ARMY

COVER SHEET

THE COMMAND OF BRITISH LAND FORCES IN IRAQ, MARCH TO MAY 2003

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Total pages: 21 (1 + 20)

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ABSTRACT

This paper reports an analysis of the British Army's operations in Iraq in March-April 2003. Comparisons are made with the similar deployment to Kuwait and Iraq in 1990-1. Coalition land forces operated highly effectively and with considerable professionalism; however, such professionalism should extend to a candid examination of shortcomings. Formation headquarters have grown by about 25% since 1991. There appears to have been an unwarranted growth in staff functions and rank inflation. There is evidence of a tendency to plan excessively, and excessive but unfocussed staff activity which had no positive output beyond the confines of the headquarters.

The net result of this misdirected activity was command and control of subordinate units and formations which was criticized as being suboptimal. Orders which were required were often produced too late, and there was a lack of passage of information from headquarters to subordinates. Recognised operational procedures were often ignored or broken, which was justified at the time as pragmatic rather than being seen as symptomatic of a general problem. Such orders as were produced often lacked clarity and, in particular, tended to give multiple and imprecise mission to subordinates.

INTRODUCTION

1. This paper presents some aspects of the British Army's analysis of the command of land forces during the period of major combat operations in Iraq during 2003. It concentrates primarily on the command of British land forces at the tactical level, although some reference is made to US Army and USMC practice. The Author is the officer responsible for the production of that analysis.

2. British land forces began to deploy to Kuwait in early January 2003. Military operations against Iraq commenced on 20 March. Basra fell on 6 April, Baghdad on 9 April. Coalition land forces moved directly on to peace support and stabilization operations, which continue to the time of writing (May 2004). This analysis considers only the period of major warlike operations. The US name for the Operation was Operation IRAQI FREEDOM; the British contribution was Operation TELIC.[1] The British land force was based on Headquarters, 1st (UK) Armoured Division, with 3 Commando Brigade, Royal Marines; 7th Armoured Brigade and 16th Air Assault Brigade under command.

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[1]   British operation names are supposed to have no connection with the nature of the operation being planned or undertaken. However TELIC was assumed to stand for 'Tell Everyone Leave Is Cancelled'.

ANALYSIS

3. For the British Army's analysis of the campaign, 93 documents were studied; some of them up to 12 box files in length. 6 CD-ROMs of other material, each containing up to 100 files, were also scrutinised. Most documents were primary sources, including records of interviews taken immediately after operations. Sources included formal post-operation reports from all British and many US formations and combat units; commanders' operational diaries; operational orders; and radio traffic logs. The analysis took roughly four man-months of effort.

4. A number of trends were noted relating to the functioning of headquarters. Comparisons were made with the ostensibly similar deployment to Kuwait and Iraq in 1990-1.[2] Further trends related to the way in which issues were reported and subsequently treated as they were passed up the chain of command during after-action review.

5. Contemporary documents obviously (and understandably) reported the perspectives of their writers at the time they were written. Some of those documents have therefore been found the be mutually inconsistent to some extent. Considerable effort was taken in the analysis to resolve such inconsistencies. This appears to have been generally successful. However, that implies that participants in the operation may have recollections of the events that do not fully concur with the findings of this analysis.

6. The overall perception of the conduct of warlike operations by Coalition land forces was one of considerable effectiveness and professionalism. This perception was reinforced by the analysis. However, a professional body should be able to examine its past performance honestly and openly; to admit shortcomings candidly, and take action to rectify them. That was the spirit in which the analysis was conducted, and this and other reports drafted. Any apparent criticism of coalition forces contained in this paper should be seen in that light; in particular, it should be seen in a context of undoubted professionalism and effectiveness.

7. The analysis of Operation TELIC was conducted in order to identify lessons and rectify potential shortcomings. The identity of units and of the originators of critical comment has largely been concealed, not least to encourage candour in the writing of post- operational reports in future. Consequently this paper is not fully referenced.[3] It does not describe actions taken to rectify issues arising from the analysis.

8. In British military doctrine, 'control' (in the sense of oversight, direction and coordination) is seen as a sub-set of command. Therefore in this paper the term 'command' could be used synonymously with 'command and control'.

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[2] The British Operation GRANBY; the US Operation DESERT STORM.
[3] A fully referenced copy of the final report of the campaign, classified CONFIDENTIAL and with a British national caveat, will be archived in due course.

OVERVIEW

9. Despite the undoubted dedication and professionalism of commanders and staff, tactical command attracted criticism from several sources, from the Land Component to unit levels. Problems appear to have arisen from three overlapping areas. Firstly, from the mechanism by which the campaign plan was translated into tactical missions and orders. This had a major impact throughout the chain of command. Secondly, the continuing and largely unconstrained growth of HQs, which caused problems related to the length and timeliness of orders. Thirdly, HQs seem to have focussed on contingency planning to the detriment of the coordination of their subordinates. This last area is clearly linked to the other two. For example, given no clear planning guidance from the campaign level, HQs understandably undertook considerable contingency planning, much of which was nugatory.

10. Problems lie exclusively in the area of headquarters structures and processes; no particular instances of poor behaviour by individuals were observed. Few *consequences* of poor command were observed, which was probably a result of the poor quality of the adversaries. A more capable enemy would have punished shortcomings severely.

TRANSLATING CAMPAIGN PLANS INTO MISSIONS AND ORDERS

11. During the 1990s NATO nations developed methodologies for campaign planning. Those methods identify tactical actions along defined lines of operations which, if successfully completed, would lead to the campaign end-state and hence the strategic objectives of the campaign. However, in retrospect it appears that the issue of how to translate the campaign plan into orders and missions for land forces has not been resolved.

