself, your colleagues and coalition forces. This will have to be a judgment at the time, but do not be afraid to shoot to kill. Civilians should not be attacked. However, remember, if you are attacked by a

TOR 6.d.(1)

PDPH/BOI AMB/BOI MTF/BOI RFAC/1 RFAC/BOI RFAC/4

TOR 6.d.(2)

NJM/1



civilian, you have the right to use force, up to and including lethal force to defend yourself, your unit or coalition forces if necessary in the circumstances".

62. As Mr Zaher continued to press his attack on Sergeant Roberts, members of the Troop made a judgment at the time and were satisfied that Sergeant Roberts' life was endangered. Accordingly, they opened fire and killed Mr Zaher. The Board does not conclude that there was a failure to comply with the extant ROE.

MTF/2 MTF/BOI SM/2 SM/BOI

TRAINING IN WEAPON SYSTEMS OPERATED

63. Evidence provided by the Regimental Gunnery Staff Sergeant (RGSS), and CYCLOPS Squadron Sergeant Major, confirms that all mandatory weapons' handling tests had been completed by 8 Troop; these included L30 120mm main armament, L94 coaxial machine gun, L7 loader's GPMG and Annual Personal Weapons' Tests (APWT; SA80 A2 or Browning pistol, dependent on the designated personal weapon). All members of 8 Troop who were interviewed by the Board affirmed that they had completed these tests within the requisite period - in December 2002 or February 2003 for all APWTs; in January 2003 (immediately before a tank firing period) for all crew-served weapons - a fact that was subsequently confirmed to the Board in interview by the Battlegroup Commander, Squadron Leader and Squadron Sergeant Major.

PDPH/BOI AMB/BOI MB/5-8 JGE/BOI

NJP/2

TOR 6.d.(3)

LEVELS OF FATIGUE IN 8 TROOP ON 24 MARCH 2003

64. A number of members of 8 Troop can recall little of events between crossing the border into Iraq and the incident at the VCP. However, both the Battlegroup Commander and Squadron Leader explained to the Board that there had been considerable activity, including an advance to contact by CYCLOPS towards Az Zubayr, in the preceding 2 days; the SSM recounted that, when he was woken to attend to Sergeant Roberts, it was the first sleep he had had since crossing into Iraq.

TOR 6.e

PDPH/BOI AMB/BOI JGE/BOI LAB/BOI KPS/BOI CR/BOI

65. However much activity 8 Troop had undertaken since entering Iraq and however much rest the soldiers had managed, it must be remembered that, in these circumstances, rest is relative and the quality of the rest is more relevant than the amount of 'down-time'; commanders (especially those who were less experienced and thus less well equipped to deal with extreme stress) had enjoyed little peace in the preceding weeks during build-up training and deployment into theatre before operations even commenced. It is the judgment of the Board that this level of underlying tension, coupled with the fact that this

PDPH/BOI AMB/BOI JGE/BOI SM/BOI



was the first significant operation for 8 Troop (including the first shots fired), considerably increased the levels of stress for all members and may have been a contributory factor in Sergeant Roberts' death.

EQUIPMENT SERVICEABILITY AND AVAILABILITY

TOR 6.f

COMMUNICATIONS INCLUDING THE USE OF PRR IN THE VCP

66. All 3 CR2 at the VCP were monitoring the Squadron Command frequency, with the Troop Leader keeping his Squadron Leader updated on events on this frequency; the Troop Leader was also monitoring the BG Command frequency. Personal Role Radio (PRR), which had only recently come into service and was available only in limited numbers, was used by 8 Troop; there is no recollection from any of the Troop or from the SQMS of any requests for more PRR. However, for the VCP task both and Sergeant Roberts had PRR with which they maintained contact when Sergeant Roberts was dismounted.

MTF/BOI NCS/BOI

POSSIBLE FAULTS WITH SERGEANT ROBERTS' PISTOL AND AVOIDANCE OF FAULT

TOR 6.f.(1)

67. Despite reasonable assumptions from those who saw or handled Sergeant Roberts' pistol at the scene of his death that he had suffered a stoppage, it is impossible now to establish what may have been wrong with his service 9mm Browning pistol. Immediately after the incident, the pistol was initially secured by before being for safekeeping; it was then issued to passed to (who briefly assumed the position of Troop Sergeant, 8 Troop) and finally to on 24 April 2003; there is no record of what happened to either the ammunition or the weapon's magazines. It was not until 8 May 2003 that the pistol was formally inspected by an armourer; whilst he identified faults that 'may contribute to a weapon stoppage', he noted that 'any inspection of the weapon (is) inconclusive' if the ammunition and magazines are not also inspected. which at this late stage was not possible. The armourer further stated that 'the weapon had been reissued since the stoppage, therefore my report for the reason as to why the weapon misfired on 24 March 2003 is inconclusive'.

GT/2 CR/2 JGE/1 JGE/BOI NCS/1 NCS/BOI DMGT/1

68. Sergeant Roberts' pistol was subsequently fired by recalled firing about 50 rounds on range practices in Iraq in mid-April 2003 and never experiencing any stoppages of any form.

