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Deterrence and the defence of Central Europe : the British role from the early 1980s to the end of the Gulf War.

Lee, Sangho

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DETERRENCE AND THE DEFENCE OF CENTRAL EUROPE: THE BRITISH ROLE FROM THE EARLY 1980S TO THE END OF THE GULF WAR

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ABSTRACT

The purpose of this thesis is to examine the reforms in the British Army and NATO's Northern Army Group (NORTHAG) during the 1980s. The highlight of the reforms was to change the force disposition of the British-led NORTHAG and adopt a new operational concept for the army group so as to allow it to undertake more offensive and manoeuvre-oriented defence. Also, the recognition that the envisaged concept required close coordination with the Air Force ultimately led to the formal adoption of the Land/Air Battle concept.

The reforms were prompted by improvements in the Warsaw Pact (WP) nuclear and conventional capabilities--in particular, its perceived ability to launch a surprise attack. The British Army thought that NATO's deterrence was losing credibility in this situation, and that NATO's forward defence strategy involved unacceptable vulnerabilities and constraints. As a result, the British insisted that forward defence be reinterpreted.

In Britain, the way the changes were introduced by reformers, such as Nigel Bagnall, prevented the formation of any tangible opposition within the military. The reforms also enjoyed strong government support at the time. Although the issue became a major focus of debate and dispute with the Germans, who saw the British reforms as a move that might compromise the defence of Germany, this obstacle was overcome and the reforms were duly implemented.

In this thesis, I discuss all these issues in detail in order to provide the first comprehensive study of the subject. This allows for detailed discussions and analyses of the content, motivation and context of the reforms from their conception in the early 1980s to the end of the Gulf War (when the validity of the reforms was successfully tested for the first, and probably, last time). This

thesis reveals significant new information, from interviews and other sources, and thereby facilitates a clearer understanding of the developments in the British Army and NATO's conventional strategy during the 1980s.

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Field Marshal Sir Nigel Bagnall and General Sir Martin Farndale very kindly agreed to see me numerous times, and I am therefore deeply indebted to them for their complete cooperation, without which this thesis would have been impossible. Field Marshal Sir Peter Inge, and others in the British and other NATO Armies and Air Forces, also made time in their extremely busy schedules for interviews. In addition, I would like to mention people and staff in NATO, SHAPE (Supreme Headquarters Allied Powers in Europe), the British and German Ministries of Defence, the Belgian, Royal Netherlands and US Embassies, and the Army Staff College (the Higher Command and Staff Course) at Camberley, for their invaluable assistance in arranging interviews and finding many information.

The sponsorship offered by the following organisations: the British government (I was the sole recipient of the FCO--Foreign and Commonwealth Office--Flagship Award); the Irwin Fund; the KRIS (Korea Research Institute of Strategy), and Hunting Engineering Ltd., enabled me to concentrate on my work undisturbed by practical or material concerns. I am therefore extremely grateful for their generous contribution to the completion of this thesis.

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Sangho Lee

August 1994

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LIST OF ABBREVIATIONS

AAA Anti-Aircraft Artillery

AAFCE Allied Air Force Central Europe

ACE Allied Command Europe

AD Air Defence

ADP Automatic Data Processing/ Army Doctrinal Publication

AFCENT Allied Forces Central Europe

AFM Army Field Manual

AFNORTH Allied Forces Northern Europe

AH Attack Helicopter

AI Air Interdiction

AKA Armoured Killing Area

APC Armoured Personnel Carrier

ARRC Allied Rapid Reaction Corps

ATACMS Army Tactical Missile System

ATAF Allied Tactical Air Force

ATGW Anti-Tank Guided Weapon

AWACS Airborne Warning and Control System

BAI Battlefield Air Interdiction

BAOR British Army of the Rhine

BATUS British Army Training Unit Suffield

BMD British Military Doctrine

C² Command and Control

C³I Command, Control Communication and Intelligence

CAS Close Air Support

CASTOR Corps Airborne Stand-Off Radar

CDI Conventional Defence Initiative

CDS Chief of the Defence Staff

CENTAG Central Army Group

CEPS Central European Pipeline System

CGS Chief of the General Staff

CINCENT Commander-in-Chief Central Europe

CINCUSAREUR Commander-in-Chief United States Army in Europe

CMF Conceptual Military Framework

COM2ATAF Commander Second Allied Tactical Air Force

COMBAOR Commander British Army of the Rhine

COMNORTHAG Commander Northern Army Group

COS Chief of Staff

CPX Command Post Exercise

DPC Defence Planning Committee

DROPS Demountable Rack Off-loading and Pick-up System

ECM Electronic Counter Measure

EEC European Economic Community

ERW Enhanced Radiation Weapon

ESECS European Security Study

ET Emerging Technology

EW Electronic Warfare

FAR Force d'Action Rapide

FEBA Forward Edge of the Battle Area

FLOT Forward Line of Own Troops

FOFA Follow-On Forces Attack

FRG Federal Republic of Germany

FTX Field Training Exercise

GDP General Defence Plan

GOC General Officer Commanding

GSFG Group of Soviet Forces in Germany

HCSC Higher Command and Staff Course

HIC High Intensity Conflict

HQs Headquarters

HUMINT Human Intelligence

IGB Inner German Border

INF Intermediate-range Nuclear Forces

ITO Individual Training Organisation

J-STARS Joint Surveillance Target Attack Radar System

JTIDS Joint Tactical Information Distribution System

LIC Low Intensity Conflict

LOC Line of Communication

LRRP Long-Range Reconnaissance Patrol

LTDP Long-Term Defence Programme

MBT Main Battle Tank

MC Military Committee

MDA Main Defensive Area

MICV Mechanised Infantry Combat Vehicle

MLRS Multiple Launch Rocket System

MoD Ministry of Defence

MTI Moving Target Indicator

NATO North Atlantic Treaty Organisation

NOD Non-Offensive Defence

NOE Nap-of-Earth

NORTHAG Northern Army Group

OAS Offensive Air Support

OCA Offensive Counter-Air

OFC Options for Change

OMG Operational Manoeuvre Group

PGM Precision Guided Munitions

POL Petrol Oil and Lubricant

POMCUS Pre-positioning of Material Configured in Unit Sets

RAF Royal Air Force

RAF(G) Royal Air Force (Germany)

REFORGER Return of Forces to Germany

RN Royal Navy

RPV Remotely Piloted Vehicle

SACEUR Supreme Allied Commander Europe

SALT Strategic Arms Limitation Treaty

SAM Surface-to-Air Missile

SHAPE Supreme Headquarters Allied Powers in Europe

SLAM Stand-off Land Attack Missile

SNF Short-range Nuclear Force

SOP Standard /Standing Operating Procedure

SP Self-Propelled

TA Territorial Army

TDC Tactical Doctrine Committee

TNW Tactical Nuclear Weapon

TVD Soviet Theatre of Military Operations

WP Warsaw Pact

CHAPTER 1

INTRODUCTION

1.1. SCOPE AND PURPOSES OF THE RESEARCH

Britain's effort to strengthen deterrence, as well as the defence of Central Europe, was particularly significant in the 1980s. The stance of Margaret Thatcher's new Conservative government on a strong defence through the North Atlantic Treaty Organisation (NATO) facilitated the initiation of many reforms at various levels of the British defence establishment and military. At the strategic level, the new government quickly moved to adopt the Trident programme in order to enhance the British contribution to NATO's nuclear deterrence. At the conventional level, a major review of British conventional forces was instituted, the aim of which was to streamline the three services of the British military to accommodate the new government's emphasis on the continental commitment. This resulted in the 1981 Defence Review, The Way Forward, under which the capacity of the Royal Navy (RN) was severely cut since it was viewed as of lower strategic priority, whilst the British Army and the Royal Air Force (RAF) escaped with only a minor reduction in strength as their role in the defence of the Central Front was viewed as crucial in implementing the government's renewed focus. 1 This reflected the desire to play a greater role in Europe by confirming that the security of Britain critically depended on the NATO Alliance, and that this goal would be best served by a stronger British military presence on the Central Front as it would strengthen both Alliance cohesion and Britain's position within NATO.²

¹ David K. Boren, <u>Britain's 1981 Defence Review</u>, (Doctoral Thesis, King's College London, 1993), p.3.

² See Michael Dockrill, <u>British Defence Since 1945</u>, (Oxford: Basil Blackwell, 1988), pp.114-5; Michael Chichester and John Wilkinson, <u>The Uncertain Ally</u>, (Hampshire: Gower, 1982), p. 63; John Baylis, <u>British Defence Policy</u>, (New York: St. Martin's, 1989), pp.23-4; and Boren, op. cit., p.8.

While this series of changes was being announced as a result of the renewed emphasis on governmental security priorities, there was a less publicised development in the British Army. It was committed to frequent radical reforms in an attempt to enhance its conventional capability, and ultimately, to delay the use of nuclear weapons in defence by winning the first battle against possible Warsaw Pact (WP) aggression with conventional means alone.³

However, this development was neither influenced by the government's new aspiration, nor was it a mere 'face-lift' on behalf of the British Army to restructure its forces in order to accommodate the shift in the government's strategic priority as in the past. Unlike the past, when such a ritual was the norm following each defence review, and which usually resulted in cuts in defence spending, the main aims of the reforms were fundamentally different from previous changes.⁴

They were focused on altering not only the physical composition of the Army but also its mentality in general--the way in which the British Army planned and prepared to fight a major war in Europe. In other words, the reforms were designed to transform the Army from a defensive and passive-minded institution to an active one which would actually be capable of undertaking defence without a heavy reliance on the use of nuclear weapons. This reflected a newly-reinforced desire in the Army to defend Central Europe by conventional forces alone and put aside nuclear weapons to their originally envisaged role--deterrence. 5 Thus, the paramount requirements for the reforms

³ Interviews, Field Marshal Sir Nigel Bagnall on 5 May 1993 and General Sir Martin Farndale on 14 April 1993.

⁴ Interview, Bagnall on 5 May 1993.

⁵ Interviews, Bagnall on 5 May 1993 and Farndale on 14 April 1993.

were to strengthen the Army's conventional capacity with the help of better planning, education, and new technology to maximise its war-fighting potential.

The highlights of the reforms were: a) the modification of the force dispositions in NATO's British-led Northern Army Group (NORTHAG); and b) the adoption of a new army group defence plan and operational concept. The most important aspect was the acceptance of a joint land/air mobile warfare concept, which exploited manoeuvre principles at the operational level in close coordination with the air force in support of land operations. This required the formulation of a jointly-agreed concept of operation understood throughout NORTHAG and 2 Allied Tactical Air Force (ATAF) in order to enable the army group to fight a single operational battle. The resulting concept was called 'Land/Air Battle'; its counter-offensive concept was also known as 'counter stroke.'

The reforms were most strongly advocated by Field Marshal Sir Nigel Bagnall, who was Commander Northern Army Group (COMNORTHAG) and later Chief of the General Staff (CGS). He felt his task was to eradicate the passive nature of NORTHAG's defence through the reforms; this was to be achieved within the existing resources; consequently, *do more with less* became his motto.

For Bagnall, the only logical way to achieve his task and repel the enemy first operational echelon attack was to enable NORTHAG to conduct an offensive mobile defence against the WP. In turn, this called for the creation of a large army group reserve to be held in the rear to launch a major operational

⁶ See Nigel Bagnall, "Airmobile Operations in Northern Army Group," <u>NATO's Sixteen Nations (NSN)</u>, (October 1988), p.75.; and "Concept of Land/Air Operations in the Central Region I," <u>Journal of the Royal United Service Institution (RUSIJ)</u>, (September 1984), pp.59-62. See bibliography for abbreviations.

mobile counter-offensive aimed at defeating the WP first offensive. Besides containing a WP attack in the early stages without the use of nuclear weapons, this approach also aimed at recovering lost NORTHAG territory and deterring further attacks, either by the threat or the execution of the army group reserve counter offensive. 8

Despite the fundamental and continuing importance of these reforms, they have hitherto been little known outside the Army. As a result, although these developments deserve a comprehensive review, they have not yet been subjected to any in-depth study. This is perhaps partly because of the existence of more controversial issues like the Trident deterrent, which aroused greater public interest. One must also remember the secret and highly-insulated nature of the developments, the details of which were obviously shielded from the public and media. It is only possible to write a detailed study on the subject *now* because the enemy, the WP, has disintegrated.

Such literature, as is already available on the reforms, is often limited and inaccurate. Many of the published sources (both primary and secondary) on the subject offer little more than a simple introduction to the changes. There is also quite a sense of confusion in the writing, and particularly in that of outside

⁷ See Bagnall, 1984, p.60. Also interview, Bagnall on 5 May 1993.

⁸ Interviews, Bagnall on 5 May 1993 and Farndale on 14 April 1993.