12. For Operation IRAQI FREEDOM, the Coalition Land Component Commander addressed this issue by issuing the 1st US Marine Expeditionary Force (1 MEF) with a relatively short mission for the campaign as a whole, but then imposing 11 'key tasks' on the Commanding General of 1 MEF. HQ 1 MEF translated this into a 'base order' which included over 2½ pages of missions for 1st (UK) Armoured Division. Subsequently HQ 1st Armoured Division produced a 'base plan' in which the given mission, concept of operations and missions for subordinates ran to almost 13 pages. It is very difficult to read the order and gain any real sense of what was intended.   In retrospect, this would be similar to inviting (say) the British 11th Armoured Division to write a single order in May 1944 which would have it land in Normandy, fight the breakout battles, advance through Belgium, cross the Rhine and link up with the Red Army somewhere in Germany in 1944-5. Several commentators remarked on the value of the US practice of the 'rock drill' which is effectively a map or model rehearsal of a plan with key staff and subordinates. On reflection it appears that such measures were necessary during Operation TELIC to enable participants to make sense of over-complex orders. There is also a danger that such complex orders promote mental inflexibility.

EXTRACT FROM 1ST ARMOURED DIVISION'S BASE PLAN: MISSION STATEMENT FOR 3 COMMANDO BRIGADE

c.   <u>Missions and Tasks</u>.

     (1)   <u>3 Cdo Bde</u>.

          (a)   <u>Ph I Setting Theatre Conditions</u>. Preparatory activity.

          (b)   <u>Ph II Shaping Operations</u>.

               i.   Conduct FPOL with 35 KU Bde in order to posn forces for Ph IIIA1 and IIIA2 .

               ii.   BPT seize key oil infrastructure on the AL FAW peninsula in order to prevent or mitigate its destruction and resulting environmental disaster.

               iii.   BPT clear and screen AL FAW Peninsula in order to enable CFMCC to clear SLOC to UMM QASR.

               iv.   BPT facilitate rearward passage of UNIKOM force to facilitate 1 MEF offensive operations.

               v.   BPT seize the port of UMM QASR in order to enable humanitarian assistance operations.

               vi.   BPT to execute TRAP within 6hrs of notification (Task allocated to 15 MEU by 1 MEF).

          (c)   Ph III Stage A1 Seizure of AL FAW and UMM QASR Port. Attack:

               i.   Seize key oil infrastructure on the AL FAW peninsula in order to prevent or mitigate its destruction and resulting environmental disaster.

               ii.   Clear and screen AL FAW Peninsula in order to enable CFMCC to clear SLOC to UMM QASR.

iii.   BPT facilitate rearward passage of UNIKOM force to facilitate 1 MEF offensive operations.

iv.   Seize and secure the port of UMM QASR in order to enable humanitarian assistance operations.

v.   Secure the KHAWR AZ ZUBAYR Naval base.

vi.   Secure key oil infrastructure on the AL FAW peninsula.

vii.   Clear and screen the Al FAW Peninsula in order to enable CFMCC to clear SLOC to UMM QASR.

viii.   BPT to execute TRAP within 6hrs of notification (Task allocated to 15 MEU by 1 MEF).

(d)   Ph III Stage A2 Relief in Place with 1st MarDiv. Sustain above tasks and:

i.   Establish liaison structure with local key personalities within AO.

ii.   Provide Coy sized Div reserve within 6hrs of notification.

It is clear that a better way of translating campaign plans into land tactical activities should be found. According to British doctrine, a subordinate should not be required to execute a mission, or plan a subsequent one, which contains more than one or two tasks (or at most three) and a unifying purpose. It should be seen as the duty of a HQ to clarify and simplify the direction it receives. For entirely understandable reasons, this did not take place during Operation TELIC.

HQ STRUCTURES AND PROCESSES

13. Shortcomings in HQ structure and processes were most apparent at formation level. This may in part be because they are larger and more dependent on explicit process, or simply because evidence from subunit level, which would indicate shortcomings at unit level, are generally not recorded.   Overall the evidence shows that HQs have become too large; contain too many overlapping functions; have officers of inappropriately high

ranks; plan too much; and tend to be very busy. However, they are not particularly productive; and produce orders that are too big and which arrive too late.

014. *Size of Headquarters*. Deployed HQs have become unwieldy. The HQ of 7th Armoured Brigade was reported as about 650 all ranks and 240 vehicles. It had a War Establishment of 42 officers, but actually contained 96. It comprised two identical CPs of over 60 vehicles each. The HQ nominal roll records 383 all ranks, excluding the signal squadron echelon.[4] However, the HQs of 4th and 7th Armoured Brigades in Operation GRANBY recorded between 288 and 306 personnel. This growth of 25% in 12 years is not accounted for by changed functions. Detailed analysis of staff posts across several HQs (described below) exposes unnecessary duplication and unconstrained growth. This growth in size was significant: one unit recorded that its brigade HQ 'gives the impression that it cannot cope ... despite the large number of staff officers to hand.' In another instance 'From the experiences to date, any plans that do finally emanate from ... [brigade HQ] to ... [this unit] will be half-baked, uncoordinated and invariably running within an unrealistic timescale.' That comment was made 7 days after G-Day. A brigade HQ noted that 'We are significantly ahead in our planning process in that the div was in bad order due to .... an overabundance of staff officers.' A staff officer in another brigade HQ remarked that orders from Division were 'invariably' quite thick but too late. It may be that HQ 7th Armoured Brigade was an extreme case, but it illustrates a trend observed in several recent operations. Recent operational analysis indicates that in a typical formation HQ, 40% of the staff do nothing useful, and a further 20% produce considerable nugatory output. Formation HQs at or near their current War Establishment appear to be quite manageable. However, significant problems arise when they grow in what appears to be either unplanned or misguided manner for operations.

15. *Growth in Staff Numbers*. As staff numbers grow, more work can be done in total but the effort required to coordinate their activities rapidly exceeds any benefit which increased numbers brings.[5]   Studies going back to the 1970s consistently indicate that when staff numbers are reduced, the effectiveness of an HQ improves[6]. Thus further increases to the size of present HQs is not a useful solution, and indeed some rationalisation seems to be required. A detailed comparison of staff numbers in brigade HQs in the 1990s and HQ 7th Armoured Brigade in Operation TELIC is given at Table 1. It takes account of the differences between 'expeditionary' and more conventional brigades. It should be noted that neither during Operations GRANBY nor TELIC was 7th Armoured Brigade 'expeditionary'. In both cases it deployed as part of a much larger forces.