MB/3



BACKGROUND REGARDING THE ISSUE OF ENHANCED COMBAT BODY ARMOUR (ECBA) - GENERAL OBSERVATIONS

TOR 6.f, 6.f.(2)

69. From the outset it should be borne in mind that, at the time of the incident, no directive existed which ordered the wearing of ECBA by UK Forces for warfighting operations. From Northern Ireland to the Balkans, it had become common practice for all ground troops to be issued body armour and ballistic plates; however, in such Peace Enforcement (PE) or Peace Support Operations (PSO), there remained the possibility of a very high percentage of deployed troops operating without the protection afforded by armoured vehicles. The lack of an ECBA directive resulted in the identification of a shortfall in holdings of ECBA against Defence Planning Assumptions (DPAs) being treated as routine business. As a result, once the potential requirement for additional ECBA was identified, the request to update UK holdings passed routinely through the various committees and steering groups. This is explored in more detail in the following paragraphs.

DJRM/1 RFAC/2 AMS/1

70. After the Strategic Defence Review in July 1998, the benchmark for logistic planning to support operational deployments changed from the Joint Rapid Deployment Force (JRDF) and Spearhead Element (total of 9000 personnel) to DPAs (up to 32 000 personnel). This adjustment occurred prior to the change in strategic focus for logistic planning across the 3 Services, which resulted in the main functional areas amalgamating into the Tri-Service Defence Logistic Organisation (DLO). In order to manage effectively the re-alignment of logistic functions from 3 separate systems (Army, Navy & Air Force) into one coherent structure, a Change Programme was introduced. Throughout the DLO's Change Programme, ECBA remained the responsibility of the Defence Clothing Integrated Project Team (DC IPT), with their established customers (Divisions, Formations or Organisations with their own Higher Level Budget (HLB)) remaining extant throughout. Due to the continuation of these well-defined relationships with HLB holders, the DLO's Change Programme had no effect on the ability to provision ECBA.

DJRM/1 RFAC/2 LJF/1 AMS/1

71. Once the DLO was established, Equipment Support LAND (ES LAND - part of the DLO) examined and identified issues with a variety of operational equipments and produced the Key Equipment Issues List (KEIL) in September 2001. The September 2001 KEIL identified that if ECBA were to be issued for warfighting, then the current holdings would be insufficient. At this point ECBA was only issued to PSO, as the ballistic threat was deemed to be greater than that for general warfighting because a greater percentage of troops would operate dismounted. It is worthy of note that ES LAND had no executive authority to direct that ECBA be provided for warfighting. The KEIL was

RFAC/6/7A DJRM/1 RFAC/2



therefore designed to list those items deemed necessary to meet anticipated requirements articulated in DPAs, but which were not funded.

72. The September 2001 KEIL was scrutinised by the Army Sustainability Committee (ASC) and the main points (including ECBA) were fed into the Logistic Sustainability and Deployability Audit (LSDA). The LSDA was then taken by the MOD's Programme and Policy Steering Group (PPSG) on 23 October 2001. In parallel to this staffing effort, the LSDA was taken by the Army Programmes and Resources Committee (APRC) on 7 November 2001 and passed to the Executive Committee of the Army Board (ECAB) on 21 November 2001. At this point no policy changes were authorised to direct ECBA to be issued for warfighting operations.

73. At the same time as the potential requirement to provide ECBA to warfighting operations was identified, the treasury budgeting system changed. The main change occurred when resource planning under the Treasury Control Framework transferred from Long Term Costing (LTC) to Short Term Planning (STP) under the Resource Accounting and Budgeting (RAB) system. Whilst options for the purchase process of ECBA were being established, there was some confusion between DLO and MOD Staff over the method of provision of such stores (including ECBA). During this period of budgetary change, no mandate to provide ECBA for warfighting operations was directed and consequently no authority for the immediate purchase of ECBA materialised.

RFAC/2 RFAC/3 RFAC/6/18 RFAC/6/19 RFAC/6/20 DJRM/1

RFAC/2

74. During the summer of 2002, constraints were placed on military activities (including procurement) which might have negatively impacted on negotiations with the United Nations. No further action regarding the procurement of ECBA was undertaken until September 2002, regardless of repeated inclusion within subsequent KEIL submissions by ES LAND.

RFAC/2 RFAC/6/15 DJRM/1

PROBLEMS IN RESPECT OF PROCUREMENT, SUPPLY,
DISTRIBUTION AND VISIBILITY OF SUCH STORES AS ECBA TO UK
FORCES ON OP TELIC

TOR 6.f.(4)

75. In an attempt to provide ECBA to personnel who might be required to deploy to Iraq on operations (if a political solution could not be achieved) an Urgent Operational Requirement (UOR) was directed to the Secretary of State for Defence's Office in September 2002. The UOR requested an exemption from imposed restrictions in order to procure 16 items. The Secretary of State's office agreed to allow 12 out of the 16 UORs requested. The procurement of ECBA was not agreed

RFAC/2 RFAC/6/15 DJRM/1



at this time, as "further advice required" was annotated against the ECBA UOR. On receipt of further clarification, the Secretary of State's Office agreed to the ECBA UOR on 13 November 2002. DC IPT then submitted the business case for the production of ECBA on 14 November 2002 and the contract for ECBA was let on 13 December 2002.