⁹ For example, the writings by academic and civilian observers which discuss the subject in some details, or make a reference to the changes in the British Army concept of operation, include: Chris Bellamy, The Future of Land Warfare, (London: Croom Helm, 1987); Richard Simpkin, Race to the Swift, (London: Brassey's 1985); Wyn Rees, "Britain and NATO," in Peter Byrd, ed., British Defence Policy: Thatcher and Beyond, (London: Philip Allan, 1991); M. Niklas-Carter, "NATO's Central Front," in J.P. Harris and F.N. Toase, ed., Armoured Warfare, (London: Batsford, 1990); and Hugh Faringdon, Strategic Geography, (London: Routledge, 1989).

observers. Even pieces written by the people who were involved in the reforms are often deliberately ambiguous. This is particularly so with the details of the scope of the operation and its implementation, such as the composition and specific tasks of the operational reserves. Therefore, it is necessary to shed new light on already available information on the reforms in order to facilitate the correction of misunderstandings and provide more information which would help to substantiate some of the claims.

Further objectives of this thesis are to provide the historical background of the changes and to examine the extent to which they stemmed from certain individuals (not just leading Bagnall, but also his successors COMNORTHAG, General Sir Martin Farndale, General Sir Brian Kenny and Field Marshal Sir Peter Inge), as well as what prompted the reforms. Also, the question arises about whether the implementation of the reforms, which caused many potentially destabilising disputes in the Alliance, was a risk worth taking. In this sense, particular attention will be paid to the West German perspective and the causes of their initial opposition, as well as to an overall discussion of the context of the debates and oppositions.

In addition, I shall try to identify the context and content of the reforms. This will involve the description of specific changes in the operational concept, weapon systems, organisation and other related fields, such as education, logistics, etc. The main questions here are what the specific topics and aims of the reforms at the various stages of military operations were, and above all, whether the implementation of the reforms within NORTHAG's existing resources was feasible.

These processes will lead to the answers to the most important questions of this thesis: a) how successful were the reforms?; and b) what are their consequences for the British Army in the post-Cold War world? Also, they will

allow the examination of a few crucial issues, hitherto excluded from open discussion: a) would the Germans have been content with restoring the original status quo, or did they secretly hope to achieve the reunification of Germany once the war got underway?; b) did not the offensive nature of the NORTHAG counter offensive concept in fact serve such a German aspiration rather well?; and c) as a result, did it not provide an impetus for fostering a different outlook in the Alliance, and especially in Germany, at variance with the fundamental ethos of forward defence?

In order to undertake a comprehensive historical survey to answer all the above questions and fulfil the aims of the research, this thesis primarily covers the ten years between 1981 and the fall of the WP and the end of the Gulf War in 1991. This time frame is an ideal way of supplying a broader perspective on the reforms because it was in 1981 that the reforms were initially introduced to, and began to be implemented in, the British Army with Bagnall becoming the British corps commander. Although the reforms were essentially completed in 1989, after the endorsement of the army group Standing Operational Procedure (SOP) in 1988, the fall of the WP in 1991 signalled that the Army was moving into an entirely different environment as the threat evaporated. ¹⁰ It is appropriate to end with a review of the British performance during the Gulf War, because with the major threat gone in Europe, it provided what was probably the first and last opportunity to test the validity of Bagnall's reforms.

¹⁰ See Martin Farndale, "The Operational Level of Command," <u>RUSIJ</u>, (Autumn 1988), p.24. (Farndale, 1988--A)

1.2. SOURCES

Primary sources are very limited due to the restricted access to documentary sources. There are practically no official accounts and records of the British government and Parliament dealing directly with the reforms as they are concerned either with finances, or with government policy in the Alliance. 11 The only official sources which actually deal with the subject directly are those records kept in the Army, but most of them are not available for reasons of security. 12

The only open writings which deal with the reforms are monographs which were published via the Army Staff College and a few collections of essays by senior officers in the British Army. ¹³ Although they are technically secondary publications, they should be categorised as primary sources for this research, because in fact they deal with the reforms in the British Army directly. Moreover, they were written by officers who underwent the Higher Command and Staff Course (HCSC), which was established as a result of the reforms.

¹¹ For example, issues concerning the British Army are found in House of Commons (Hansard), <u>Debate on Army</u>, (London: HMSO, Various Years). There are also special reports from the Defence Committee on specific issues. See <u>United Kingdom</u> in <u>Primary Sources</u> section in bibliography for details. Otherwise, Ministry of Defence, <u>Statement on the Defence Estimates (SD)</u>, (London: HMSO, Various Years) are the major sources of information.

¹² There is actually an exception. For example, Army, <u>Design For Military Operations: The British Military Doctrine (BMD)</u>, Army Code (AC) 71451, which is the official Army doctrinal pamphlet, is not restricted material.

¹³ Thomas Boyd-Carpenter, ed., <u>Conventional Deterrence into the 1990s</u>, (London: Macmillan, 1989), J.J.G. Mackenzie, and Brian Holden Reid, ed., <u>The British Army and the Operational Level of War</u>, and <u>Central Region vs. Out-of-Area-Future Commitments</u>, (London: Tri-Service Press, 1990); Brian Holden Reid and Michael Dewar, ed., <u>Military Strategy in a Changing Europe</u>; and Brian Holden Reid, ed., <u>The Science of War</u>, (London: Routledge, 1993).

The timing of the writing of this thesis has enabled me to take advantage of a lot of new information from two specific primary sources, which would otherwise have been unattainable if the WP still existed. Firstly, a handful of the official documents of the British Army concerning the subject have been released exclusively for the purpose of this research. I did not deliberately seek classified information, although a few people graciously went to the trouble of allowing me access to a few restricted documents upon my request. ¹⁴ Unfortunately, these are limited both in number and content. For example, only ten of the previously restricted documents became available to me, and some of them were clearly edited prior to their release. Above all, the amount of primary information in documentary form is too little to be used as a major source. Nevertheless, it proved invaluable as it contained the raw information through which I was able to verify or dispute some claims made both during the interviews and in other secondary written sources.

Secondly, it was possible to conduct a number of interviews with those people who were directly involved in formulating and implementing the reforms. In fact, these interviews are the single most important information source of this thesis. The first group of interviewees consists of those who exercised exclusive authority over the implementation of the reforms. They include the prime architect, Bagnall, and the three COMNORTHAGs who served after him. The second group includes the in-service officers of both the British Army and the RAF, from senior officers down to the rank of Major, who have been implementing the reforms in the front-line. Their testimonies and opinions have been invaluable in assessing the impact of the reforms throughout the ranks and

¹⁴ See <u>Private and Unpublished Papers and Documents</u> section in bibliography for examples.

services. The third group consists of the officers of other NORTHAG armies (Germany, the Netherlands and Belgium). Interviewees include two former CINCENTs (Commander-in-Chief Central Europe) and Chiefs of Staff (COS) of the Bundeswehr and other ranks down to Colonel. The last group is made up of former senior officers of the British Army, who remained keen observers of the changes, and civil servants, who have in-depth knowledge of the subject by having been involved in the implementation of the reforms at the governmental level. 15

As the reforms were a recent development, the memories of those interviewees were fresh, and they were usually able to provide specific details. Sometimes, there was more than one interview with a particular person. I have been fortunate in many ways in securing so much detailed information through them, because, with the demise of the WP, many of them felt comfortable enough to give detailed testimony on the reforms without hesitation. I have tried to verify the information gathered in interviews by cross-referencing with other testimonies or with written sources, if they were available. As mentioned, the primary documentary sources were particularly useful for this purpose as I have tried to provide dual sources for each statement. However, due to the overall scarcity of the information, most of which is still shielded from the public, some of the assertions simply cannot be verified. The major drawback then is that sometimes there is no way to check some claims, or to research contradictory statements made during interviews. Also, it forces some information to be narrated without a critical review process. Consequently, the construction of a framework for analyses must sometimes depend on the claims made during interviews, sometimes utilising the critiques used by those people as the basis to

¹⁵ See bibliography for details.

construct my own arguments. Hence, the primary focus of the thesis is on a historical review of the reforms, with limited scope for critical analysis.

As discussed earlier, the lack of publicly available information has meant a limited range of literature concerning the subject in secondary sources. ¹⁶ There are a few articles available in military journals, such as the <u>Journal of the Royal United Service Institution</u>, written by those who were involved in the formulation of the concept. They are mostly focused on the implementation of the concept and reforms. ¹⁷ There is also a handful of articles which discuss the broader aspects of the theoretical and operational facets of the new concept. ¹⁸ However, with the exception of Colin McInnes' well-informed introductory pieces on the subject, few other non-military sources are available, ¹⁹ and even they fail to provide enough details for readers to understand the reforms.

Although there is ample material concerned with the general developments in the British Army, including broad discussions on recent

¹⁶ For example, many issues of <u>British Army Review (BAR)</u>, which is one of the most widely-read in-house publications in the British Army, are in fact 'technically' restricted as they carry a "Restricted" classification.

¹⁷ For example, Bagnall's articles cited in Note 4 discuss the aims of his reforms, while Patrick Hines's article, "Concepts of Land/Air Operations in the Central Region II," <u>RUSIJ</u>, Vol.129, No.3, (September 1985), pp.63-66, outlines the role of the RAF in Bagnall's initiative.

¹⁸ See two articles by Martin Farndale, "Counter Stroke: Future Requirements," RUSIJ, Vol.130, No.4, (December 1985), pp.6-9; and 1988--A. Also see Halberdier, "Counterstroke-An Option for the Defence," BAR, No. 73. (April 1983), pp.30-32. This was the first discussion in a British military journal on the subject.

¹⁹ The writings of Colin McInnes on the subject are: "Conventional Forces," in Stuart Croft, ed., <u>British Security Policy</u>, (London: Harper Collins, 1991); <u>NATO's Changing Strategic Agenda</u>, (London: Unwin Hyman, 1990), and "BAOR in the 1980s: Changes in Doctrine and Organization," <u>Defense Analysis</u> (<u>DA</u>). Vol.4, No.4, (1988), pp.377-394.

developments and some in-depth analysis of the issues (from the tactical and operational philosophy of the Army to new weapon systems), it is not directly concerned with the reforms--although it incidentally touches upon some aspects. The material is mostly written by people who are more or less directly affiliated with the British Army and the other armed forces. Consequently, it is found most often in in-house journals of the British (and sometimes American) military or in special interest and government-sponsored publications.²⁰

Far more secondary sources are available on the theoretical discussions relevant to the new concept, but they vary a great deal in both temporal and spatial scope. Historical background on the subject is also abundant, ranging from works which provide a detailed chronology and analyses of various wars in the twentieth-century to the memoirs of many who were involved in those conflicts. 22

²⁰ See the beginning of Article section in bibliography for the list of titles.

²¹ For example, the following monographs deal exclusively with concepts and theories of modern warfare, especially theories of manoeuvre warfare and the operational level of war. Christopher Bellamy's two books: The Evolution of Modern Land Warfare, (London: Routledge, 1990), and The Future of Land Warfare; John English, On Infantry, (New York: Praeger, 1981); Robert Leonhart, The Art of Maneuver, (Novato: Presidio, 1991); William Lind. Manoeuvre Warfare Handbook, (Boulder: Westview, 1985); Edward Luttwak, Strategy, (Cambridge: Harvard University Press, 1987); John Mearsheimer, Conventional Deterrence, (New York: Cornell University Press, 1983); Richard Simpkin, Race to the Swift; F.W. Von Mellenthin and R.H.S. Stolfi, NATO under Attack, (Durham: Duke University Press, 1984). The following books deal with the Soviet theories of war: Richard Simpkin, Red Armour, (London: Brassey's, 1984); P.H. Vigor, Soviet Blitzkrieg Theory, (London: Macmillan, 1983); and Steven Zaloga, Red Thrust, (Novato: Presidio, 1989). Finally. although it was based on a fictional scenario of a war between NATO and WP. John Hackett's The Third World War, (London: Sphere Books Ltd., 1978), provides excellent insight on how the war might have developed in reality.

²² For example, the basis for historical analysis relevant to this research can be found in the following titles: Correlli Barnett, Shelford Bidwell, Brian Bond,

Nevertheless, there is only a handful of writings available in secondary sources concerning the history and development of British operational and doctrinal ideas in the past. Even more lacking are discussions on the development of the British and NORTHAG concept of operations. There are few such articles, and those provide only basic ideas on the subject.²³

As a result, because of the overall lack of information and substance, the use of secondary material was limited to providing a historical and general background to the reforms. In short, it does not offer sufficient information for the undertaking of impartial evaluations of the many issues which this thesis discusses other than providing some theoretical and historical reference with which to conduct an analysis of some aspects of the reforms, such as an evaluation of the validity of NORTHAG's operational concept and weapon systems.