[See next page]

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[4]   Nominal roll attached to HQ 7th Armd Bde Commander's Diary.
[5]   A consequence of Brook's Law. Frederick P. Brooks, Jr. *The Mythical Man-Month: Essays on Software Engineering.* 20th Anniversary Edition, Addison-Wesley, 1995.
[6]   For example, QinetiQ/KI/CONSULT/CR03014/1.0 dated June 2003.

Ser	Function	Bde HQ, 1990-1	HQ 7th Armd Bde, Op TELIC
(a)	(b)	(c)	(d)
1.	Total staff offrs	About 45, including watchkeepers and Liaison Officers (LOs)s. (1)	96 (War Establishment of 42)
2.	G2 staff offrs	1 SO3	4
3.	G3 staff offrs	1 or 2 SO3s. (2)	6: 2 SO2 Plans, 2 SO3 Plans, 2 SO3 Ops.
4.	Engr staff offrs	Up to 3 (including any from attached engr sqn or regt)	7
5.	Air, Avn and AD staff offrs	3: 1 Avn (if bde had organic hels); 1 AD; 1 Bde Air LO (BALO).	6; ie 2 of each.
6.	NBC staff	1 ssgt	2 capts, plus 2 offrs attached from Jt NBC Regt (3)

Table 1 – *Comparison of Brigade HQ Size, 1990-1 and Operation TELIC*

Notes:

(1) Armd Bde. Independent expeditionary bdes (1 Inf, 5 Abn, 19 Inf and 24 Airmob) had up to a dozen more, almost entirely for 3rd line logistics.

(2) Armd bdes had 1, which was insufficient for 24hr ops. Independent bdes had up to 3.

(3) Notwithstanding the issue of BRACIS to automate NBC hazard prediction, warning and monitoring.

16. *Discipline*. In 1974, HQ 20th Armoured Brigade reviewed their CP structure explicitly to provide a 'lean, hard, flexible and survivable Brigade HQ'.[7] The result totalled 105 all ranks and 30 vehicles of all kinds. It did not contain many of the functions required of a brigade HQ during Operation TELIC. Artillery, engineer, G5 and media staff were not included in that total, nor were attachments (such as those from the Joint NBC Regiment or the Phoenix Battery). However, adding those officers, and soldiers pro rata, would have brought the total for HQ 7th Armoured Brigade to 166 all ranks[8] and 48 vehicles. This should be compared with the 383 personnel actually deployed. It seems reasonable to assume that since the end of the Cold War the absence of an imposed discipline which strictly limits the size of HQs has resulted in unnecessary growth.

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[7] HQ 20 Armd Bde 20/G/001 dated 13 May 74. TDRC Serial 03225.
[8] Including about 40-45 officers.

17.   *Augmentation*. Some of the augmentation for Operation TELIC is entirely understandable, such as officers from a Phoenix STA Battery and the Joint NBC Regiment.   Numbers of Civil-Military Cooperation (CIMIC) and Media officers were also present. However, much of the increase is a result of unplanned or unconstrained augmentation, both in peace and war. 7th Armoured Brigade claims to have built an entirely duplicate command post (CP), which might be thought to explain the increased in numbers. Some level of redundancy is clearly required. However, HQ 4th Armoured Brigade also claimed to have had an entirely duplicate CP during Operation GRANBY, yet its staff was only the same size as 7th Brigade at the time. In fact, during Operation TELIC 35 members of HQ 7th Armoured Brigade were not duplicated, so the attempt was unsuccessful despite the numbers of personnel added. In addition, it was necessary to combine both CPs once the HQ remained static for long periods. Overall it appears that much of the apparent complexity of modern war stems in practice from the self-imposed complexity of modern HQs. It is most telling that the commanders of both commanders of both brigades saw a requirement for a personal staff officer (a military assistant or aide-de-camp), rather than relying on his COS. This seems to be the first time this has happened. None of the growth of staff numbers is a consequence of digitization.

18. *Staff Functions*.   A expansion of staff functions has been a major contributor to the growth of HQs.   In general, wherever a new function has been added a new post has been created. There is no evidence of multi-skilling or job integration, which would allow a number of staff functions to be carried out by a lesser number of staff. For example:

  a.   G1/G4 staff and watchkeepers are present to coordinate the activities of personnel, medical and logistic units. In the case of 7th Armoured Brigade, 2 maintenance watchkeepers and 2 medical LOs were added, for a total of 4 additional posts. It would have been possible to have created the same effect with fewer people if appropriate pre-employment training had been provided.

  b.   Information Operations is essentially the coordination of functions such as deception, media operations, EW and physical destruction in accordance with the commander's plan. Coordination of functions is a G3 task. In modern conflict operations will tend to move between combat and non-combat functions; the G3 staff should plan and coordinate that process.   There is a clear need for Information Operation skills in formation HQs, but that does not mean that extra posts should be created. It might instead mean revision to the pre-employment training of G3 staff.

  c.   Similarly it is difficulty to see a requirement for a 'deep operations' staff. There is an obvious requirement to coordinate fire; be it in deep, close or rear operations; and this falls naturally to the artillery staff. However, it is difficult to see why the branch which coordinates artillery fire in deep, close and rear

operations should also be exclusively responsible for divisional deep operations. The integration of effects is in the first instance a G3 responsibility.

      d.   In current British doctrine the G5 branch is responsible for civil-military functions, of which CIMIC is one[9]. CIMIC requires small, expert groups and will tend to be officer-intensive. There is without doubt a requirement for CIMIC groups in a modern land force in most circumstances. However, they should be seen as CIMIC *units* rather than *staff*. This would significantly reduce the apparent need for CIMIC staff in HQs.

The net effect of this expansion of functions is a requirement for time and effort to coordinate their efforts. This appears to have contributed to slow HQ tempo, producing orders which were too large and too late. One COS remarked on the emergence of 'an HQ within an HQ' in his command post, over which he had limited control.