76. Following the letting of the ECBA contract, a rolling delivery programme was initiated via DC IPT. The programmed delivery for ECBA components commenced on 10 January 2003 and the last scheduled delivery was on 04 April 2003 (some 16 days after commencement of warfighting in Iraq). Despite the speedy implementation of the contract by DC IPT and the rapid production of ECBA items by the contractor, neither organisation would have had any indication that the political process would end so abruptly and that warfighting would commence so soon after UK Forces had commenced their deployment to Iraq.

RFAC/2 RFAC/6/8 DJRM/1 LJF/1 AMS/1

77. Constrained by the rate at which the contractor could produce ECBA elements, the supply and distribution of ECBA was thus set against an unachievable timeframe. Whilst production of ECBA continued, a Force Generation Order for a northern deployment into Iraq (through Turkey) was issued by the Permanent Joint HQ (PJHQ); it was received by Headquarters 1 (UK) Armoured Division (HQ 1 (UK) Armd Div) on 13 December 2002. HQ 1 (UK) Armd Div logistic staff issued a request to deploying units for a list of items required for deployment (including ECBA). Due to diplomatic constraints, the northern deployment did not occur and a second Force Generation Order for a southern deployment through Kuwait was issued on 10 January 2003 (this meant that there were only 68 days between the Force Generation Order for the deployment via Kuwait, and the commencement of warfighting). This late change further delayed the logistic staff's ability to define fully the requirements of deploying units.

RFAC/2 RFAC/6/8 MFJ/1 JK/1 NAA/BOI NAA/1

78. HQ 1 (UK) Armd Div submitted the completed equipment requirement to HQ LAND on 20 January 2003. At this point the request was handed to the Supply Chain Operations Cell (SCOC). SCOC initiated the process of entering all demands onto Stores System 3 (SS3), the primary inventory control system responsible for the majority of items held by the DLO. The full requirement for ECBA could not be met by SS3 as item holdings were insufficient to meet demand. There was limited stock held because delivery from civil contractor was to take place over the period 10 January – 04 April 2003. In order to satisfy as many demands as possible, SS3 issued the next size up where possible, but existing stocks of ECBA were soon exhausted. The remaining demands were sent by SCOC direct to DC IPT, as they were

RFAC/2 RFAC/5 MFJ/1 LJF/1 JK/1



highlighted as Buy as Required (BAR) items (in other words, items that would be BAR from industry by the relevant IPT; in the case of ECBA, this was the DC IPT). The demands would therefore be satisfied once new stock became available from the contractor.

79. After all ECBA items held on SS3 were issued, new stock was distributed from industry via the DC IPT. On 2 February 2003, 2nd Royal Tank Regiment (2 RTR) received 1400 ECBA High Velocity (HV) ballistic plates; the 1st Battalion The Light Infantry (1 LI) received 240 ECBA covers on 28 February 2003. 2 RTR deployed to Kuwait between 27 February – 09 March 2003 and further issues of ECBA were received; 365 ECBA covers to 2 RTR on 10 March and 295 ECBA plates to 1 LI on 15 March 2003. At this point two consignments were outstanding and did not arrive prior to the commencement of warfighting. One consignment arrived in December 2003 and the other consignment was never received.

RFAC/2 RFAC/5 NAA/BOI NAA/1 MFJ/1

SUPPLY CHAIN ISSUES

TOR 6.f.(4)

80. Based on the evidence presented to the Board of Inquiry, it is impossible to confirm with absolute certainty why the delay and loss of the remaining two consignments occurred. The Board considers it more pertinent at this stage to comment on the strain that was placed on the Supply Chain (SC) and the realities of asset visibility at the time of the initial deployment on Operation TELIC. Without itemising all the elements the SC must process, it must be understood that the deployment timeline had been severely compressed due to political sensitivities over overt military preparations. All deploying units and formations were given little time to increase their holding of stores from Peace Establishment to War Establishment. Where this could not be completed prior to departure, the increased scaling was sent via the SC. This increase included all clothing scales (and ECBA), equipment. personnel, vehicles, ammunition and the provision of combat supplies (water, fuel and ration packs) for the deploying force. The individual baggage entitlement was also too low to allow soldiers to deploy with all issued personal equipment. As a result, some units moved ECBA by container due to its weight, only for the container to arrive after commencement of warfighting.