John Harding and John Terraine, Old Battles and New Defences-Can We Learn from Military History?; Michael Carver, The Apostles of Mobility, (London: Weidenfield and Nicolson, 1978); three books by Anthony Cordesman and Abraham Wagner: The Lessons of Modern War, Vols. I (1990--A)., II (1990--B) and III (1990--C), (all from Boulder: Westview Press, 1990); B.H. Liddell Hart, Deterrent or Defense, (New York: Frederick A. Praeger, 1960); Kenneth Macksey's two books: Tank versus Tank, (New York: Crescent Books, 1991); and Tank Warfare, (New York: Stein and Day, 1971). Consult Bibliography for more sources.

²³ For example, the following articles provide insights into the earlier British concept of defence in Central Europe. W.L. Dawson, "Land/Air Warfare," RUSIJ, (May 1949), pp.209-219; R.S. Evans, "The Need for Offensive Operations on Land," RUSIJ, (September 1976), pp.28-33; Frank Kitson, "The New British Armoured Division," RUSIJ, (March 1977), pp.17-19; L.O. Lyne, "The Fighting Potentialities of a British Armoured Division," Armor, (July-August 1954), pp.46-47; Edgar O'Ballance, "The Development of British Armoured Doctrine," Armor, (January-February 1965), pp.14-17; and Richard Ogorkiewitz, "British Tank Policies," Armor, (January-February 1955), pp.24-28.

1.3. RESEARCH PLAN

CHAPTER TWO examines the foundation of the reforms. Three areas are discussed to determine each one's influence in formulating the reforms in the British Army: 1) the British and other NORTHAG corps' operational concept and deployment in Central Europe; 2) contending ideas and debates on conventional improvements in the west, as well as two new operational concepts, the US Army AirLand Battle Doctrine and SACEUR's (Supreme Allied Commander Europe) FOFA (Follow-On Forces Attack) sub-concept; and 3) the origins of Bagnall's ideas. This is to provide an overview and examine both the circumstantial and intellectual roots of the reforms.

CHAPTER THREE looks back on the major political, strategic, and operational developments in Europe and in Britain up to the early 1980s in order to discuss the events which influenced the reforms in the British Army. Above all, this chapter reviews the British perception of the major external and internal developments at the time, issues which had particularly strong bearings on the formulation of the reforms. Notably, the British perception of NATO's nuclear deterrence, the WP threat and forward defence are discussed. In addition, the impact of the 1981 defence review on the Army's reforms is examined. In short, this chapter discusses the reasons why the reforms became imperative, whether the logic behind the initiation of the reforms was correct, and with what resources the Army planned to implement the reforms.

CHAPTER FOUR examines Bagnall's reforms in detail. It comprehensively discusses the aims, contents, and major issues of the reforms from their formulation to initial implementation. This includes a review of NORTHAG's operational level thinking and the Land/Air Battle Doctrine. Also, the counter offensive/counter stroke concept is analysed to discuss the

fundamentals of the ideas. This includes an examination of the overall aspects of the doctrine, as well as its underlying principles and logic.

CHAPTER FIVE outlines the debates and process of disseminating the new doctrine in Britain and the Alliance. The contents of the debate and the opposition in the Alliance, especially by West Germany, are examined in particular. There is also an in-depth look at Bagnall's personality and role, and an analysis of whether the reforms would have been possible without him. Hence, this chapter highlights not only the political and strategic foundation of the debates within the Alliance, but also the personal disputes among NATO commanders, and their influence on the reforms.

CHAPTER SIX focuses on the expansion of the reforms by Farndale in order to address a few critical issues, such as a possible cross-border counter offensive. More specifically, there is an in-depth discussion of this subject in relation to the secret German aspiration to reunite Germany, which examines whether the reforms in fact served German political and strategic aims as much as they did British ones. This chapter concludes with a review of how the debate was settled and what became of the reforms, as well as how the revised concept became assimilated into the NORTHAG armies, and what their stance was after they became fully integrated to operate under a single army group concept.

CHAPTER SEVEN discusses the details of the material changes which occurred as a result of the reforms. It is concerned with all aspects of the issue, from the procurement and deployment of new weapon systems and equipment and the establishment of a new major formation (the airmobile force), to education, training and finances. Specifically, the question of whether the reforms could be implemented within the existing resources (or if not, where new resources were to come from and what other measures became necessary to fulfil the requirements) is addressed.

CHAPTER EIGHT examines the validity of the reforms. It uses the British performance during the Gulf War, as well as examples from the past, as evidence to support the credibility and success of the reforms. The Gulf War was the first and probably the last major testing ground for the validity of Bagnall's reforms in the British Army in a real war, since the chances of fighting a major conventional war in Europe became remote (at least for the time being) as the threat from the Soviet Union and WP evaporated. Such an analysis can provide a useful insight into how the reforms have changed British attitudes towards warfare, as well as how they will operate in future contingencies. The chapter also discusses the future of the British Army in the face of force cuts under Options for Change.

CHAPTER NINE concludes by looking at various aspects of the reforms and by answering what I consider to be the most crucial and relevant questions regarding the reforms. These include questions on whether the reforms were justified and feasible, and whether NORTHAG's operation, including the counter offensive, could have been plausibly carried out. Ultimately, I will attempt to answer whether the reforms were successful or not.

CHAPTER 2

THE FOUNDATION OF THE REFORMS

2.1. INTRODUCTION

The aim of this chapter is to provide a general overview and offer analyses of both the circumstantial and intellectual foundations of the reforms. I shall begin with an examination of the developments in the British and other NORTHAG armies' operational concept and their deployment on the Central Front up until the early 1980s (2.2. and 2.3.). This is to identify and examine the weaknesses of their previous posture, as well as to pinpoint the reasons which necessitated the reforms.

Firstly, I argue that in the case of the 1 (BR) Corps, the changes it introduced since 1945 were mostly cosmetic and designed to accommodate a fall in defence spending as the British economy declined. Furthermore, deep-seated traditions, such as the regimental system, proved to be an additional barrier which hindered the formulation of a plausible concept of operations above the tactical level, because regimental officers were reluctant to develop a broader perspective of the battlefield.

Secondly, the NORTHAG armies were deployed to carry out, in essence, positional defence individually in shallow depth. This remained so despite a number of modifications introduced by each corps over the years because of the lack of resources. Also, since each corps had developed its own concept of operation based on the notion that this was an individual prerogative, coherent joint defence planning was absent. All these negative factors fostered widespread pessimism and ignorance in NORTHAG. Under the circumstances, the army group's ability to offer a credible defence against the WP was in grave doubt. The attempt to correct this critical deficiency was the initial impetus for Bagnall's reforms.

The next topic (in 2.4., and 2.5.) consists of a series of brief discussions of contending ideas and debates over conventional improvement, which took place in the west during the late 1970s to the early 1980s, as well as of the two new major operational concepts—the US Army AirLand Battle Doctrine and SACEUR's FOFA sub-concept—that examine various ideas and options which were offered and formulated as a result of the renewed western effort to strengthen deterrence and conventional defence in Europe. This is to facilitate analyses of their possible influence in shaping the reforms in the British Army.

In 2.7., I examine the impact of Bagnall's own ideas on the formulation of the reforms to determine their intellectual roots. I argue that his idea was developed, from the outset, entirely by himself in an effort to offer a plausible joint concept of operation for NORTHAG based on his personal research into German counter offensive operations on the Eastern Front during World War Two. Therefore, despite the fact that his concept had a lot in common with other proposals and operational thinking at the time, their influence on Bagnall's ideas was non-existent. Nor was Bagnall's effort an attempt to profit from growing trends at the time. In fact, his concept was developed prior to the formation of any other ideas despite the fact that its official endorsement came only in 1984.

Before beginning the discussions, I provide a comprehensive chronological review to help readers understand the often confused processes and developments of the reforms, from their conception to the completion of their initial implementation in the late 1980s.

2.2. A CHRONOLOGICAL OVERVIEW OF NIGEL BAGNALL'S REFORMS

It took roughly eighteen years (1971-1989) from the time when the need to plan at the operational level was first conceived by Bagnall until the completion of the initial implementation of the reforms went through. Bagnall first began promulgating the need to fight a whole battle when he became a Brigadier commanding the Royal Armoured Corps in 1971. From then on, he started developing his ideas about formulating a more robust concept of operation in the British Army. He continued this throughout the 1970s, during which time he was promoted to Commander 4 (BR) Armoured Division in 1975 and later to Assistant Chief of the Defence Staff (Policy) in 1978. As a divisional commander, he was able to dispute the British operational concept of the time through conducting a series of exercises aimed at showing the vulnerability of the corps' defence. It was then that his idea was received with more attention throughout the corps. 2

Nevertheless, he had to wait until becoming Commander of 1 (BR) Corps in 1981 to put his ideas to the test. The first step he took was to establish an informal discussion group called the Tactical Doctrine Committee (TDC) in 1 (BR) Corps in 1981. The TDC was an unorthodox gathering within the Army which initially had twelve members in various ranks from different services of the Army and military establishments, including an official from the Ministry of Defence (MoD). The purpose in the early days was to discuss plans and ideas concerning the improvement of the 1 (BR) Corps' capability, but the scope of the

¹ Interviews, Bagnall on 5 May and 6 November 1993.

² Interview, General Sir Brian Kenny on 16 September 1993.

topics and discussion was greatly extended as the TDC expanded and became an established feature within the office of the CGS and the MoD.³ Meanwhile, such an unconventional move by Bagnall was criticised by some people in the Army who saw it as breaking the chain of command.⁴ Nonetheless, the TDC played one of the most crucial roles throughout the reforms; it was especially instrumental in building up the necessary consensus within the British and NORTHAG military establishments.⁵ As a result of Bagnall's initiative and TDC meetings, the divisions within the corps were able to undertake a series of studies to explore the manoeuvre and mobile defence option in the defence. By the end of 1982, each produced a tactical battle concept concerning the feasibility and conduct of counter stroke operations in the divisional and corps areas.⁶

By the time Bagnall became Commander British Army of the Rhine (COMBAOR) and COMNORTHAG in 1983, the reforms in the British Army were in full swing, as well as being introduced to NORTHAG. He first tested his concept of operation during the Command Post Exercise-83 (CPX), code-named 'Winter Sale.' During the exercise, he managed to shock many participants and observers, including the Germans, by willingly abandoning West German territory from the IGB (Inner German Border) down to near Hanover before

³ Interviews, Bagnall on 5 May and 6 November 1993 and Field Marshal Sir Peter Inge on 22 June 1993.

⁴ Interviews, Bagnall on 5 May and 6 November 1993, Inge and Kenny.

⁵ See chapter 5.3. for more.

⁶ See <u>1 (BR) Corps Battle Notes, Sect.30-The Counter Stroke</u>. Tactical Studies by the 11th and 20th armoured Brigades of the 4th Armoured Division, (22 November 1982), TDRC 6266., <u>Corps Battle Note-Counter Stroke</u>. A Battle Note prepared by Charles Guthrie and Amended by the GOC (General Officer Commanding), (November 1982), TDRC 6265.

launching a major counter offensive with the army group reserve over the IGB against the gap discovered between the WP operational echelons. The result of CPX-83 was reported to the MoDs of many different countries, and elicited severe criticism and controversy. Above all, he broke two cardinal rules: not only did he ignore the forward defence imperative by intentionally allowing enemy penetration, but he also launched a counter offensive across the IGB in the direction of Magdeburg. Such an operation had been regarded as taboo, and even thinking in such terms was discouraged. Nevertheless, it became a watershed after which NORTHAG armies were able to think and plan their operations in a different dimension.

Thereafter, he soon succeeded in reaching an agreement with the RAF and 2ATAF in 1984 on the fundamentals of the joint Land/Air Battle. Furthermore, he reported that an initial agreement was reached with forces in NORTHAG on the relaxation of the rules of forward defence, which was accompanied by permission for the re-deployment of national forces to create the army group reserve. 9

In 1985, Bagnall was promoted to CGS, a position which he held until 1988, whereupon he retired. Meanwhile, Farndale, who was Commander 1 (BR) Corps under Bagnall, replaced him as COMNORTHAG, and enthusiastically

⁷ Interviews, Bagnall on 5 May and 6 November 1993 and Colonel Michael Dewar on 20 May 1993.

⁸ Interviews, Bagnall on 5 May and 6 November 1993, Dewar and General Hans Henning Von Sandrart on 8 April 1993.

⁹ See Bagnall, 1984, passim.

continued the reforms. In fact, Farndale was instrumental in further expanding Bagnall's reforms in NORTHAG. 10

That same year, Farndale officially outlined the essence of counter stroke and acknowledged that the British Army would embrace the new concept from then on. 11 In 1986, official endorsement of the new NORTHAG concept of operation came for the first time in the Statement on the Defence Estimates, which reported details as follows:

2. The revised concept places greater emphasis on the selection and defence of vital areas; on cooperation between ground and air forces; on tactical flexibility and mobility; and on the employment of reserves. Indeed, a key element of the plan is a considerable strengthening of the armoured reserve forces available to NORTHAG. It is important to recognise that the concept does not mark any change in NATO's essentially defensive posture; nor does it imply any abandonment of the principle of forward defence, which remains a fundamental tenet of NATO strategy. But it does recognise that force improvements permit the adoption of a more mobile tactical concept. Static defence can lead only to a war of attrition, while the new concept would allow the defenders to seize the initiative from the aggressor, giving the Alliance a much better chance of defeating the enemy, rather than merely delaying him. 12

1987 was a busy year as Farndale was finalising the details of generating the army group reserve with other national forces and preparing for REFORGER 87 (Return of Forces to Germany) and the FTX (Field Training Exercise) phase of the exercise, code-named 'Certain Strike.' During the exercise, the deployment of the external reserve, 3 (US) Corps, in the

¹⁰ Interviews, Bagnall on 5 May and 6 November 1993, Farndale on 14 April and 21 June 1993, Inge and Kenny.