19. *Functional LOs*. The British Army has not differentiated clearly between functional LOs and other elements of the staff. Functional LOs are present to provide technical advice, and to pass reports, returns and requests, typically at fixed times. One person can normally fulfil those functions. Conversely, if an HQ is to function continuously, the main 'G' staff branches must be manned on a 24-hour basis. Thus, in the case of 7th Armoured Brigade above, there is a clear need for 2 SO3 G3s. It is not clear that there should be 2 Bales, since air tasking is largely driven by the 72-hour Air Tasking Order process. It is probably true that the air cell at a brigade HQ needs 24-hour manning, and must overall coordinate air, aviation, AD battlespace management issues. However, a detailed task analysis would probably indicate that that requirement could be met by 2 or 3 people, not the 6 which were at first sight required. This reinforces the need to consider multi-skilling and job integration, suggested at Paragraph 18 above.

20. *Staff Ranks*. The normal working ranks in a divisional HQ in the British Army has generally been major and captain; and at brigade level, captain. There has been a gradual trend since the late 1980s to place lieutenant colonels in staff positions at divisional and even brigade HQs, and several majors into brigade HQs. This effect was exacerbated during Operation TELIC[10] and has several detrimental effects. The most serious is the tendency to over-plan, since these higher-ranking staff tend to be planners rather than being involved in current operations. It reduces the role of SO2s and SO3s; the latter reportedly at times almost to insignificance. The real effect in Operation TELIC was protracted, nugatory staff work. Lieutenant colonels do not perform the same functions as captains and majors.

21. *Excessive Planning*. There were several instances of HQs planning too much. The result was typically orders which arrived too late. Such planning tended to focus on the production of what were effectively contingency plans that were never executed. For

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[9]   To reiterate, the **G5** branch. ADP Command, Page 5-6 Table 5.1. In contrast, in Berlin until 1992 the G5 Branch was exclusively concerned with Military Government.
[10]   Both 7th Armoured and 16 Air Assault Brigade HQs contained in effect at least one supernumerary SO1; HQ 1st (UK) Armoured Division about 5.

example, HQ 1st Armoured Division produced a total of 4 Operation Orders, three of them before 21 March. Of those, the second and third covered contingencies which were not in the 1 MEF plan and which were never executed. A very large amount of nugatory effort was produced in planning for a contingency to seize and operate from an airfield at Qalat Siqar, well outside the Divisional area. One brigade HQ produced at least five contingency plans in a 48-hour period prior to 21 March. They used four unestablished plans officers working in shifts around the clock. Not one of those contingencies was executed. In part this was due to the way that the campaign plan had been translated into missions and orders.[11] Alternatively it may have resulted from recent teaching at staff college, which has tended to concentrate on the operational (joint or campaign) level and not pointed out the differences at the tactical (formation) level. A major consequence of excessive planning is the workload it imposes on subordinate HQs. Being smaller, they are even less able to cope.

22. *Effects*. Several staff officers referred to the disruptive effect of attending Course of Action briefs as part of this process. One brigade HQ pointed out on 4 March that Divisional orders contained insufficient detail for the operation they were about to undertake; whereas the Division had already provided a major nugatory contingency plan on 28 February, would produce another one on 11 March and update that on 15 March. Planning is only beneficial if it is well directed.

23. *Contingency Planning*. Divisional and brigade HQs should plan for the next operation, considered as perhaps 6-30 hours ahead for a brigade and 12-48 hours ahead for a division.[12] It is sensible, where possible, to plan for not just the intended next operation (the sequel) but also some alternatives (branches). Some eventualities could take place at any time; contingent orders should be considered to cover them. In the case of Operation TELIC the sequel (Phase 4 operations) and the most probable contingency (the seizure of Basrah) were not properly considered, whilst other possibilities were considered at great length.[13] One advantage of contingency planning is that it provides both mental rehearsal and a sharing of intent. MAPEXs have many of the same benefits. However, given that the real circumstances are never likely to be predicted accurately in advance, the subsequent generation of extensive plans will tend to be nugatory. A short fragmentary order giving only the outline of the contingency, possible missions and key coordinating detail might be entirely sufficient.

24. *Excessive Activity*. The overall impression from Operations IRAQI FREEDOM and TELIC is of HQs that were large and usually very busy but which produced relatively little output. A colonel observing one British brigade HQ noted that its staff was being 'fixed' by continuous calls for internal updates: 'they cannot work effectively with constant updates'. In another the COS was frequently overloaded by people asking him

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[11] See paragraphs 11-13 above.
[12] Staff Officers' Handbook, page 3-28-1. In the Second World War a division's planning horizon was essentially 'the next day', which implies 12-36 hours hence.
[13] During Operation GRANBY, HQ 1st Armoured Division was at risk of being swamped by having to respond to too many plan and orders from HQ VII (US) Corps. The GOC directed the priority of planning so as to respond only to essential issues.

unnecessary questions; people 'would not take no for an answer' unless it was personally from the COS. That may be because his SO3s' authority had been undermined by the presence of SO2s. Despite its augmented size HQ 7th Armoured Brigade provided only 8 fragmentary orders in the 18 days between 21 March and 6 April. In the same period the Divisional HQ sent 27 fragmentary orders[14] but of those 9 contained only miscellaneous coordinating detail. At its busiest the Divisional command net was carrying only an average of 5 messages per hour over a 12-hour period, with a maximum of 19 (roughly one every three minutes). Peacetime exercises suggest that rates of up to 50 messages per hour can be accommodated. At the same time there were several calls from subordinates for greater flow of information – meaning situation reports. The evidence strongly suggests that during Operation TELIC deployed HQs contained too many people, busied themselves with too much nugatory planning, but did not run well internally.

25. *Length of Orders*. In several cases the results of this process – the orders – were excessively long. At the beginning of a campaign or major operation relatively long orders are required. They often contain detailed information which is required as a one-off process. Instructions for the handling of enemy prisoners of war were an example in this case. However, at least one divisional and one brigade operation order doubled in size between their first and second editions. A detailed examination of its contents suggests that the increase was not justified. On one 25-page operation order, the Mission first appeared on Page 10. It was almost impossible to gain the sense of the order from reading it. Many fragmentary orders ran to 4 pages, simply because of the inclusion of numerous 'No Change' items. Several would otherwise have been less than 10 lines long. A battalion second-in-command reported that his unit HQ had produced an operation order one inch thick prior to G-Day, but that about an hour after the beginning of operation only one page was still relevant. Not only do long orders take time to produce, they take time to read and be acted upon. During the Cold War, brigade orders rarely exceeded 10 pages plus annexes, not least due to physical problems of reproduction. British HQs appear to have lost the art of brevity, and in places were telling subordinates how to do their business.