RFAC/2 RFAC/5 DJRM/1 LJF/1 MFJ/1 RSS/3

81. <u>Battlegrouping</u>. Battlegrouping of units also had an impact on the delivery of equipment via the SC. Where sub-units were grouped under another unit HQ (for example, the two companies from 1 LI which were assigned to 2 RTR BG), stores requested for the deploying sub-units would continue to be sent to that unit's peace-time location. This would continue unless a unit change of address had been submitted — therefore, stores would continue to arrive in Germany at the unit

MFJ/1 JK/1



address for a sub-unit deployed in Iraq. The onward delivery would then rely on the speedy action of the Unit Rear Party to forward the items through the SC to Operation TELIC.

82. Logistic Information Systems. The ability to monitor the delivery of stores to Operation TELIC was controlled by the available Logistic Information Systems (Log IS). The primary tool for following items through the SC from depot to unit delivery is the Visibility in Transit Asset Logging (VITAL) system. Whilst the system functions adequately, it is reliant on Log IS nodes being placed at key locations to provide accurate feedback on where an item of stock is in the SC. Therefore, if the item is placed on VITAL and logged out of the depot, but not entered on VITAL at the seaport or airport of embarkation/disembarkation, then visibility of the item will not be possible until it turns up at the Logistic Rendezvous (Log RV) in the theatre of operations. To add to this problem, the ability to process an item is reliant on the scanner connected to the VITAL terminal being able to read the barcode attached to the item packaging.

DJRM/1 RFAC/2 MFJ/1 LJF/1 JK/1

83. Asset-Tracking. In many cases, the process of moving items from container to vehicle, ship or air asset (or multiple combinations) damages the packaging and renders the barcode unreadable. In cases during Operation TELIC, violent storms removed packaging and consignment information. This is a reality of the "friction" experienced by the logistic SC on operations and one that is common to all barcodereliant Log IS. During the deployment phase, containers were filled at peacetime locations and depots, then moved via shipping to Kuwait. Stores were placed into containers with no formal method of tracking (via Log IS) exactly which items were in each container. As a result. under tight time constraints, with limited logistic assets and no Log IS to relate items to specific containers, it was impossible to track or, in some cases, identify containers as they arrived in Kuwait. It is judged by the Board that an inability to 'read' the relevant barcode and the difficulty in container identification may have led to the delay (and 'loss') of ECBA consignments to 2 RTR. It is also considered that the term 'loss' is misleading; where items did not arrive at a unit, they were more likely to have been sent to a different unit due to a failure to find or 'read' consignment information.

DJRM/1 RFAC/2 LJF/1 JK/1

84. <u>Total Asset Visibility (TAV)</u>. For Operation TELIC, the UK procured elements of the Total Asset Visibility (TAV) system, developed by the US military. TAV is an advanced system for asset tracking, where containers are electronically tagged; the tagging is achieved through radio frequency signals, thereby improving the efficiency of delivery. The location of containers can then be determined remotely via secure internet access. Cross-referencing with the existing VITAL system

DJRM/1 MFJ/1



identifies the contents of each container or pallet. TAV was installed at a number of locations in the UK, Germany, Cyprus and the Gulf. Unfortunately, TAV was introduced part-way through the deployment phase and in insufficient numbers to provide visibility on all containers. In addition, the system only allowed equipment to be tracked as far forward as the major bases in Kuwait. Once the containers and pallets were broken down and the contents transported to individual units, this visibility ended.

85. <u>Supply Chain Confidence</u>. As the SC became overburdened, delivery times became extended. As these delays continued, confidence in the SC by dependent units started to fail. As a result of the extended delivery timelines and the pressure on units to have all their equipment prior to deployment, items were re-demanded because they had not been received as part of the original demand (the correct procedure if items fail to meet the Recommended Delivery Date (RDD) is to interrogate the SC, not to re-demand items). This action of double or repeat demanding effectively flooded the already stretched SC and created more tension on a system that was not designed to deal with such a volume over a compressed timeframe.

DJRM/1 JK/1 MFJ/1

THE SCALE OF ISSUE OF ECBA TO 8 TROOP AT THE TIME OF THE INCIDENT: THE REASON FOR DEFICIENCIES

86. Both CYCLOPS Squadron Leader () and Sergeant Major () recall all members of CYCLOPS being issued their full complement of ECBA; a number of sets (specifically the larger size of 190cms/120cms) were then withdrawn on 20 March 2003 (2 days before entry into Iraq) and were redistributed to those considered to be in greater need (dismounting infantry and echelon support staff in unarmoured vehicles). Amongst those in 8 Troop affected by this withdrawal were Sergeant Roberts, and (); all were of above average

TOR 6.f.(2), 6.f.(3), 6.f.(4), 6.f.(6)

AMB/BOI JGE/BOI NCS/BOI SM/BOI MT/BOI CR/BOI LAB/BOI RHT/BOI

87. Although there is some discrepancy over how many sets of ECBA were withdrawn and how many remained in 8 Troop, the Board believes that at least 5 sets were withdrawn. The only soldier who recalls still having his ECBA at the time of the VCP is the played no part in the dismounted function of the VCP.

height.