¹¹ See Farndale, 1985.

^{12 &}lt;u>SD 1986</u>, p.33.

¹³ Interviews, Farndale on 14 April and 21 June 1993 and Von Sandrart.

NORTHAG sector was successfully tested. Also, NORTHAG's Land/Air Battle and counter offensive/counter stroke concept were, for the first time, successfully tested in a FTX format. 14

Meanwhile, a new Operational Guideline (GDP) was issued that same year by the new CINCENT, General Hans Henning Von Sandrart, who was also the COS of the Bundeswehr. ¹⁵ Concurrently, the first class of the HCSC was given at the Army Staff College in Camberley. This three-month course was inspired and founded by Bagnall as a part of his reforms, its purpose being to educate officers about the theory and conduct of war at the operational level. ¹⁶

Farndale was then replaced by Brian Kenny as COMNORTHAG in late 1987. Soon after, in 1988, the new army group operational level SOP was formally adopted. It laid out the principles of mutual support, operations in depth and effective reserves, and advocated greater peacetime cooperation among national corps, which enabled 'the men of one nation to train under the command of another,' as the joint operations of the Allies was a crucial part of the new operational level thinking. ¹⁷ At the same time, it was agreed that NORTHAG's defence would become more elastic as the possibility of initially yielding more ground was approved by the Alliance. ¹⁸

¹⁴ See Martin Farndale, "Exercise Reforger 87," <u>Army Quarterly and Defence Journal (AQ&DJ)</u>, Vol.118, No.1, (January 1988), pp.8-20. (Farndale, 1988--B) See more in chapter 6.2.

¹⁵ The German MoD, <u>Operational Guideline (or General Defence Plan--GDP)</u>. (August 1987). See more in chapter 6.3.3. Also interview, Von Sandrart.

¹⁶ For references on HCSC, see HCSC, Detailed Programme for Course Number 5, 1992.; and HCSC, Operational Art. Course Material for Course Number 6, 1992, TDRC 10361. See further discussion in chapter 7.5.1.

¹⁷ Farndale, 1988--A, p.24. Also see McInnes, 1991, p.33, for more details.

¹⁸ SD 1988, p.16.

The endorsement of the first ever British operational doctrine, <u>Design for Military Operations: The BMD</u>, in 1989 signalled the completion of the initial objectives of Bagnall's reform, as it outlined the highlights of the Army's understanding of the operational level of war and the new operational concept. ¹⁹

By the time Peter Inge became COMNORTHAG that same year, most of the ground work for the fulfilment of the initial aims of the reforms had been laid. He was to be in charge of streamlining the implementation of other requirements, such as introducing the NORTHAG Airmobile Division, which was a by-product of the reforms.²⁰ He was the ideal person to put a final touch on the reforms because he had followed the developments closely and inspired many ideas himself from the time when he was Bagnall's COS as Commander 1 (BR) Corps. He eventually became CGS in 1992 and CDS (Chief of the Defence Staff), with promotion to Field Marshal, in 1994. Since then he has been carrying out what Bagnall started more than twenty years ago, further modifying the reforms to suit the new roles of the British Army in the post-Cold War era.

Although the British Army, fortunately, did not have to fight the WP, it nevertheless had a chance to test the validity of the reforms during the Gulf War. Despite the fact that it sent only one division--1 (BR) Armoured Division--under the command of Major General Sir Rupert Smith, and undertook a comparatively smaller role than that of the US forces, its demonstration of

¹⁹ Interviews, Bagnall on 5 May and 6 November 1993 and Colonel Robin Draper on 10 March 1993. Also see F.R. Dannatt, <u>Towards an Operational Doctrine for the British Army in the Post Cold War Era</u>, (TDRC 10224, 1992), pp.1-2.

²⁰ See Peter Inge, "Development in the Land Battle," <u>RUSIJ</u>, (Winter 1989), p.11, on his views on airmobile force. Also see chapter 7.4. for further discussion.

flexibility and superior war-fighting capability surprised many.²¹ It was an event which largely vindicated the value and success of the reforms.

In fact, most of the major field commanders in the Gulf, including Smith, were a new breed of officers, educated at the HCSC and indoctrinated with operational level thinking. They also successfully exploited many weapon and logistics systems which were introduced throughout the reforms 22 It was the opinion of Smith that, the British Army, the incompetence of the Iraqi's notwithstanding, could not have achieved such a spectacular success or gained respect from the other forces in the Gulf, especially from the US Army, if not for its effectiveness and ease of ability to plan and execute a joint operation, without the reforms and the new education provided by the HCSC.23

²¹ See Ministry of Defence. Operation Granby: An Account of the Gulf Crisis 1990-91 and British Army's Contribution to the Liberation of Kuwait, Army Code 71512, 1991, for the British account of Operation Granby. Interviews, Field Marshal Lord Michael Carver on 20 April 1993 and Major General Sir Rupert Smith on 12 May 1993.

Interview, Bagnall on 5 May and 6 November 20 1993 and Smith. Rupert Smith was not technically a student, though he sat in on HCSC2. Eventually, he became the course director for HCSC3.

²³ Interview, Smith.

2.3. DEVELOPMENTS IN THE BRITISH ARMY OF THE RHINE AND 1 (BR) CORPS SINCE THE END OF THE SECOND WORLD WAR

2.3.1. THE SITUATION UP TO THE END OF THE 1960S

Since the end of World War Two, a main determinant of Britain's defence policy had been the state of the country's economy. Within the constraints of a shrinking financial pool, successive governments were forced to maintain, according to Carver, 'a perpetual balancing act' between commitments and resources. ²⁴ Continuous economic difficulties gradually eroded Britain's world-wide role, and its position as a state with global interests was compromised each time a review of British defence commitments was carried out. Although Britain continuously attempted to keep some of its influence outside Europe throughout the 1950s, it was inevitably retreating from the glories of empire. Eventually, the commitment to the commonwealth was replaced by an interest in Europe as the country wished to pursue a leading role both in the European Economic Community (EEC) and NATO. ²⁵

The Alliance's commitment to the defence of Germany was first officially endorsed in the 1954 Paris Agreement. Under the accord, Britain pledged to maintain four army divisions and a tactical air force on the continent until 1998;

²⁴ Michael Carver, <u>Tightrope Walking</u>, (London: Hutchinson, 1992), p.vii. Also see Keith Hartley, <u>The Economics of Defence Policy</u>, (London: Brassey's, 1991), pp.1-2, for the major determinants for defence budget allocation.

²⁵ See David Greenwood, "The United Kingdom," in Douglas J. Murry and Paul R. Vlotti, ed., <u>The Defense Policies of Nations--A Comparative Study</u>, 2nd ed. (Baltimore: The Johns Hopkins University Press, 1989), p.264; and Peter Byrd, "Introduction," in Peter Byrd, ed., <u>British Foreign Policy under Thatcher</u>, (Oxford: Philip Allan, 1988), pp.3-4.

this marked the official foundation of British Army of the Rhine (BAOR). In fact, BAOR was originally formed from the residual British occupation force of Germany after the Second World War.²⁶

The transformation was initially completed by the ensuing foundation of NORTHAG in 1952, and its headquarters (HQs) were subsequently established in Mönchengladbach.²⁷ From the outset, careful consideration was given to assigning NORTHAG corps sectors to the four national armies. Among them, the stronger ones (i.e. the British and German corps) would defend the major attack route in the middle while the weaker ones (the Netherlands and Belgian corps) would defend less important routes in the north and south ends of the army group area.²⁸

In 1954, BAOR's air and ground HQs moved to Rheindahlen in West Germany, where they have been co-located ever since.²⁹ Meanwhile, the number of troops in the BAOR quickly declined from 77,000 in 1957 to 55,000 in 1959; this level of strength was maintained until 1992. Although the total number of troops contracted, it was nonetheless the single largest British overseas deployment, especially after demobilisation and the end of conscription, and came to represent 30 per cent of the total Army strength.³⁰ Furthermore,

²⁶ Faringdon, op. cit., p 279.

^{27 &}lt;u>Jane's NATO Handbook 1989-90</u>, (Surrey: Jane's Publishing Co., 1989), p.122.

²⁸ Interviews, Bagnall on 5 May 1993 and Farndale on 21 June 1993. See details of the NATO deployment on the Central Front in Faringdon, op. cit., chapter 10.

²⁹ Harry Tuzo, "Northern Army Group and its British Component," <u>RUSIJ</u>, (June 1975), p.9.

³⁰ Faringdon, op. cit., p 279.

this was to be substantially strengthened by an up to 120,000-strong reinforcement in an emergency.³¹ At the same time, RAF Germany (G), which had fifteen squadrons as part of 2 ATAF, maintained around 10,300 personnel from 1959.³² In fact, despite the relatively quick rundown of the overall strength of BAOR, there was a persistent effort to introduce a new generation of equipment to either supplement or replace many of the Second World War vintage weapons, most of which were becoming obsolete.³³

By 1961, the number of divisions in BAOR was reduced from four (three of which were armoured) to three divisions.³⁴ The abolition of conscription was followed by a major force reduction in 1963, which left the Army with 180,000 men. Also, the reforms introduced by Dennis Healey, then Secretary for Defence, in 1964 caused a further erosion of Army strength, which left it with only six divisions. As a result, the Army came under severe pressure as it was still expected to carry on with the traditional responsibility of imperial policing as well as maintaining the same level of commitment in Germany. An expectation that the pressure would be somewhat relieved only arose after the Healey statement in 1966 that Britain would soon relinquish the commitment east of Suez.

³¹ See SD 1985, p.23, para. 4, for details on the reinforcements sent during Exercise LIONHEART in 1984.

³² See Robert Close, <u>Europe Without Defense?</u> (New York: Pergamon, 1979), p.60; Bruce George, "United Kingdom," in <u>Jane's NATO Handbook 1989-90</u>. p.53; and <u>The Military Balance 1982-83</u>, (London: International Institute of Strategic Studies, 1982), p.32.

³³ See Richard Orgokiewitz, <u>Armour</u>, (London: Stevens, 1960), p.62; and Anthony Verrier, <u>An Army for the Sixties</u>, (London: Secker & Warburg, 1966), p.146.

³⁴ See H.C.B. Rogers, <u>Tanks in Battle</u>, (London: Seeley & Co., 1965), pp.218-9.

The ensuing 1968 Defence Review thus reflected Britain's recognition of Europe as its strategic centre. 35 Therein, Britain displayed a strong enthusiasm towards aligning its policy with the US. This was based on Healey's belief that as long as the US remained in Europe, a war with the WP was inconceivable. Thus, Europe should increase the level of its conventional commitment sufficiently enough to convince the US that it would not be prematurely dragged into a nuclear war with the Soviet Union due to NATO's lack of conventional capability. 36 Nonetheless, Britain still lacked consistency in the direction of its defence policy and remained without any longer-term strategic thinking.

2.3.2. THE 1 BRITISH CORPS AREA OF RESPONSIBILITY

The NORTHAG area of responsibility covered roughly the northern two-thirds of the FRG which included the Northern German Plain, also known as 'the Hanover Plain.' Consequently, this was where the British corps sector was located. With a frontage of about 60 kilometres from the region of the Mittelland Canal to the northern Harz, this region lay 'along the most direct axis of advance between Berlin, Magdeburg, Hanover, the Rhine, and the Ruhr.'³⁷

All of the former NORTHAG commanders whom I have interviewed pointed out that they expected the WP was planning to achieve its major

³⁵ See Baylis, 1989, p.33., Stephen Kirby, "Britain, NATO and European Security: The Irreducible Commitment," in John Baylis, ed., <u>British Defence Policy in a Changing World</u>, (London: Croom Helm, 1977), p.109. Also interview, Air Chief Marshal Sir Brendan Jackson on 11 May 1993.

³⁶ See Carver, 1992, pp.70-77, for Healey's legacy. Also interview, Carver.

³⁷ Faringdon, op. cit., p.366.

concentration in this area.³⁸ It had the best tank-going terrain, and lay on the route to the Channel and the western French coast. This assumption was more credible since the WP was seeking a quick conclusion to a possible conflict before the NATO nuclear decision; any WP attack would be as quick as possible and would take the shortest path to its objective.³⁹ In fact, an Autobahn (A2) between Hanover and Berlin was the shortest route for an attack from the east.