26. *Timeliness*. Much of this criticism would not affect operational effectiveness directly – it would simply keep excessive numbers of staff officers busy. However, the critical impact was that on important occasions the relevant orders were released too late. For example, 5 fragmentary orders regarding initial operations were released by the Divisional HQ on 21 March, the day after operations started. Operations to enter Basrah are another example. A fragmentary order warning of the possibility of entering Basrah was released by HQ 1st Armoured Division on 2 April. On 5 April the (battalion) battlegroups (BGs) of 7th Armoured Brigade received warning of an orders group, to be held on 7 April, concerning operations to occupy Basrah not before 8 April. Basrah fell on the morning of 6 April; 7th Armoured Brigade rushed out an operation order dated 0600hrs that day which acknowledged that some of the events in the order may already

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[14] A 'fragmentary order' is a relatively short document which contains changes to an extant operational order. They are usually issued in response to changes to the situation which do not require a completely new plan to be formulated.

have taken place. They had. The Divisional HQ rushed out a fragmentary order, which said very little of substance, dated 0815hrs. Thus neither the Division nor the Brigade had a contingency plan, in the shape of an order, to cover a contingency which had been discussed in February. However, both HQs clearly thought that one was required. Either the order was unnecessary, or it was too late. In those circumstances, it seems that short contingency plans written on perhaps 2nd or 3rd April would have been sufficient. Similarly, the Divisional HQ released its orders for Phase 4 – peace support operations – on 21 April, 15 days after Basrah fell. In the interim battlegroups were largely left to their own devices, and there was a lack of clarity of responsibility between, for example, the CO of in-place BG in Basrah, the commander and the staff of 7th Armoured Brigade, and the divisional artillery commander, who had been appointed to oversee military governance. Such criticisms are not unique to the British Army: a member of the HQ of 1st Marine Division commented that 'The planning cycle was way behind the execution being conducted by the forward commanders. Div HQ was still producing lengthy OPLANS and FRAGOs that were too late for the commanders, as they had already stepped off.'

27. *Battle Procedure*. It was commented on several occasions that orders were produced in parallel because warning orders and orders were consistently produced too late. In retrospect this appears as justifying poor battle procedure. Warning and operations orders from HQ 1 MEF appear to have been consistently late, which had an effect right down to subunit level. However, whilst some blame can be placed with higher HQs, intermediates do not seem to have taken control of the process at their own level for the benefit of their subordinates. In addition, those orders that were produced often contained inappropriate levels of detail. Old lessons concerning the need for timely and efficient passage of orders need to be reinforced.

28. *Summary*. Operation TELIC provides plentiful evidence that HQs have become too large; they contain too many branches; their staffs show a tendency to be over-ranked; and they tend to concentrate on planning, to the detriment of issuing timely orders and keeping subordinates informed. This appears to be at least in part because Staff College and Combined Arms Staff Trainers concentrate on planning, rather than the conduct of operations. On reflection it appears that we need to:

     a.   Reduce the size of deployed HQs;

     b.   Provide firm guidance and education to ensure that unconstrained re-growth does not occur;

     c.   Streamline HQ processes, with less nugatory planning and more effective passage of information, both internally and externally; and

     d.   Change the focus of training to concentrate on execution (in particular, decision-making under stress of time and information constraints, and passage of information) and less on planning.

All of these may benefit from an approach that includes task re-design and job integration, which will clearly have training implications.

TACTICAL MISSIONS AND ORDERS

29. Operation TELIC provided clear and well-documented evidence that current training is leading to missions, and orders generally, that are excessively long, confusing and hard to understand. Quite separately, they are inconsistent with the spirit and principles of Mission Command.[15] For example, in one order the stated mission ran over 20 lines. In two battlegroup orders (from different battlegroups) the 8 subordinate subunits were given an average of 8 or 9 tasks each. Instances of 12 or 13 tasks in a mission statement were noted. Such lists of tasks often had no stated purpose, which would make prioritizing between them impossible. The concept of operations was often verbose and lacked clarity. The statement of commander's intent often simply reiterated the mission (which reduces to 'I intend to achieve my mission'). Alternatively they were excessively complex: one intent statement ran over 7 lines and was then followed by further intent statements for each of 3 phases. Plans were often phased, when substantive activity only took place in one phase: arriving at the line of departure and reorganization are not substantive activity. In at least one case the order contained a 'desired end state', which simply repeated the mission. In several other cases mission statements contained multiple contingent tasks (as in 'be prepared to ...'), which were either implied tasks that need not be stated, or coordinating detail.

MISSION STATEMENTS

One example from Operation TELIC illustrates these difficulties. A battlegroup was tasked with securing part of Basra. The mission statement gave 8 tasks to a particular subunit, with the anodyne purpose 'in order to expel the Regime and set the conditions for transition to peace support operations.' The City had been subdivided into very small areas as a control measure. Examination of the mission showed that the first two tasks were adjacent terrain features; the third was to cross a feature which lay between them, the next two were similar implied tasks, the sixth was a coordination measure and the last two were contingencies. By re-drawing the boundaries to include the terrain of the first two tasks, the tasks in the subordinate's mission could have been reduced to 'Seize Objective A' and then 'conduct peace support operations in Area B'. The attached sketches illustrates the process. There were several similar examples.

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[15] Mission Command is the British Army's philosophy of command. It is explicitly linked to a manoeuvrist approach to operations which seeks to attack an enemy's will and cohesion rather than his strengths. It is essentially a decentralised style of command; its principles are unity of effort (underpinned by the concept of main effort), decentralization, trust, mutual understanding and timely and efficient decision-making. *ADP Command*, Army Code 71564, April 1995, paras 0210-0212.