WHETHER THE WEARING OF ECBA (INCLUDING HIGH VELOCITY (HV) BALLISTIC PLATES) WOULD HAVE SAVED SERGEANT ROBERTS' LIFE

TOR 6.f.(7)

88. The forensic ballistic evidence and pathologist's reports presented to the Board leave the Board to judge that, had Sergeant Roberts been wearing correctly fitting and fitted ECBA (as originally issued to him and then withdrawn on 20 March 2003) when this incident unfolded, he would not have been fatally injured by the rounds that struck him.

TAW/2 NCAH/2 DMJ/1

READY AVAILABILITY OF EQUIPMENT DESIGNED TO DELIVER FORCE PROTECTION TO INDIVIDUALS

TOR 6.f.(5)

89. observed that equipment designed to deliver force protection to individuals deployed on operations should be made available not just at the point of deployment, but also during periods of training. As in every other aspect of training for operations, it is appropriate for troops to be equipped as they would expect to fight; if troops are to behave and respond in a certain way during an operation, then they should be appropriately prepared for this in training.

PDPH/BOI

90. Witnesses interviewed by the Board fully concurred with observations.

AMB/BOI MTF/BOI

91. The Board fully concurs with this observation.

TERMS OF REFERENCE RESOLUTION

92. The Board is satisfied that all of the Terms of Reference have been addressed.

FACTS ESTABLISHED THROUGH EVIDENCE

TOR 7.a

93. 8 Troop, CYCLOPS was deployed on the orders of its Squadron Leader to establish a Vehicle Check Point (VCP) to the north-west of Az Zubayr (area Grid QU 567652) in order to prevent interference with the Coalition Main Supply Route (MSR) TAMPA by regime loyalists.

AMB/BOI

94. At the time of the incident, Sergeant Roberts and at least 4 other members of 8 Troop, CYCLOPS were not wearing Enhanced Combat Body Armour (ECBA); Sergeant Roberts had not managed to fit HV ballistic plates to his CBA. Although ECBA had previously been issued to the Troop, it had been withdrawn on the orders of the BG Commander and had been re-distributed to those considered at higher risk.

PDPH/BOI AMB/BOI MTF/BOI JGE/BOI NCS/BOI KPS/BOI

95. For reasons unknown, Mr Zaher approached the 8 Troop VCP and | MTF/BOI



attacked members of the Troop with rocks; his assault on Sergeant SM/BOI Roberts was sustained. 96. At the time of Mr Zaher's assault on Sergeant Roberts, Sergeant LAB/BOL Roberts' local protection (previously provided by the driver of c/s 41. MTF/BOI) was absent. 97. Sergeant Roberts experienced an unidentified problem with his GT/2 service 9mm Browning pistol. CR/2 98. Sergeant Roberts died as the result of a single 7.62mm round JJC/1. TAW/3 which entered his chest; this round was fired from the L94 coaxial NCAH/1-2 machine gun of CR2 callsign 42. NCS/BOI COULD THE DEATH OF SERGEANT ROBERTS HAVE BEEN AVOIDED? 99. The reason for Sergeant Roberts' death consisted of the following factors:

a. Had Sergeant Roberts been wearing ECBA at the time he was shot by c/s 42, he would not have been killed.

Paragraph 88

b. Had Sergeant Roberts' pistol functioned properly, he would have avoided prolonged close contact with Mr Zaher, a factor which resulted in the Troop shooting Mr Zaher as they perceived him to be a continued threat to Sergeant Roberts.

Paragraph 10.a Paragraph 47.a

c. The absence of as Sergeant Roberts' close protection allowed the situation to escalate unnecessarily.

Paragraph 36 Paragraph 37

d. A lack of understanding of the significance of coincidence between the L94 coaxial machine gun and the gunner's sight resulted in and employing a weapon system that was inherently inappropriate at short-range.

Paragraph 41 Paragraphs 44-46

e. The lack of any SOPs or drills for the establishment of CR2 VCPs resulted in the CR2 crews not appreciating the lack of coincidence of the L94 coaxial machine gun at short-range.

Paragraph 16 Paragraph 60

FLAG F TO PART 1 TO BOARD OF INQUIRY REPORT

24710359 SGT S M ROBERTS - BOARD OF INQUIRY - CONCLUSIONS OF THE BOARD

TACTICAL LEVEL ISSUES

ADEQUACY OF PROCEDURES

1. The fact that there was no form of Standard Operating Procedure (SOP) for the establishment of CHALLENGER 2 (CR2) Vehicle Check-Points (VCPs) meant that 8 Troop had no basis on which to consider the factors and limitations for establishing a tank VCP. The Troop made the best use of operational experience from other theatres and, in the limited time available, had established a functioning VCP. It is the judgment of the Board that, if time had been available, considerable benefit would have been gained from establishing what the Troop's actions should have been for a number of potential scenarios ('actions on').

Paragraphs 16, 21, 60

2. The fact that there are inadequate written procedures or caveats regarding very close range engagements with the L94 coaxial machine gun led to making an incorrect assessment as to the appropriateness of using this weapon system to engage at the VCP.