2.3.3. THE BRITISH OPERATIONAL CONCEPT BEFORE THE REFORMS

BAOR had yet to formulate a plausible operational concept during the 1950s and early 1960s. Armoured forces had become the predominant arm, and faith in their value remained strong.⁴⁰ In reality, however, a series of reorganisations in 1956 and 1957, the result of which confined armour's role mainly to infantry support and exploitation, reflected confusion as to what its exact role should be.⁴¹ As a result, BAOR's operational concept remained diffuse, and its dispositions were suitable neither for a cohesive positional defence, nor a mobile one.

The advent of TNWs (Tactical Nuclear Weapons) proved to be a mixed blessing for BAOR's armoured force, since it became heavily dependent on their

³⁸ Interviews, Bagnall on 5 May 1993, Farndale on 14 April 1993 and Von Sandrart.

³⁹ Interview, Farndale on 14 April 1993. He verified this in a discussion with a Soviet General in 1990. See 3.4. for more on the WP operational plan.

⁴⁰ See Rogers, op. cit., pp.215-6.

⁴¹ See Lyne, op. cit., p.47; Orgokiewitz, 1955, p.28; D.C. Mullen, "New Divisional Organization Trials," <u>BAR</u>, (March 1956), p.7.

use rather than developing a robust conventional capability. As Verrier stressed, the order of the day concerning TNWs became, in fact, 'ask and ye shall be given.'⁴² Yet TNWs secured the dominance of armour which was considered the only arm able to undertake defensive operations in a nuclear environment.⁴³

Due to the premium given to nuclear weapons, BAOR had based its force planning on a deliberate insufficiency of forces throughout the 1960s. This thinking primarily stemmed from the fact that the BAOR would force a 'pause,' but nothing more. This weakness was thought to be a factor which reinforced deterrence under massive retaliation, ⁴⁴ as it was assumed that deliberate weakness would convince the US to increase its nuclear guarantee. Thus, the logic of the 'pause' philosophy assumed that immediate conventional defence would be offered merely in order to provide 'a chance for second thoughts before it gets rougher' so as to prevent the WP from pursuing a course of action which would be disastrous. ⁴⁵ Even the adoption of Flexible Response in 1967 did not change the underlying rationale of the British Army for some time.

Upon entering the 1970s, however, there was a sign that BAOR was moving towards the adoption of a more imaginative defensive posture as its priority shifted from a purely defensive posture to a mobile linear defence, which emphasised more offensive operations.⁴⁶ The new concept of operations reflected an initial gesture to comply with Flexible Response by learning to prolong the conventional phase within existing resources, although the notion of

⁴² Verrier, op. cit., p.149.

⁴³ See Rogers, op. cit., p.215; and Macksey, 1971, p.247, and p.250.

⁴⁴ Hackett, op. cit., p.55.

⁴⁵ Tuzo, op. cit., p.12.

⁴⁶ Interview, Carver.

deliberate insufficiency was still important. Within this framework, 1 (BR) Corps would be deployed in two echelons, with two divisions being close to the IGB in accordance with forward defence, and expected to hold a line closer to the border in a tactical mobile battle until forced by attrition to withdraw through the second echelon, which would then assume the forward echelon's role. The weakened divisions would then re-group to provide an additional echelon behind the second one.⁴⁷ General Tuzo commented that, given reasonable deployment time, the defending forces would be able to fight an aggressive and imaginative battle under the new concept.⁴⁸

While it was very mobile at the tactical level, however, this was an essentially static defence which remained vulnerable to attrition from superior enemy forces. ⁴⁹ Above all, because of the open and flat terrain of its corps sector, which did not favour linear static defence, and because of limited resources, the corps would have quickly fallen back to consolidating defensive positions at the rear.

Under the restructuring plan of 1975, divisions in BAOR were made smaller to create an additional division. Each consisted of two less permanent 'field forces,' which deployed five 'battle groups' based on either an armoured regiment or an infantry battalion, thus producing a flexible force more adept at both responding to various situations and mobile defence. This provided the corps with increased infantry strength and gave the dismounted infantry a greater capability to hold ground, and with the provision of Milan ATGWs (Anti-Tank Guided Weapons), it became possible for them to be deployed further forward in

⁴⁷ See McInnes, 1990, pp.134-5.

⁴⁸ Tuzo, op. cit., p.11.

⁴⁹ See McInnes, 1991, p.30.

the initial defence line.⁵⁰ In return, this allowed for the concentration of armoured force and, as a result, the corps allocated it a counter penetration role.⁵¹ Nonetheless, the reduction of the number of unit (or battlegroup) HQs in relation to the number of sub-units (or combat teams) proved to be an obstacle. It became difficult to obtain the required command coverage unless the battlegroup was broken up into a series of independent and largely ineffective combat teams, and they were essentially too weak to undertake an offensive campaign.⁵² In the end, the changes failed to secure the flexibility the corps had hoped to attain because, in addition to the elimination of the brigade command, the creation of the fourth division forced it to depend further on reinforcements.

In short, the 1974 review, which initiated the 1975 restructuring, failed to deliver what had initially been envisaged, and the new structure made only negligible improvements in the offensive efficacy of the BAOR. Hence, it created more problems in the short term because such a move, building an additional division without an actual increase in the overall strength of BAOR, looked as if it was only an attempt to produce a quick-fix so as to show that Britain was standing by its increased continental pledge. In fact, due to the lack of flexibility and increased dependence on reinforcement, everyone in BAOR expected very early use of nuclear weapons. ⁵³ As General Hackett argued, the drastic changes made the weaker force even weaker and 'within three years of the 1974 Defence

⁵⁰ See William Scotter, "The British Army Today," <u>RUSIJ</u>, (June 1976), p.17; McInnes, 1988, p.378; and Bellamy, 1987, p.146.

⁵¹ See Kitson, 1977, p.18; and Hackett, op. cit., pp.146-7.

⁵² Kitson, 1977, pp.18-19.

⁵³ Interview, Carver.

Review BAOR was at its lowest level of operational efficiency ever. ¹⁵⁴ The only positive aspect of the review was the fact that it made possible the initiation of a series of new weapons procurement programmes by the Army and RAF, the benefits of which were only to be felt much later in the early 1980s when the reforms were initiated. ⁵⁵

Efforts to correct the deficiency created by the 1974 review started almost immediately. Their highlight was the formulation of a new defensive concept called 'killing zones' or 'armoured killing areas (AKA),' which attempted to improve upon the previous echeloned defence while consolidating the changes introduced. AKAs were a series of mobile pockets which could be placed along the axes of an enemy advance. Their positions were not rigidly determined, but likely avenues of the enemy advance would be identified, and the terrain would be surveyed during peacetime, providing the defenders with intimate knowledge of it.⁵⁶ The selected defence terrain would be prepared immediately after the outbreak of hostilities, or when the enemy's imminent attack was anticipated. Once the enemy was sucked into an AKA, the local defender would then inflict high rates of attrition in a relatively positional battle with a combination of armour and ATGW-armed mechanised infantry, with artillery and air support available throughout. The defenders would mainly fight against the enemy first echelon and then withdraw before the second echelon arrived.⁵⁷ In short, it was a mobile defence concept which took advantage of local mobility and firepower for defence while exploiting terrain as a force multiplier. Also, counter attack

⁵⁴ Hackett, op. cit., p.329.

⁵⁵ Interviews, Bagnall 5 May 1993 and Jackson.

⁵⁶ McInnes, 1990, pp.134-5.

⁵⁷ Interview, Farndale on 14 April 1993.

inside an assigned area within a corps sector was critical for successful defence. This concept was very similar in many respects to the West German defence counter attack concept which was underlined in the 1973 *Hdv* 100/100.58

Although the AKA concept was considered to be both more aggressive and a general improvement, it fell short of addressing the fundamental problems of BAOR's defence. In fact, the idea was more of positional than mobile defence. It was criticised as only a doctrinal rationalisation which was based on the extension of the infantry tactics of the Army and which was vulnerable against a numerically superior enemy with considerable fighting power. ⁵⁹ Moreover, the British corps' ability to create strong AKAs along each anticipated enemy route of advance would be inevitably curtailed by insufficient personnel strength and equipment, which would, in turn, render virtually impossible the maintenance of a cohesive defence throughout AKAs and would result in the defenders either being forced to abandon those positions quickly, or eventually being overrun by superior enemy forces through attrition. Also, the limited number of reserves available in each sector would be too small to retake the initiative through counter attack, and so they would quickly succumb to the continuous WP follow-on forces onslaught. ⁶⁰

The most damaging aspect of the concept's positional nature was that it could be operationally dislocated by the enemy at will, because it essentially involved waiting for him to enter the designated area before an attack could be launched. In fact, the defender would be helpless if the enemy decided to bypass

⁵⁸ See chapter 2.4.2. for the Bundeswehr concept of operation.

⁵⁹ See Peter Stratmann, "NATO Doctrine and National Operational Priorities," in Robert O'Neill, ed., <u>Doctrine</u>, <u>The Alliance and Arms Control</u>, (London: Macmillan, 1986), p.197.

⁶⁰ See Hackett, op. cit., p.159, for an example.

him (almost certain because the success of the OMG--Operational Manoeuvre Group--depended on the maintenance of tempo), leaving him to be dealt with by the follow-on echelons. Meanwhile, the WP's strong forward air and artillery assets would generate enough firepower to pin down the defenders in positional defence. In short, even if a few zones managed to hold their positions, they would eventually be beaten piecemeal by follow-on echelons while the first echelon or the OMG would be running well beyond those defence zones towards the rear area.

The introduction of the 'aggressive delay forces' battle concept in the late 1970s was an attempt to redress the many drawbacks of the killing zone concept, particularly the vulnerability to the WP multi-echeloned and OMG attack. 62 It envisaged the disruption and delaying of the enemy's advance while determining the direction and scale of the WP main attack by the aggressive covering force battle, which was reinforced with more armour. Then, according to the 1981 Statement on the Defence Estimates, 'the aggressive delay forces would be withdrawn through the main defensive position after they had disrupted the enemy's advance. The forces in the main defensive position would then absorb any attack and create time.... for other formations to counter-attack in order to regain lost ground. 163 Its main focus was to allow the defenders to determine the enemy's major efforts prior to the manning of the killing zones. Thus, the areas which were supposedly on the path of the enemy major thrusts would be given sufficient resources to withstand the enemy onslaught. The other

⁶¹ See McInnes, 1990, p.135. See 3.4.2. for more on OMG.

^{62 &}lt;u>SD 1981</u>, para. 320.

^{63 &}lt;u>SD 1981</u>, para. 320.

areas would be thinned out to achieve economy of force so as to provide a strong reserve for counter attack, or to reinforce the identified threatened area.

This was a logical evolution from previous thinking, and attempted to compensate for its weakness. It did provide a much greater opportunity for mobile defence with the stronger reserve, and it became the conceptual framework within which the earlier version of Bagnall's operational concept was developed. In fact, it was the first time Bagnall played a major part in influencing the operation of the British corps by demonstrating the validity of this form of defence when he was commanding 4 Armoured Division in Germany. 64

In conclusion, during much of the 1970s, Britain considered its military contribution to the Alliance to be adequate, not for the purpose of defending Germany, but to satisfy the US in order to keep American forces at a level which would be sufficient to deter WP aggression. Above all, it reaffirmed that the main agenda for the defence of Europe remained firmly focused on nuclear deterrence provided by the US. Thus, conventional defence had only a supporting role in Europe. The series of cosmetic changes made in BAOR over the years was a good indicator that Britain certainly adhered to such a perception.

2.3.4. THE IMPACT OF TRADITION AND THE REGIMENTAL SYSTEM

The regimental system was developed by the Army in the nineteenth-century for the purpose of policing the empire. To guard imperial possessions, British forces

⁶⁴ Interview, Kenny.

⁶⁵ Interview, Carver.

were often deployed in overseas garrisons in the colonies conducting relatively minor campaigns.⁶⁶ Henceforth, the emphasis was placed primarily on the cohesion and effectiveness of regiments, and the system provided cohesion and loyalty among its members in the infantry units, especially under the environment in which soldiers sometimes had to fight long and isolated wars in remote outposts of the empire.⁶⁷

However, many--including Bagnall--criticised the system for the parochial and passive tendency it nurtured among its officers. Perhaps the following remark by Bagnall may best describe the origin of the passive tendency and low-level tactical thinking of most British officers: 'The Army had been lazy about studying the conduct of major operations. Officers did their job as regimental soldiers.... And at NORTHAG, some of my predecessors thought their job was just to keep everyone happy.'68 Its impact was profound. Although officers exercised strong leadership within a regiment, as well as demonstrating a lot of moral and personal courage during many wars, the system nevertheless discouraged them from becoming good strategists by preventing the development of a broader perspective of the battlefield, and by limiting the aptitude for fighting a war on a scale beyond the tactical level. Also it inhibited officers from developing constructive and creative criticism.'69

As Bagnall observed, the most profound effect of such a passive tendency among British officers, therefore, was the lack of zeal and the aptitude

⁶⁶ See Brian Holden Reid, "Is There a British Military 'Philosophy'?" in Mackenzie and Holden Reid, 1990, p.4.