Illustration:

In Figure 2, the subunit's objective is subdivided into areas CAT and DOG. Route SPADE runs between CAT and DOG. The tasks given in the mission statement produced during Op TELIC would read:
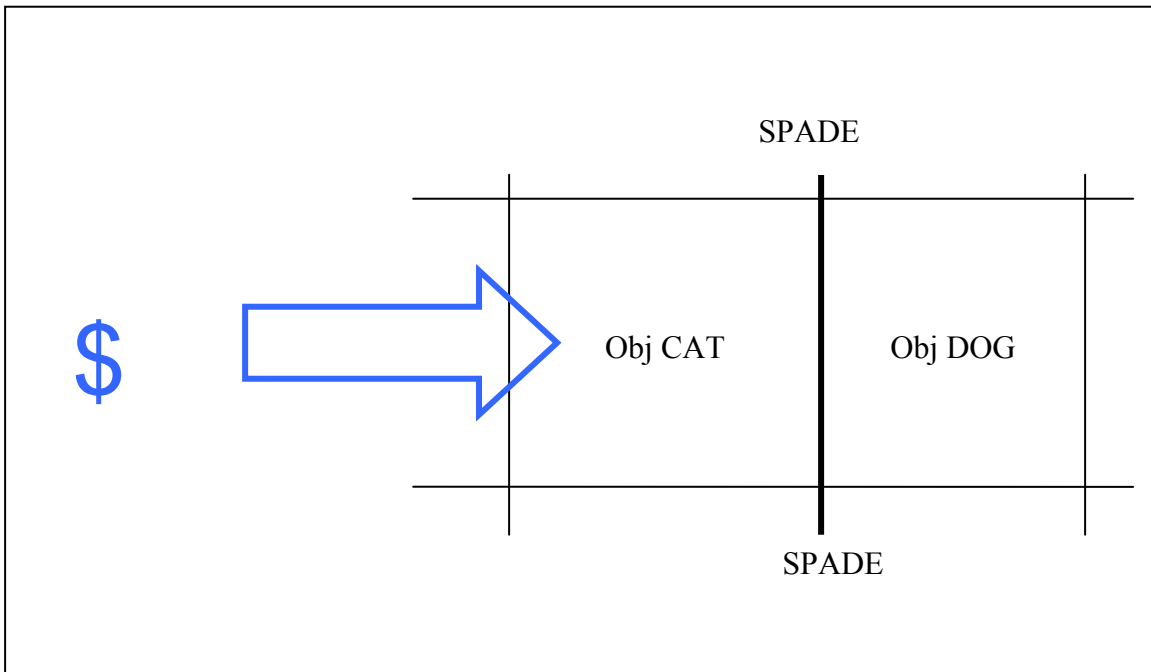
'a. Seize Obj CAT;
b. Cross Route SPADE within boundaries;

c. Seize Obj DOG;

in order to ...'

However, by simply re-drawing the boundary of the objective to include CAT and DOG (say, Objective LION), the task becomes simply:

'Seize Obj LION, in order to ...'

'Crossing SPADE within boundaries' becomes an implied task.

Figure 2: *Redrawing Boundaries to Simplify Mission Statements*

30. During Operation TELIC concepts of operations tended to be excessively lengthy; appear self-important; and contain statements of the obvious (reducing to 'I intend to achieve my mission').   At times they attempted to be inspirational in a manner which would work well face-to-face, but was lost when receiving the written order cold. A concept of operations and subordinates' mission statements together should rarely exceed two pages, and normally be considerably less than that. There is a clear requirement to clarify guidance for the content of orders, particularly missions and concepts of operations.

MISSION COMMAND

31. Commander's reports from Operation TELIC stress the importance of the philosophy of Mission Command, but on occasion state that there are times when detailed orders are required. However, the evidence is otherwise. **No examples of a need for close control were given**. Nor were any found subsequently. There is a need for careful and detailed planning on some occasions, particularly where subordinates must cooperate closely in time and space. At times significant constraints must be placed on a subordinate's freedom of action. However, neither of those are contrary to the spirit of giving clear direction to a subordinate, and then allowing him to execute it as he sees best. The fact that, for example, in doing so he may not cross a given line does not affect the philosophy of Mission Command. In practice, there is considerable evidence that execution was generally decentralized during Operation TELIC. What appears to have happened is that missions were not phrased clearly and simply, which overshadowed the real flexibility that in practice appears to have been afforded.

CIS

32. On Operation TELIC, the Clansman radio system struggled, but coped. 'Patron was inconsistent, Brent was overloaded, and most calls on Ptarmigan were weak and broken.'[16] The level of battlefield digitization was patchy and inconsistent, whilst the need for voice communications remained strongly apparent. Battlefield digitization was extremely limited. It had two major weaknesses: a lack of connectivity and the need for uninterrupted power supplies. BOWMAN radio, which will replace Clansman, is eagerly awaited. However, no case of critical loss of communications was noted. Systems seem to have worked, and current expectations appear to challenge the laws of physics. Expectations are often based on experience of static HQs using terrestrial landline or even fibre optic cables, which are simply not available in mobile operations.   US experience stressed the value of satellite-based communications to low levels of command, but even then found that video teleconferencing (VTC) had to be limited because of excessive use of bandwidth.   In general it seems that **traffic invariably expands to fill the available bandwidth**, not least because of the adoption of high-bandwidth systems such as VTC. Technical breakthroughs have been promised for decades, but do not appear to occur despite the introduction of much more technology and the complexity it brings. If anything the evidence is that headquarters have become

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[16]   A direct quote from a staff officer in a brigade HQ. Patron and Brent are deployable secure speech systems. Ptarmigan is the major land formation deployable CIS.

larger and less responsive. High bandwidth systems may have contributed to that. Information and bandwidth management will be critical aspects of digitization.

33. IT was deployed on British Army combat operations for the first time during Operation GRANBY in 1990-1, and huge progress has been made since then. Modern HQs could probably not function without it, but the progress of digitization is uneven. Relatively little IT exists at unit or battlegroup levels, and some aspects such as artillery and air defence have attracted more digitization than, say, logistics or battlefield engineering. Most IT systems are functionally 'stovepiped'. For example, artillery CIS can operate up and down the chain of command, but cannot interoperate with other battlefield functions.