Paragraphs 10.f, 39, 41, 45, 46

3. The mandated training and testing regime to ensure competence in the use of vehicle and individual personal weapons was correctly applied. All members of 8 Troop were appropriately qualified to use the weapon systems employed in this incident.

Paragraph 63

ADEQUACY OF PERSONNEL AND ACTIONS TAKEN OR NOT TAKEN

4. When approached by an apparently unstable and dangerous assailant, Sergeant Roberts was understandably in fear for his life. It is the deduction of the Board that, by making ready and firing his pistol at Sergeant Roberts initiated a chain of events that unfolded very rapidly and which he could not possibly have anticipated; his Troop, inexperienced and fearful for his life, responded to this threat by an escalation of force which ultimately resulted in his death.

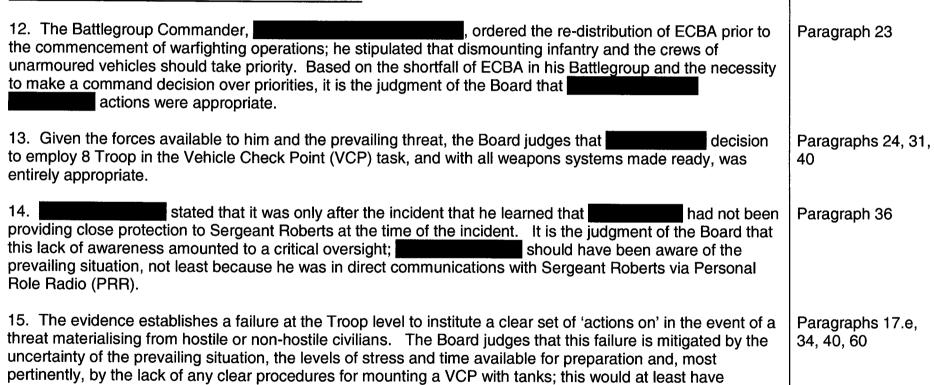
Paragraphs 13, 47.b

5. The board considers it fact that both the Squadron Leader and the Troop Leader had stipulated that the dismounted element of the VCP should constitute a minimum of 2 soldiers; it is also fact that, at the time of Sergeant Roberts' death, this was not the case.	Paragraphs 35.b, 36
6. The Board considers it fact that Sergeant Roberts had instructed to remount his vehicle prior to reversing it back on to the central reservation; it was for this reason that Sergeant Roberts was dismounted alone when he was attacked by Had Had remained with Sergeant Roberts as his local protection, the Board judges it most unlikely that the incident would have unfolded as it did.	Paragraph 36
ADEQUACY OF EQUIPMENT	
7. Enhanced Combat Body Armour (ECBA). It is a fact that there were insufficient holdings of ECBA with front-line troops at the time of Sergeant Roberts' death for all personnel to be properly equipped. It is a fact that the Combat Body Armour (CBA) which Sergeant Roberts was wearing at the time of his death was inadequate to prevent this outcome. Had Sergeant Roberts been wearing correctly fitting and fitted ECBA (as originally issued to him) when this incident unfolded, it is the Board's judgment that he would not have been fatally injured by either of the rounds that struck him.	Paragraphs 22-23, 59, 88
8. <u>ECBA for Training</u> . They Board judges it appropriate that ECBA (or its replacements) which is to be worn during operational deployments should be available to troops under training.	Paragraph 89
9. <u>CBA</u> . Whether or not Sergeant Roberts followed up advice that had apparently been proffered to him and attempted to make temporary use of any High Velocity ballistic plates is unknown. Whether any such temporary measure could have saved Sergeant Roberts' life is unknown; the destruction of Sergeant Roberts' CBA at the Field Hospital where his body was subsequently treated means that this will remain unresolved.	Paragraphs 26-28 Paragraph 54
10. <u>9mm Browning Pistol</u> . No conclusions can be reached with regard to Sergeant Roberts' Browning pistol. No inspection was carried out at the time and it was subsequently fired by without experiencing any problem.	Paragraphs 67-68
11. PRR – VRC 353 Interface. The Personal Role Radio (PRR) is incompatible with the CR2 vehicle	Paragraph 17.d

communications system (VRC 353). During the VCP task, the Troop Leader might at any stage have been trying to monitor the BG Command frequency, report to his Squadron Leader on the Squadron Command frequency and maintain communications with Sergeant Roberts on the ground with the PRR; to do this would have necessitated the Troop Leader changing headsets and would have left him in the position of either commanding his Troop (the vehicles) using the VRC 353, or maintaining communications via the PRR with Sergeant Roberts – not both simultaneously.

ADEQUACY OF COMMAND AND SUPERVISION

provided a basis for consideration of factors and limitations.



HIGHER LEVEL ISSUES

ADEQUACY OF PROCEDURES

16. Accounting and Procurement. Procedures for the provision of consumable stocks (such as ECBA) were not well understood at the time that the Resources Accounting and Budgeting (RAB) system was implemented. Whilst this did not cause a delay in the procurement of ECBA, as no mandate existed at the time, it is essential that customers (Divisions, Formations or Organisations with their own Higher Level Budget (HLB) etc) understand the process. It is the judgment of the Board that a more comprehensive briefing note to enable a fuller understanding of this financial mechanism should have been produced during the implementation of the RAB system.