⁶⁷ See Luttwak, 1987, p.98.

⁶⁸ Interview, Bagnall on 6 November 1993.

⁶⁹ R.A.D. Applegate, "Why Armies Lose in Battle: An Organic Approach to Military Analysis," <u>RUSIJ</u>, (December 1987), p.53.

to undertake high-tempo mobile operations at the operational level. Applegate said that:

the needs of a conformist hierarchy for a stable environment was reflected in the British Army's linear and positional style of warfare.... British officers had been.... essentially administrators and tended to command from the rear, 'running' the battle from a series of maps.... and.... the [regimental] discipline, training and leadership meant that the British military organism lacked any real aptitude for mobile operations, but whilst their linear integrity remained intact they could offer very stubborn resistance. 70

As a result, the British had been 'historically bad at combining little engagements into bigger ones.' 71 In short, the particular British characteristics which had been developed over the years reflected a good fighting spirit at unit level while it seemed to have been understood that a collection of unit combats made up the higher-level fighting. Thus, no sense of urgency existed among officers in the Army to develop a concept with which to manipulate higher level operations.

Although it had an operational aim of driving the Germans out of Egypt, for instance, the battle of El Alamein was achieved by a strict methodical approach in the attritional tradition, not by manoeuvre. The was not an application of the operational method, at least in the sense which Montgomery's German opponents preferred or the 1980s' British Army envisioned. Nonetheless, his success there became the basis for the so-called 'Montgomery approach,' which according to Holden Reid, was elevated as the British model for 'some 20 years after 1945.'73

⁷⁰ Applegate, op. cit., pp.53-4.

⁷¹ Faringdon, op. cit., p.365.

⁷² Brian Holden Reid, "The Operational Level of War and Historical Experience," in Mackenzie and Holden Reid, 1989, p.9.

⁷³ Holden Reid, op. cit. in Mackenzie and Holden Reid, 1990, p.10.

Consequently, any glimpse of operational level thoughts in the British Army diminished after the war when Britain re-focused on the duties of empire. Kennedy eloquently summed up the effects of this development:

After 1945, the United Kingdom's military energies were once again focused on her empire. Although her land and air forces were to spend the next 25 years conducting a fighting withdrawal rather than campaigns of conquest, the European continent resumed its historical role in British military thinking as an unpleasant place out of which comes no good... The savage pressure on defence resources produced, instead of strategic clarity, out of which an understanding of the operational level of war might have developed, an introspective attitude which examined the infantry platoon in detail and failed to apply similar scrutiny to the higher level conduct of war. In this respect it is significant that the British experience of command of large forces in a manoeuvre war was limited in scale. ⁷⁴

Indeed, having had a small professional force with which to fight brush wars in peacetime, the Army inevitably embraced the proven ideas which favoured 'down-to-earth practical soldiering' over unproven theory and doctrine. ⁷⁵ Hence, it had an abundance of tactical doctrines and was taught to adhere to the principles of war. Thus, the Army was not compelled to endorse an operational doctrine, since, as Holden Reid observed, 'doctrine at any level above the tactical has always been an anathema.'

Changes began as Britain finally recognised that its contribution to the Alliance had become the key to its national defence. Bagnall said in an interview that in the early days the Alliance only existed on paper. Also, up until the

⁷⁴ A.I.G. Kennedy, "The Operational Art of War," in Mackenzie and Holden Reid, 1989, p.140.

⁷⁵ Dominick Graham, "England," in Richard A. Gabriel, ed., <u>Fighting Armies:</u> NATO and Warsaw Pact-A Combat Assessment, (London: Greenwood Press, 1983), p.76

⁷⁶ Holden Reid, op. cit., in Mackenzie and Holden Reid, 1989, p.10.

1970s, the British Army considered Germany as 'a good place for training' without many implications for its national defence, and certainly not as a place to fight. 77

Ironically, one of the outcomes of such developments, and of a series of cuts in strength since, was a positive impact on the Army's ability to take up a more demanding role later as, with ever-shrinking resources, it tried to adapt to the increasing demands of the defence of Europe. In fact, these cuts paved the way for a more professional and efficient army to be established as it had to seek a way to do more with less.

⁷⁷ Interview, Bagnall on May 5 1993. The same point was raised by Carver during an interview.

2.4. THE DEPLOYMENT OF OTHER NORTHERN ARMY GROUP CORPS

2.4.1. 1 NETHERLANDS CORPS

The Netherlands corps was located on the top of the 'layer-cake' where it would defend an area between the northern border with AFNORTH (Allied Forces Northern Europe) and the German corps sector. It was thought to be well-equipped and to have a good chance of defending its area of responsibility, mainly due to favourable terrain for defence. The Netherlands was responsible for a build-up by M-day to three divisions in the forward area, as well as two reserve ones. At the start of the 1980s, however, it was able to provide the M-day equivalent of less than two full three-brigade divisions, while maintaining only one armoured brigade in Germany to cover for the deployment of the whole corps in the case of war, due to continuous cuts in defence spending and the consequent lack of resources. The section of the whole consequent lack of resources.

The Netherlands Army shared doctrinal and operational concepts with West Germany. The bulk of its equipment was of German origin, and it cooperated closely with the Bundeswehr in training. It pursued a concept which combined positional and area defence with a form of FOFA to interdict the enemy from the rear. Under this concept, it envisaged a simultaneous defence combining first, a close-in defence in forward defence positions, and second, a

⁷⁸ See Faringdon., op. cit., p.360; and Anthony Cordesman, <u>NATO's Central Region Forces</u>, (London: The Royal United Service Institute, 1988), p.121, for more details on the geographical conditions.

⁷⁹ See <u>Jane's NATO Handbook 1989-90</u>, p.122; and Cordesman, 1988, p.85, p.115, and p.120, for an assessment of the Netherlands' mobilisation capability.

depth defence with combined positional and mobile defence-in-depth. During the latter operational phase, the reserves would be employed for an offensive mobile defence which included 'offensive actions such as surprise fire, counterthrusts and counterattacks.'80 During an interview, Colonel Soetemeer of the Dutch Army stressed that the corps planned a fluid armoured mobile defence in the early 1980s, and, unless the WP deliberately chose to concentrate in the Dutch area, it would have been able to cope with the WP attack there.81

Nevertheless, many doubted its capability to carry out mobile warfare, while acknowledging that it had greater ability to conduct static attritional defence. 82 Also, the lack of in-theatre forces to cover the corps' deployment would prove to be damaging despite its ability to conduct a cohesive positional defence in the early hours of the conflict. As will be discussed in chapter 4, its deployment would probably have to be covered by the Germans. This would not only tie up the valuable German reserve, but also the lack of a jointly agreed concept of operation and SOP in the army group would undoubtedly prevent the timely committal of the Dutch corps in strength. Moreover, the traffic problem, which would inevitably be caused by such a tie-up, would substantially degrade the army group's efficacy during the initial operation, while providing the WP air force with a series of lucrative targets.

⁸⁰ J.R. Roos, "Armour in Central Region," NSN, (Special 1, 1985), p.67.

⁸¹ Interview, Colonel G.C.W. Soetemeer on 23 April 1992. Also interviews, Bagnall on 5 May 1993 and Farndale on 14 April 1993.

⁸² See Cordesman, 1988, p.121. Also interviews, Bagnall 5 May 1993 and Draper.

2.4.2. 1 GERMAN CORPS

The 1 German Corps sector shared the heart of the Hanover Plain with the British corps on the south. The German corps was designed to exploit a geographical segment of its sector which was open and flat. Consequently, Germany deployed the strongest mobile corps among NORTHAG and all other German corps in NATO, which consisted of four regular divisions (three Panzer and one Panzergrenadier) with a substantial number of artillery, airmobile and ancillary forces under the direct corps control and four Home Defence Brigades and four Home Defence Regiments from the German Territorial Command-North (which was two division strength equivalent). The main task of the Home Defence forces would be to guard the corps' rear areas to ensure the operational freedom of the German and other NORTHAG corps, and in some cases they might be used to reinforce the main defensive areas. 83

The Bundeswehr's operational thinking was influenced by the Reichswehr's experience in Russia, since many of its founding senior officer corps were World War Two veterans. The experience was passed on to the post-war Bundeswehr; however, this focused on tactical lessons, 'particularly those of mobile defence at which the Wehrmacht excelled, rather than on analysing Russia's successful operational conduct of the campaign.'84 Also, the circumstances of the German constitution 'limited its military horizons to the Central Region and Schleswig-Holstein' and only in 1987 did the Bundeswehr

⁸³ See K.G. Benz, "Fire and Manoeuvre-The German Armoured Corps and Combined Arms Battle," <u>International Defence Review (IDR)</u>, (April 1984), p.475; Cordesman, 1988, p.90. Also interview, Von Sandrart.

⁸⁴ Kennedy, op. cit., in Mackenzie and Holden Reid, ed., 1989, p.141. Also see William Rennagel, "West Germany," in Gabriel, op. cit., p.122.

draft its own operational level doctrine independent of the Alliance, as a result of the reforms. 85 All this led many to believe that the Bundeswehr was losing touch with its traditions by breeding defensive-minded soldiers due to a narrow interpretation of past experience and an indifferent attitude towards tradition. 86

The earlier Bundeswehr concept of operations was prescribed in Army Regulation Hdv 100/100 Command and Control in Battle, which was drafted to provide a uniform guideline of conducting 'a combined operation by a major combined-arms unit (brigade and above). The concept and language used in Hdv 100/100 were generally compatible with ATP-35 (A). It recognised that the basic manoeuvre unit would be the brigade, whilst the division would be mainly responsible for the defence of an assigned sector without intervention from the corps. The corps' involvement would be the last resort. Thus, the operational level in the Bundeswehr would signify the handling of divisions and corps. 89

Dannatt, op. cit., p.13. Also see Jan Oerding, <u>NATO's New Strategy and Its Implementation on the Operational Level</u>, (HCSC 6, TDRC 10472. 1993), pp.14-5. See chapter 6.3.3. for more on the 1987 GDP and its relations to the reforms.

⁸⁶ See Simpkin, 1985, p.18. Interviews, Bagnall 5 May 1993 and Dewar.

⁸⁷ Ministry of Defence, Hdv 100/100 (Army Regulation 100/100 Command and Control in Battle), 1973, p.1.

⁸⁸ See Bellamy, 1987, p.139; and Roy Meller, "Federal Germany's Defense Potential—Part I," <u>IDR</u>, (February 1974), p.170. Interviews, Fischer 7 April 1993 and Von Sandrart.

⁸⁹ Interview, Von Sandrart. Also see Philip Karber and John Milam, "The Federal Republic of Germany," in Jeffrey Simon, ed., <u>NATO-Warsaw Pact Force Mobilization</u>, (Washington, D.C.: National Defense University Press, 1988), p.259.

There are some similarities between the earlier Bundeswehr and the British AKA concept with more emphasis on the combined armour, infantry and artillery operation. Based on interviews with General Von Sandrart and Lt. Colonel Fischer, the defenders' tasks can be summarised thus: 1) to identify and occupy important terrain; and 2) to wear the enemy down by lateral movement and immediate local counter attack. 90 The defenders were expected to conduct a primarily defensive delaying battle both from prepared positions and by encounter battle.

However, in line with forward defence, the overriding emphasis was placed on the immediate local counter attack to catch the enemy on the move with surprise in order to regain the initiative. Thus, they would seek to make an early commitment of tactical reserves in the local counter stroke whenever possible. Onsequently, the concept suffered from the same shortcomings as did the British one. In short, its stress on the tactical battle at lower levels would be a disadvantage against the WP. Furthermore, even if divisions and corps enjoyed freedom of action and some elasticity of defence within the assigned sector, their operations would essentially remain within the tactical scope. It seemed to be the antithesis of the tradition of the operational level of war and defence-in-depth which characterised the typical German operations during the Second World War.

Despite these shortcomings and as Cordesman wrote that the Bundeswehr was 'far from perfect,' it maintained better readiness and sustainability than other corps, and was the best equipped army in

⁹⁰ Interviews, Fischer and Von Sandrart.

⁹¹ Interviews, Fischer and Von Sandrart.

NORTHAG.⁹² Although its sustainability was not entirely satisfactory, it had persistently maintained adequate war reserves and ammunition stocks for 30 days of intensive conventional combat, the amount of which were believed to be sufficient for the operation it envisaged.⁹³ Moreover, its reliable and effective mobilisation system, and the re-equipment of its territorial and regular forces during the 1970s and 1980s, had enhanced its fighting capability significantly.⁹⁴

In conclusion, as many commented, the Bundeswehr would have been able to defend its own corps sector effectively at the early stages of the war, but the lack of a coherent and plausible operational idea and the weakness of, especially the Dutch and Belgian Corps, would have forced it to quickly abandon its forward defence positions and engage in a battle of withdrawal to avoid isolation and piecemeal defeat. Under the circumstances, 1 German Corps' resources and fighting-power would have been wasted.