34. One US battlefield IT system, deployed across the Coalition, had a marked impact. The Blue Force Tracker (BFT) automatically reported the location of all units equipped with transmitters to all HQs having a BFT monitor. For the British land contingent this typically meant transmitters at unit level and monitors at formation level. A screen shot of BFT is shown at Figure 3. Experience of BFT was mixed. High-level HQs (at corps level and above) were generally more in favour of it than units and low-level HQs. It did not provide sufficient detail to be a significant factor in avoiding fratricide. It displayed Coalition unit locations very accurately, but Iraqi unit locations were only as good as the most recent intelligence. Often this was very good; at times reports were badly out of date. One British HQ reported that the most important use of BFT was to display the location of US forces theatre-wide, providing a broad situation report. It seems likely that as more elements are issued with such systems, their perceived effectiveness will increase.

HEADQUARTERS ESTABLISHMENTS

35. The size, and growth in the size, of formation HQs was discussed above. Following Operation TELIC a number of proposals for increase to HQ establishments were made. The following proposals for enhancements have been noted:

Divisional HQ:	Brigade HQ: (1)	BGs:
(a)	(b)	(c)
- SO1 and SO3 Media Ops	- SO3 Information Ops	- BG Amb Offr (capt)
- Medical Ops Branch	- SO2 Medical	- Unit Press Officer (2)
- SO2 or SO3 ES Avn	- G5 cell (under armour)	- Armd Sqn battle capts
- SO1 Avn	- SO2 and 2nd SO3 Media	- SO3 Arty Ops (3)
- SO1 Air	- SO3 NBC	- A senior Medical Offr (4)
- SO1 G5 (CIMIC)	- Comd's MA or ADC	
- SO1 Div (Log) Sp Gp	- additional geo pte	
Total: 7-10 posts	Total: 8 posts	Total: about 6 new posts

Table 2 – *Suggested Enhancements to HQ Establishments*

[see next page}

Notes:

(1) For armoured brigades. 11 posts have been noted for 3 Commando Brigade.
(2) Permanently established.
(3) Vice the SSgt currently present.
(4) It being considered that unit   MOs are generally insufficiently experienced to both command unit medical assets and advise COs.

36.   British HQs are 4 times larger than they were in 1945.[17]   Although some increase has clearly been necessary, there is no convincing reason to explain such increase of that magnitude.   Analysis of archives suggests that incremental increases have occurred in largely unconstrained fashion almost continuously in the intervening period.[18]   As noted above, detailed analysis of task and functions does not adequately explain that growth. Whatever the merits of specific proposals, it is clear that uncontrolled and misguided augmentation of HQs has in the long run been detrimental to their function, and should be strongly constrained.

37.   The tendency to increase the rank held in a particular appointment should be particularly avoided. Greater trust should be placed on the quality and training of junior officers and NCOs, and enable them to gain the experience from the operations whilst still young. Any other trend is in the long run inevitably self-defeating.

DIVISIONAL HEADQUARTERS

38. In part due to the increased size of divisions, the number of combat support and combat service support subunits[19] has grown, and with that the HQ has also grown.[20] For example, in the Second World War there were effectively four engineer, four logistic support and three maintenance companies in a typical British division.   Within the divisional area today there would be nine logistic support, eight maintenance and up to 20 engineer subunits. As a result there are several units of those arm and services,[21] and the head of branch at divisional HQ is a colonel; in 1944-5 he would have been a lieutenant colonel.   For comparison:

[see next page]

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[17]   Establishment Table II/110/3 effective 30 Nov 43; together with II/104/3 effective 8 Dec 43, III/181/2 effective 10 Dec 43, II/261/2 effective 24 Feb 43, II/290/1 effective 7 Dec 43 and II/215/1 dated 20 Feb 45.
[18]   MoD Historical Branch (Army) letters HB(A) 6/3 dated 1 Dec 98 and 21 Apr 99.
[19]   Combat support: for example, artillery, air defence and engineer. Combat service support: for example, personnel, supply, maintenance and medical.
[20]   During the Second World War a division was typically 11-16,000 men strong, without the 'divisional slice' of Corps and Army troops. A similar division today is 20-25,000 men strong.
[21]   Typically, 4 engineer, 2 logistic support and 4 maintenance battalions.

Ser.	Appt (1)	Br Div 2002-3	Br Div 1944-5	Third US Army 1944-5
(a)	(b)	(c)	(d)	(e)
1.	COS	Col	Lt Col	Maj Gen
2.	DCOS	Col	Lt Col	None: Army G1 and G4 both Cols.
3.	Comd Arty	Brig	Brig	Col
4.	Comd Engr	Col	Lt Col	Col
5.	Comd Maint	Col	Lt Col	Col
6.	Comd Log Sp	Col	Lt Col	Col

Table 3 – *Comparison of Ranks*

Note:

(1) Shows nearest equivalent for British Second World War divisions.

Current divisional HQ organization is in some aspects nearer to that of a Second World War army than that of a division. This is not unique to the British Army; in 2004 the G1-4 Branches of a US division are led by lieutenant colonels, whereas they were led by majors in 1945. In the Second World War a head of arm or service (for example, the engineer and maintenance commanders) was in practice the CO of a battalion-sized unit of about 3-4 companies. Because the nominal organization of divisions has become considerably bigger, there are now several such units (typically discriminated between 'close' and 'general support'), with a colonel's staff to coordinate them. That would be entirely justified if such a division at full scale were ever deployed. However, only 2 Army brigades were deployed for both Operations GRANBY and TELIC, and the existing staff structure was adapted to fit.[22] On reflection:

a. If the Army expects that it will not generally send more than 2 brigades on a large-scale operation, there might be scope for rationalizing the command chain and reducing rank representation.

b. It cannot be said that a unit commander cannot also function as the arm or service advisor to a divisional commander. That practice was the norm during the Second World War, because the mission of the unit was identified as that of supporting the division, as a British divisional HQ and Signal Regiment still does today.

c. Similarly, the apparent complexity of modern war should not be used to justify increased rank representation. As previously discussed, that apparent complexity is at least in part a consequence of the real complexity of HQs. Any such argument is self-fulfilling.