Paragraph 73

17. Procedures for Procurement of ECBA. Despite the fact that the KEIL process had identified the potential shortfall in ECBA in September 2001, no action was taken until this shortfall was raised as an Urgent Operational Requirement (UOR) in September 2002. The Board has confirmed that ES LAND had no executive authority to direct ECBA be provided for warfighting. The aim of the KEIL was to identify potential shortfalls against DPAs in order to inform and allow MoD central staffs to prioritise and take action as it judged appropriate. The Board judges it unfortunate that the lack of ECBA (when set against the requirements of the Defence Planning Assumptions (DPAs)) did not receive timely attention at the appropriate level within the MoD.

Paragraphs 69- 71 Paragraphs 75-76

18. Once the contract had been let, the complete ECBA order was received from industry within 4 months. Despite this fact, it was not timely enough to ensure that all UK troops deployed on Operation TELIC 1 were appropriately equipped. It is the judgment of the Board that items which are required for force protection (such as ECBA) should not be Buy as Required (BAR). ECBA must be available for all scales of operations in accordance with DPAs, prior to deployment. Sufficient stock must also be available to allow for training ECBA and maintenance scales.

Paragraphs 76, 78,

19. <u>Supply Chain Procedures</u>. It is the judgement of the Board that the delay in satisfying demands through the SC led to a lack of confidence in the demand system. As the SC became overburdened, a lack of confidence grew in units demanding items, as mandated delivery timelines passed and urgently required stores failed to arrive. The resulting lack in confidence caused units to re-demand items that had been ordered

Paragraph 85

but had not yet arrived. This action effectively doubled the amount of some stores that the SC was required to provision and placed increased pressure on the delivery of items to units.

ADEQUACY OF EQUIPMENT

20. <u>VITAL</u>. The monitoring of location and flow of stores to Operation TELIC was reliant on the correct use of the Visibility in Transit Asset Logging (VITAL) system. It is the opinion of the Board, that when used correctly the system would have provided adequate asset tracking facilities to the deploying force. The failure of asset tracking during the deployment was due to the lack of Log IS nodes (VITAL terminals) being placed at key locations. As a result, items were entered onto VITAL and logged out of the depot but not entered on VITAL at the seaport or airport of embarkation/disembarkation. This resulted in a lack of visibility of the stores until they turned up at the Logistic Rendezvous (Log RV) in Kuwait/Iraq. To add to this problem, the ability to process an item was reliant on the scanner connected to the VITAL terminal being able to read the barcode attached to the item packaging. When items did eventually arrive in theatre, if the barcode was unreadable or there was no other consignment documentation, the stores would not be able to be reconciled from the VITAL system. The Total Asset Visibility (TAV) system was introduced part-way through the deployment and was designed only to track containers (not their contents).

Paragraphs 82-84

ADEQUACY OF COMMAND AND SUPERVISION

21. <u>Force Generation Order</u>. The necessary Force Generation Order for a southern deployment (via Kuwait, rather than via Turkey) was delivered by PJHQ to HQ 1 (UK) Armd Div on 10 January 2003; although this made for extremely short lead-in times for the procurement and delivery of necessary stocks, the Board deduces that PJHQ had little choice in the matter as it was placed under tight political constraints.

Paragraph 77

ACTIONS TAKEN TO PREVENT RECURRENCE (TO DATE)

- 22. The Board has identified 7 actions taken since this incident occurred:
 - a. Chief of Defence Logistics (CDL) has implemented a large-scale review of all aspects of Supply Chain management and operations under the Defence Logistic Transformation Programme (DLTP). The DLTP will refine and rationalise Defence Logistics to meet the high demands placed upon the SC during

DJRM/1 AMS/1 JK/1 operations. DLTP will provide a complete review from End to End (E2E) of the SC, will deliver new Log IS to provide Management of the Joint Deployable Inventory (MJDI) and initiate a more coherent method of supplying units with operational stock prior to and during deployments via the Priming Equipment Packs (PEPs). PEPs will ensure that soldiers receive all of their operational equipment prior to deployment. The implementation of these measures will take place after realistic and demanding trials have been conducted: This will deliver a more efficient SC and will build on lessons learned from Operations TELIC and HERRICK (Afghanistan).

b. Since July 2003, Director of Joint Capabilities has mandated that an operational reserve of ECBA is maintained as 'Force Generation' stock; this reserve is for 33,000 sets of ECBA.

AMS/1

c. Current MoD policy dictates that personnel will be in possession of ECBA prior to deployment onto operations; this policy is reinforced by positive checks at air and sea ports to ensure that this is the case. Anyone arriving at a port without ECBA is issued a set at that time. Additionally, spare sets of ECBA are held by units and formations in the deployed force. Thus the Supply Chain (SC) for ECBA is now well established and there are no problems with the availability of ECBA within operational theatres.