2.4.3. 1 BELGIAN CORPS

The Belgian corps sector was located south of the British corps and north of the border with CENTAG (Central Army Group). The sector frontage was about 40 kilometres long, and the Harz to its south provided much of the protection to its

⁹² Cordesman, op. cit., p.112.

⁹³ See Rennagel, op. cit., p.121. Also see Cordesman, op. cit., p.98 and 101. Also see 7.6.4., for other corps sustainability.

⁹⁴ Karber and Milam, op. cit., in Simon, op. cit., p.261.

⁹⁵ Interviews, Bagnall on 5 May 1993, Chalupa, Farndale on 21 June 1993 and Von Sandrart.

front and right flanks. 96 1 Belgian Corps consisted of two divisions (each with three brigades and a Reconnaissance Brigade Group which had three reconnaissance, two tank, one logistics and one artillery battalions) in the early 1980s. Nevertheless, only two out of six brigades (one mechanised infantry and one armoured) were actually deployed in the Belgian corps area along with the Reconnaissance Brigade Group. 97 Also, among the NORTHAG armies, the Belgian Army had the poorest reputation. It was called a 'hollow army,' which suffered from a lack of funds and sustainability despite its high professional standards and good record in NATO exercises and competitions. 98

Yet the defensive advantage afforded by the Harz mountains in the south provided the army group with some assurance that the Belgians would probably be able to cope with the defence of the sector at the early stage. ⁹⁹ It was also hoped that the Belgian sector would be spared if the WP launched a standing start attack because the WP was not expected to go out of its way 'to give themselves a bad time just for the sake of springing a local surprise in the Harz, when this tangled country may be so easily bypassed through flatter and easier ground on either side. ¹⁰⁰

In an interview, Lt. Colonel Briot of the Belgian Army said it also developed an AKA concept around 1974-5. However, due to the lack of resources and reserves, it is difficult to imagine that more than a straight static defence could have been managed, despite the fact that they were eager to

⁹⁶ Faringdon, op. cit., p.371.

⁹⁷ Interview, Lt. Colonel Briot on 25 March 1993.

⁹⁸ Jane's NATO Handbook, 1989-90, p.123. Also see Cordesman, 1988, p.179.

⁹⁹ Interviews, Briot and Farndale on 14 April 1993.

¹⁰⁰ Faringdon, op. cit., p.373.

contribute as much as possible within their resource limitations. ¹⁰¹ Also, similar to the problems with the Dutch corps, its lack of in-theatre forces could hamper the already over-stretched British corps operations by forcing it to provide cover for their deployment. Hence, regardless of German criticism over the British propensity for an early fall-back, ¹⁰² it would be difficult for the British corps to cover the Belgian deployment while maintaining a strong coherent defence close to the IGB with the limited assets available to it at the time.

2.4.4. CONCLUSION

The conventional posture and operational concept of the NORTHAG corps in the late 1970s was very passive and aimed at conducting separate corps battles which were untenable, and thus could not offer a cohesive defence against the WP's superior might. Furthermore, the lack of readiness, especially in the Dutch and Belgian corps, would have seriously threatened the army group's initial defensive operations, making NATO's nuclear early-use inevitable. In fact, there was no chance that they could offer a prolonged and coherent conventional resistance against a surprise WP deep attack, and this would result in a rapid collapse of the army group defence as the posture eased the WP's chance to achieve deep penetrations along the army group sector. As will be discussed in chapters 3 and 4, this and other political and strategic considerations during the late-1970s gave the impetus to the British Army to explore new ways of bolstering its conventional defence capability, which were ultimately to be realised through Bagnall's reforms in the early 1980s.

¹⁰¹ Interview, Bagnall on 5 May 1993 and Farndale on 21 June 1993.

¹⁰² Interview, General Leopold Chalupa on 12 May 1993 and Fischer.

2.5. CONTENDING IDEAS FOR CONVENTIONAL IMPROVEMENT BEFORE THE REFORMS

2.5.1. THE MILITARY REFORM MOVEMENT AND THE DEBATE BETWEEN MOBILE AND ATTRITIONAL DEFENCE

The military reform movement, which was advocated by such people as Steven Canby and Edward Luttwak in the US, was one of the most influential forces behind the burgeoning interest in conventional improvements throughout the mid-1970s and 1980s. It had a very strong impact on the perception of the US and the Allies towards new conventional options in Europe, such as the operational level mobile defence. ¹⁰³ The reformers' main focus was on the reduction of NATO's dependence on early nuclear use. They stressed that bolstering the direct defence option by the restructuring of NATO forces and the creation of operational reserves was both desirable and feasible within the existing budget and resources. ¹⁰⁴ Furthermore, they opposed an overwhelming reliance on high-technology solutions, as shown in the European Security Study (ESECS) reports and FOFA.

In sum, they suggested that several improvements were needed if NATO's ability to counter the WP conventional attack was to be reinforced. Firstly, it was recognised that the future military doctrine of the Alliance should be based on the principles of the operational level of war in order to enable them

¹⁰³ See two articles by Steven Canby, "Military Reform and the Art of War," Survival, (May/June 1983), pp.120-127; and "NATO: Reassessing the Conventional Wisdoms," Survival, (July/August 1977), pp.164-168.

¹⁰⁴ Robert A. Gessert, "The AirLand Battle and NATO's New Doctrinal Debate," <u>RUSIJ</u>, (June 1984), pp.56-8.

to fight a war on a larger (theatre-wide) scale with efficiency and without duplication of effort. Secondly, the desirability of conducting an operational level mobile defence in Europe was suggested because it was perceived as a better option to secure victory against the numerically superior WP. 105 Thirdly, it was felt that NATO would require better C3I (Command, Control, Communication and Intelligence) capability--as well as better training, interoperability and sustainability--to conduct the style of warfare mentioned. Finally, closer coordination with the air force was seen as essential if NATO's capacity to conduct a joint air and land operation was to be improved. In short, their support was based on the assumption that NATO enjoyed some advantages over the WP which could be exploited to reinforce its defence. 106

However, the military reformers' views on the conventional option, and particularly on mobile defence, sparked a major debate. The opposition was led, for example, by John Mearsheimer, who championed the cause of a defensive concept which combined forward defence and relatively static defence. This kind of defence would utilise both local mobility and the increased accuracy and firepower of newly-available weapon systems such as Precision Guided Munitions (PGMs). ¹⁰⁷ In the first place, he argued that the mobile defence

¹⁰⁵ See Edward N. Luttwak, "The Operational Level of War," <u>International Security (IS)</u>, (Winter 1980/1981), pp.61-79; and Canby, 1977, pp.164-68.

¹⁰⁶ See Gessert, op. cit., p.58; Von Mellenthin and Stolfi, op. cit., p.123; Simpkin, 1985, pp.52-3; and Zaloga, op. cit., p.65, for details of NATO's advantages.

¹⁰⁷ See John Mearsheimer, 1983, chapters 6 and 7; "Precision-Guided Munitions and Conventional Deterrence," <u>Survival</u>, (March/April 1979), pp.68-76; and "Maneuver, Mobile Defense, and the NATO Central Front," <u>IS</u>, (Winter 1981/1982), passim. See Richard K. Betts, "Conventional Strategy," <u>IS</u>, (Spring 1983), pp.140-162, for criticism on the reformers' views. Also see Bellamy, 1987, pp.297-8, for support for Mearsheimer's views.

concept was too risky and allowed virtually no margin for error; nor did it favour the outnumbered defender and, even if the initial counter attack succeeded, it would eventually succumb to follow-on echelons. Therefore, such a situation would make mobile defence vulnerable to WP counter attack and envelopment. Finally, NATO's lack of interoperability and cooperation would make the operation a very difficult one to perform. 108

Mearsheimer's criticism at the time seemed to be justified. Indeed, if NATO intentionally allowed WP penetration deep into its territory for mobile defence, which such a form of warfare would inevitably involve, it would require extreme agility and powerful operational reserves to deal with the breakthrough. Moreover, if the counter attack failed, the WP would be free to push deeper into NATO territory. The problem would be aggravated if there was more than one penetration due to the lack of operational reserves in NATO. Lastly, the lack of interoperability among its armies would scarcely aid the planning of any coordinated counter move by NATO.

Nevertheless, there were a few discrepancies in this argument as well. Naturally, good defence was indeed a stronger form of warfare, but without the capability for a major counter offensive to restore the original status quo, it would be very difficult to deter the attacker in the first place. ¹⁰⁹ Secondly, advances in technology notably brought about an exponential increase in the lethality of weapons--they also introduced better and more capable C3I systems which could be used to enhance the coordination and synchronisation of a major counter offensive by the defenders. Furthermore, the increase in mobility and

¹⁰⁸ Mearsheimer, 1983, chapters 6,7 and 8, passim.

¹⁰⁹ See Mearsheimer, 1983, pp.56-9, for the susceptibility of having no counter offensive capability against, e.g. in his analogy, 'Limited Aim Strategy.'

protection, as well as in the firepower and range of weapon systems, would allow the counter forces to be more responsive and lethal in their attack. 110 In short, the advances in technology favoured defence, yet they could also be utilised as a force multiplier to achieve economy of force and elasticity of defence at the operational level, which was the main focus of the military reformers. Particularly, Mearsheimer's view on the use of PGMs was quite skewed as he concentrated on the defensive potential of the weapons, whereas they could be equally exploited for offensive operations. 111 Although forward static defence utilising a good defensive terrain seemed to offer an economic solution, as it was a tactically sound deployment, it involved an equal distribution of forces along the entire front, making it very difficult to achieve economy of force at the operational level. Also, many units in forward positions would be operationally dislocated because of the linear nature of the defensive positions close to the front, which was quite vulnerable to a surprise attack.

This debate seemed to represent the clash of the two opposing mentalities, since the two schools argued from distinctively different positions based on two opposing, yet very strongly logical, points of view. Perhaps this was one of the reasons for their cautious reception by the public and military. Despite their distinctive contribution in shedding new light on the necessity of exploring the operational thinking, as Richard Betts wrote, 'Both the intellectual power and policy weakness of reformist critiques lie in their simplicity and the

¹¹⁰ See Holden Reid, op. cit., in Mackenzie and Holden Reid, 1989, p.6, for the view that technology strengthened both defensive and defensive-offensive options.

¹¹¹ See Betts, 1983, p.161. Also see the same article for excellent critiques of the overall shortcomings of the reformist ideas, as well as other proposals.

clarity of their theoretical premises. 112 This criticism could equally be applied to the attritional defence advocates. In the end, reformist ideas provided a useful framework within which NATO was able to develop a new conventional thinking in the late 1970s and early 1980s. Yet one of the most important lessons of the debate was that the evolution of both operational thinking and technology could not be considered in isolation, but should be exploited to supplement the new-found interest in enhancing NATO's conventional options. 113

2.5.2. EMERGING TECHNOLOGY AND THE EUROPEAN SECURITY STUDY (ESECS)

One of the more disturbing trends in NATO at the time was its growing dependence on technological solutions in order to support its conventional improvement, as well as to off-set the WP's numerical superiority. 114 As the debate continued, a new line of thought emerged, which stressed the possibility of replacing nuclear with conventional deterrence. For example, it was sometimes thought that PGM technology would offer an alternative way of attacking objectives which previously required strikes by nuclear weapons due to the inaccuracy of many conventional delivery systems at the time. Even if this were not the case, some, like Mearsheimer, firmly trusted PGMs to be instrumental in the significant reinforcement of NATO's defences. 115

¹¹² Betts, 1983, p.162.

¹¹³ See Flanagan, 1988, p.82.

¹¹⁴ Timothy Garden, The Technology Trap, (London: Brassey's, 1989), p.3.

¹¹⁵ See James A. Tegnelia, "Emerging Technology for Conventional Deterrence," <u>IDR</u>, (May 1985), p.652; and Frank Barnaby, <u>Future War</u>, (London: Multimedia, 1984), p.10.