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[22] The attachment of a third brigade (3 Commando Brigade) in the case of Operation TELIC cannot be taken to justify retaining those rank levels, since the internal rank structure of 3 Commando Brigade is appreciably greater than that of an Army Brigade. The two cannot be justified simultaneously

39. The responsibility of G1 and G4 staffs appears to have shifted, and the results have been detrimental. Until the early 1980s the DCOS of a British formation was called the 'Deputy Assistant Adjutant and Quartermaster General'. Together with his staff he actively controlled all personnel and logistic assets in the formation.[23] They now largely see themselves as being responsible for planning and coordination of personnel and logistic functions from the formation HQ. This leaves a gap in the control of the formation logistic units, and a consequent wish to appoint further officers to that function. For example, Table 2 reflects a wish for an extra SO1 to run the Divisional (logistic) Support Group, and the HQ of a close support logistic battalion became in effect the HQ of the Brigade (logistic) Support Group for 7th Armoured Brigade. During the Second World War those jobs were done by the logistic support battalion and company commanders respectively. This suggests that there may be grounds for concern in relation to the staffing of future Army structures

40. During Operation TELIC, HQ Artillery 1st Armoured Division had relatively few resources. Initially, the divisional Offensive Support Group (OSG) had just one (self-propelled) artillery battalion was under OPCOM, but in practice that battalion supported 7th Armoured Brigade for much of the operation. The only other unit in the OSG was a close air defence battalion, which was subsequently re-roled for rear security operations. Nevertheless the Deep Operations Cell in Divisional HQ was augmented by 4 lieutenant colonels. Whilst it is dangerous to draw too many conclusions from a single operation, the appointment of a brigadier as divisional artillery commander with a large and potentially increasing staff should not necessarily be taken as a model for the future.

AFTER-ACTION REVIEW

41. The British Army's analyses of previous wars and campaigns show common shortcomings. Unit and formation reports, perhaps with commendable loyalty, show a tendency to avoid criticism of superiors. This has a cost. Weaknesses are glossed over, and overall reports tend to stress the positive rather than provide a balanced view. This is especially true where reports are aggregated to higher levels. Important facts are omitted, and it is normally impossible to gain an understanding of combat operations at subunit levels. For example, the Kirke Report into the lessons of the Great War was not published until after the death of Field Marshal the Earl Haig[24] in the 1930s; and the available military records of the Falklands Conflict omit several key details, which are recorded in published books. In addition the production of such reports is usually slow. It was not always so: during the Second World War the British Army regularly published extracts of combat lessons identified within a few weeks of the start of a campaign.[25]

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[23] For example, Maj Gen (retd) Keith Spacie, formerly DAA and QMG of 16th Parachute Brigade, personal communication.
[24] The CinC of British Armies in France in WW1.
[25] During Operation HUSKY, the Allied invasion of Sicily, the War Office published and distributed tactical lessons after 5 weeks of an 8-week campaign. Without this, valuable lessons would not have been available in time to influence operations for the Normandy landings in June 1944.

42.   Many of these shortcomings were seen during Operation TELIC. Published unit reports rarely criticize their superior HQs[26]; an outbreak of Diarrhoea and Vomiting which ran to over 1,000 cases by 15 May was largely overlooked; and detail down to subunit level was largely missing. For example, 1 RRF Battlegroup was attacked several times in up to battalion strength supported by tanks; this is not recorded in its commander's diary. The MOD 'First Reflections' document stated that mobilization of Reserves 'proceeded smoothly', which is not a balanced view of the truth. It was similarly disappointing to see a MOD Corporate Communications brief produced as late as December 2003 which said that the 'the UOR programme was a major success'; which was also a somewhat optimistic assessment. It also said that reservists should, in future, be given 21 day's notice of mobilization and that this was 'up from 14 [days]'. Whilst that statement is true as a reflection of intent, it hides the fact that in mobilisation for Operation TELIC many reservists got considerably less than 14 days' notice.

CONCEPTS AND DOCTRINE

43.   The terms 'Effects-Based Operations' (EBO) and 'Networked-Enabled Capability' (NEC) are not found in extant British doctrine.   They are at most statements of policy, concepts or aspirations. Thus the use of the term 'effects-based' in connection with Operation TELIC is hollow and unnecessary. To ascribe useful meaning to those terms in the context of Operation TELIC is premature. It does not reflect the way in which the commanders and staff were trained, and so any use of such terms should be taken with caution. It is also unfortunate to see such terms paraded with only flimsy justification. For example, smart munitions are of themselves not network-enabled. The use of statistics concerning the increased use of precision-guided munitions as evidence for the efficacy of NEC during Operation TELIC was not justified, and in this case probably not justifiable.   Public reports of Operation TELIC have at times indulged in the overenthusiastic use of such terms without proper justification. The risk is that such usage is subsequently used to support policy or doctrine, without a proper basis in observed fact. EBO and NEC are emerging *concepts*, which may require doctrinal codification after further study.

OBSERVATIONS AND CONCLUSISONS

44.   British Brigades and Battlegroups displayed considerable effectiveness during the period of warlike operations in Iraq in 2003. They operated for 15 days after the fall of Basra without an extant operation order. They worked well, which is to their credit. It suggests that British low-level tactical doctrine, and their experience, allowed them to work purposefully. However, it indicates that much of current HQ processes, and the orders thus produced, are nugatory. Subordinates can and did work adequately without much of them. Much of the activity observed in HQs did not lead effectively to useful output.   Staffs have become too big, and some judicious reduction is required. Shortcomings in the way various doctrinal processes, such as formulating mission statements or the exercise of mission command, require further thought.

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[26]   However, adverse criticism can be found in commander's diaries.

45. This Paper has tried to avoid presenting any negative impression of the individuals involved. Coalition land forces, including the British, performed well. Shortcomings, where observed, were not due to stupidity or ignorance; they probably reflect doctrine, teaching and training that needs to be revised. The material used in this paper has already informed the British Army's review of HQ structures.[27] The precise conclusions to be drawn by members of an international forum such as the ICCRTS will vary from nation to nation and service to service, since any such conclusions will depend on organizational context and culture. This paper is offered to the CCRP in order to foster debate and discussion, and so no further conclusions are offered here.

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[27] May 2004.