AMS/1

d. Once deployed into a theatre, troops are likely to be upgraded to OSPREY for the duration of their operational tour and to KESTREL for specific operations. Details of OSPREY and KESTREL, and the AFV Crewman's Survival Waistcoat, are given below.

AMS/1

e. <u>OSPREY</u>. OSPREY is a modular system with greatly enhanced 'soft armour' (including detachable neck and arm attachments) and state-of-the-art ballistic plates. Sufficient quantities are being manufactured to provide for all military personnel on operations. Thus the Defence Clothing Integrated Project Team (DC IPT) will have produced 13,900 sets of OSPREY by 31 July 2006 (currently, over 5,000 sets have been deployed in Iraq and 500 in Afghanistan) and ultimately 20,550 sets, which will allow OSPREY to be used for Pre-Deployment Training (PDT), roulement of troops into/out of theatre and full reconditioning on return from operations.

AMS/1 DMR/1

f. <u>KESTREL</u>. KESTREL is a body armour system which was introduced to Iraq in 2005 and Afghanistan in 2006 as part of the Urgent Operational Requirement (UOR) process. This system includes improved coverage body armour, which can be fitted with either the smaller (ECBA) ballistic plate or the larger

AMS/1 DMR/1 OSPREY plate. It is designed for 'top-cover' sentries and for drivers of unarmoured vehicles and provides greater coverage against fragmentation from Improvised Explosive Devices (IEDs). A total of 4,975 sets of KESTREL have been procured and a large percentage is already in use.

g. <u>AFV Crewman's Survival Waistcoat</u>. The AFV Crewman's Survival Waistcoat (Mark 2) is now in service. This waistcoat is specifically designed for permanently mounted tank crews in a non-permissive environment, such as was experienced during the warfighting phase of Operation TELIC 1. The AFV Crewman's Survival Waistcoat is based on Enhanced Combat Body Armour (ECBA) with a limited load-carriage capability; this allows tanks crews to extract from the vehicle in an emergency with their personal weapon, water, ammunition and appropriate ballistic protection.

DMR/1

24710359 SGT S M ROBERTS - BOARD OF INQUIRY - RECOMMENDATIONS OF THE BOARD

RECOMMENDATIONS OF THE BOARD

- 1. To assist in preventing a recurrence of this incident, the Board recommends that:
 - a. All training establishments and units of the British armed forces are educated in the importance of issuing to troops correctly fitting ECBA, which must then be properly worn by troops in an operational theatre and in training. The significant ballistic qualities of the HV ballistic plates issued as part of ECBA should also be clear to all troops. This education should form part of annual individual training.

Paragraphs 105-106, Paragraph 120.a

b. HQ DRAC, as the Competent Army Authority (CAA), should lead on the development of doctrinal notes for the employment of Armoured Fighting Vehicles (AFVs) at VCPs; these notes should apply for both warfighting and peacekeeping scenarios and should be applicable to both RAC training and combined arms Pre-Deployment Training (PDT). They should include, inter alia, guidance on the employment of all available weapon systems (including personal weapons); and command, control and communications procedures (C3, including connectivity between PRR and vehicle-mounted communications systems) to be employed between mounted and dismounted troops.

Paragraph 99

c. HQ DRAC, as the CAA, reviews the content of RAC crew courses and ensures that crewmen at all appropriate levels understand the significance of gun-sight coincidence on AFVs and the inherent risks of employing weapon systems below the computed minimum range.

Paragraph 100

d. The Board notes the observation that a lack of confidence in the Supply Chain (SC) exacerbated the complexities of deploying material into theatre in time for the commencement of warfighting operations. This lack of confidence resulted in units that had already demanded items re-demanding those that had not

Paragraphs 82, 84, 117

yet arrived, thereby inputting a double demand on a system that was already stretched. Whilst the Board notes that significant resources have been applied to modernising the Joint Supply Chain (for example the Defence Logistics Transformation Programme (DLTP)), the Board judges that a degree of education and perception management may be required to ensure that units deployed on large-scale operations in the future actually trust the SC, including such Logistic Information Systems (Log IS) as VITAL and TAV.

- e. Until such a time as CDL introduces MJDI, Visibility in Transit Asset Logging (VITAL) will remain the primary tool for following items through the SC from depot to delivery. The Board judges it essential that VITAL continues to provide effective visibility for stores tracking for the foreseeable future; operations must be supported by a robust and well established system of VITAL/Log IS nodal points at the seaports or airports along the SC, in order to maintain visibility of assets in transit and therefore provide accurate feedback of where an item is in the SC.
- f. The Board deduces that a major factor leading to items in the SC becoming "lost" was due to VITAL terminals being unable to read the barcode attached to the item packaging. It is therefore recommended that further investigation is undertaken by the DLO and the Defence Supply and Distribution Agency (DSDA) to resolve the issues associated with unreadable barcodes and investigate options to make the system more robust.

Paragraph 118

Paragraph 118