Among many developments, the ESECS report entitled Strengthening Conventional Deterrence in Europe--Proposal for the 1980s, which was published in 1983, became the most influential--and controversial--work concerning the use of ET (Emerging Technology) in strengthening the defence of Europe. Briefly, this report concluded that an increase in NATO defence expenditure of about 4 per cent per annum would enable NATO to acquire the necessary high-technology equipment to deter a WP conventional attack. 116 Although the overall emphasis of the report was on the selection of the technological option, it also attempted to identify the advantages and weaknesses of the WP, and its suggestions were centred around exploiting those points. The report pointed out the necessity for improvements in the following areas: 1) improvement in NATO's C3I, surveillance and target acquisition capability; 2) blunting the initial WP attack; 3) eroding WP air power (by counter-air); 4) attrition of the WP follow-on forces (FOFA); and 5) disruption of the WP C3I. Furthermore, all the missions including counter-air and interdiction, were expected to be accomplished with non-nuclear forces. 117

In sum, the ET debate and ESECS report represented the strong desire of the West to compensate for the weakness of NATO's numerical strength and avoid the early use of nuclear weapons by introducing means of substituting for and supplementing them. In fact, its analysis was similar to those that led to the early work on the AirLand Battle Doctrine and to FOFA. 118 Also, it indicated

¹¹⁶ See the Report of the European Security Study Group (ESECS), Strengthening Conventional Deterrence in Europe, (New York: St. Martin's Press, 1983), for details. Also see Johannes Steinhoff, "Dream or Reality: Hardware for FOFA," NSN, (May 1985), pp.24-28.

¹¹⁷ Steinhoff, op. cit., p.26; and Gessert, op. cit., p.56.

¹¹⁸ Gessert, op. cit., p.56.

that ET could have benefits in bolstering NATO's conventional defence, so long as the notion of substitution and an overwhelming stress on the technological solution were avoided. 119

2.5.3. NON-OFFENSIVE DEFENCE

The original non-offensive defence idea was proposed in Germany in the 1950s, but more tangible support began appearing in the 1970s and remained strong within the civilian sector throughout the 1980s. 120 In essence, the non-offensive defence (NOD) concept meant 'structuring and organising military forces in such a way that they are suitable only for defence and as useless as possible for attack.' 121 Its advocates believed that NATO defence without the offensive capability would be a positive factor in stabilising its deterrence structure. 122 The controversy over ERW (Enhanced Radiation Weapon) and INF (Intermediate-range Nuclear Force) deployment further fuelled the cause of NOD, and led to the 'Without the Bomb' debate in Britain in the early 1980s. Above all, the supporters of NOD rejected any move, either nuclear or

¹¹⁹ Karl-Heinz Kamp, "NATO's Defense--FOFA but Still Nuclear," <u>IDR</u>, (July 1986), p.902, for criticism.

¹²⁰ For the discussion on NOD see: McInnes, 1990; Barnaby, 1984 and 1986. For the British thinking, John Baylis, <u>Alternative Approaches to British Defence Policy</u>, (London: Macmillan, 1983); Alternative Defence Commission. <u>Without the Bomb</u>, (London: Paladin, 1985); Ken Booth and John Baylis, <u>Britain</u>, NATO and Nuclear Weapons, (London: Macmillan, 1989).

¹²¹ Niklas-Carter, op. cit., in Harris and Toase, ed., op. cit., p. 225.

¹²² See Barnaby, 1986, p.161 and p.165; and 1984, p.152; and Bellamy, 1987, p.130.

conventional, that could be seen as offensive, including the AirLand Battle Doctrine and FOFA, or the maintenance of a large mobile armoured force. 123

Yet NOD was criticised as posing a series of political and operational problems for NATO, both in crisis and war. ¹²⁴ If NATO's declared strategy was based on the combination of nuclear no-first-use and defensive defence, which NOD advocates supported, it would be easier for the WP to choose a military option as they would feel less vulnerable. Also it could only lead to a war of attrition which NATO could not expect to win. A.J.G. Pollard clarified the point: '[It] is the philosophy of defensive defence that is most dangerous. [It] denies the conventional offensive force elements and thus questions the validity of deterrence.' ¹²⁵ This could compromise the whole essence of NATO's posture based on maintaining deterrence.

2.5.4. CONVENTIONAL RETALIATION

The conventional retaliation idea was proposed by such people as Samuel Huntington in his article, "Conventional Deterrence and Conventional Retaliation in Europe," and Elmer Dinter and Paddy Griffith in their book, Not over by Christmas. Their fundamental argument was that it would be a more credible deterrent since their proposal incorporated deterrence based on both

¹²³ Niklas-Carter, op. cit., in Harris and Toase, ed., op. cit., p. 225.

¹²⁴ See Keith Dunn, <u>In Defense of NATO</u>, (Boulder: Westview, 1990), p.82; Bellamy, 1987, pp.130-1; and Michael Dewar, <u>The Art of Deception in Warfare</u>, (London: A David and Charels, 1989), p.209, for criticism.

¹²⁵ A.J.G. Pollard, "Future Defence of the Central Region," in Holden Reid and Dewar, ed., op. cit. p.125.

denial and punishment. ¹²⁶ This would involve, according to Dinter and Griffith, taking 'tokens' by undertaking counter offensive action early in the war with which to secure some territorial gains in the WP territory. It was argued that such an action would 'reduce the risks of both a prolonged war and nuclear one' while strengthening NATO's 'hand at the negotiating table' in bringing a quick cessation of the conflict and securing 'a lasting peace' thereafter. ¹²⁷

For example, Simpkin observed that the idea of incapacitating the enemy's will to carry on the fight by neutralising his rear with 'a prompt Allied offensive into Eastern Europe' could unhinge the WP offensive was plausible. 128 Nonetheless, this concept was very difficult to accept, particularly because it was too aggressive for a defensive alliance like NATO to adopt, as well as because the cost of implementing the strategy was a lot higher than postulated. 129

Despite such political and operational difficulties, as will be discussed, once NATO achieved a substantial improvement in its capability and regained confidence, a line of thought which favoured such an option became established in the minds of many--slowly but surely. This was the case with the formal endorsement of the NORTHAG concept of operation by both the Germans and British, the integral tenet of which was an army group counter offensive against the main enemy force, regardless of its location--either within or over the IGB.

¹²⁶ See Samuel P. Huntington, "Conventional Deterrence and Conventional Retaliation in Europe," <u>IS</u>, (Winter 1983/4), pp.32-56; and Elmer Dinter and Paddy Griffith, <u>Not over by Christmas</u>, (Sussex: Anthony Bird Publications, 1983), p.23, and passim.

¹²⁷ Dinter and Griffith, op. cit., p.23.

¹²⁸ Simpkin, 1987, p.307.

¹²⁹ See Keith A. Dunn and William O. Staudenmaier, "The Retaliatory Offensive and Operational realities in NATO," <u>Survival</u>, (May/June 1985), pp.108-118, for criticism.

2.6. NEW CONVENTIONAL OPERATIONAL THINKING

2.6.1. THE US ARMY FM 100-5 AIRLAND BATTLE DOCTRINE

The AirLand Battle Doctrine, which was first endorsed in 1982, was to compensate for the limitations in the Active Defense Doctrine of 1976. ¹³⁰ Although Active Defense called for a return to the spirit of the offensive, seizure of the operational initiative and rejection of the all-firepower, all-attrition style of battle, in reality it focused on firepower-oriented defence, which involved lateral movement of the forces in all-arms operations, to achieve concentration while taking advantage of new weapon systems as combat multipliers to increase lethality. ¹³¹ Consequently, it was criticised for the lack of operational level design by being 'inactive and unaggressive, relying once again on attrition, firepower and a "managerial" fix to a military problem,' which demonstrated that the US had yet to comprehend the principles of the operational level of war and was uncomfortable with the concept. ¹³² Under the circumstances, the relevance of manoeuvre was limited to the movement of reserves from one point to the

¹³⁰ See Robert Romjue, <u>From Active Defense to AirLand Battle: The Development of Army Doctrine 1973-1982</u>, (Monroe: U.S. Army TRADOC, 1984), passim; McInnes, 1990, chapter 5; and Paddy Griffith, <u>Forward into Battle</u>, (Novato: Presidio, 1990), chapter 6.

¹³¹ See Griffith, 1990, pp.164-5; Bellamy, 1987, p. 132. Also see Paul H. Herbert, <u>Deciding What has to be Done: General William E. Depuy and the 1976 Edition of FM 100-5, Operations</u>, (Washington, D.C.: Combat Studies Institute, 1988), for the background of the Active Defense Doctrine.

¹³² Griffith, 1990, p.165. Also see Leonhard, op. cit., p.6.; William G. Hanne, "AirLand Battle: Doctrine Not Dogma," <u>IDR</u>, (August 1983), p.1035; and J.G. Williams, "The British and American Approaches to Operational Art--Where They Might Lead," in Mackenzie and Holden Reid, 1990, p.18.

other, and, because of the lack of a coherent campaign plan, it would result in a piecemeal committal of the reserves. 133

Unlike Active Defense, AirLand Battle stressed a more manoeuvre-oriented offensive approach at the operational level, which addressed the demands of the European theatre as well as others, in order to adapt 'to the specific strategic and operational requirements of each theatre.' 134 It was an evolution of the earlier thoughts of the US Army on 'the integrated battlefield' and 'the extended battlefield.' The integrated battlefield meant combined nuclear, chemical and conventional operations, whereas the extended battlefield involved a deep attack into WP territory with the above combination in both air and land dimensions. 135 Ultimately, the AirLand Battle Doctrine became the overarching concept under which the above two sub-concepts became integrated with combined conventional air and ground operations to increase both firepower and mobility in three-dimensional warfare. 136

The new doctrine envisaged three types of battle: first, deep battle against the enemy follow-on forces; second, close-in battle; and third, battle in one's own rear against Soviet special forces (e.g. OMGs). 137 It placed a particularly strong emphasis on deep battle. It was understood that the battle would be fought by both the air force with interdiction, and the army with stand-

¹³³ See Dannatt, op. cit., p.12.

¹³⁴ The US Army, <u>FM 100-5 Operations</u>, (Washington, D.C., 1986), Preface. Also see McInnes, 1990, p.125; and Dannatt, op. cit., pp.12-3.

¹³⁵ See more on the extended and integrated battlefields in: Romjue, op. cit., p.43; and Gessert, op. cit., p.54.

¹³⁶ Romjue, op. cit., p. 44.

¹³⁷ See Bellamy, 1987, pp.133-4.

off firepower, armour, and attack helicopter assets against the enemy's follow-on echelons. ¹³⁸ It would be conducted simultaneously with close-in battle, and both of them would be aimed at winning the first battle. ¹³⁹ The purpose would be to keep the enemy forces arriving for the close-in battle at a manageable level and to defeat them piecemeal by isolating them from the follow-on ones. ¹⁴⁰ The advantage would be that a numerically inferior force could defeat a substantially larger foe with a combination of manoeuvre, firepower, and superior technique in a multi-dimensional battle. ¹⁴¹ Also, the doctrine postulated that technology favoured offensive action since it enhanced the firepower and mobility of the weapon systems used. In fact, it was thought that the advent of new conventional technology nearly detached the nuclear and chemical dimensions from the earlier extended battle concept, and thus it became possible to conduct an extended conventional war. ¹⁴²

The deep battle element in AirLand Battle had a fundamental influence in the ensuing development of FOFA, which stressed its hardware and technology aspects. Specifically, the emphasis on deep battle was seen as a willingness to take the war beyond the IGB. If the extension of the battlefield by ground forces was forbidden, it was considered acceptable to use air power and long-range

¹³⁸ See Griffith, 1990, p.165; and Gessert, op. cit., p.54.

¹³⁹ See <u>FM 100-5</u>, p.2.

¹⁴⁰ See Niklas-Carter, op. cit., in Harris and Toase, op. cit., pp.215-6; and Griffith, 1990, p.165.

¹⁴¹ See Gessert, op. cit., p.54; and J.B.A. Bailey, <u>Field Artillery and Firepower</u>, (Oxford: The Military Press, 1989), p.299.

¹⁴² Gessert, op. cit., p.54.

firepower to attack across the IGB. ¹⁴³ Above all, it caused a major controversy in NATO over the intentions of the US, especially over possible offensive land operations across the border. ¹⁴⁴ As a result, the emphasis on the deep attack aspects of the doctrine was significantly reduced in the 1986 revision, but without changes in the overall doctrinal aspects. ¹⁴⁵ Furthermore, the possibility of a major counter offensive and anything supporting such an idea were officially dismissed. ¹⁴⁶

2.6.2. FOLLOW-ON FORCES ATTACK (FOFA) SUB-CONCEPT

Similar to the AirLand Battle Doctrine, FOFA, which was officially adopted by NATO in 1984, postulated that the conduct of deep battle would create a major advantage in defence against the WP, which would significantly strengthen NATO's deterrence. 147 Furthermore, it offered an alternative in which technology could replace some of the roles that were previously assigned to nuclear weapons. Thus, FOFA technology, which seemed to alleviate the need for early use of nuclear weapons, was seen as increasing the flexibility of

¹⁴³ See Bailey, op. cit., p.299. Also see the GDP, p.9.

¹⁴⁴ See Hansard, <u>Debate on Army</u>, 22 October 1984. Comment by Davies and Boyes, for the British criticism.

¹⁴⁵ See Bellamy, 1987, p.133.

¹⁴⁶ See Henry S. Tuttle, "Is AirLand Battle Compatible with NATO Doctrine?" Military Review (MR), (December 1985), pp.8-9.

¹⁴⁷ See Bernard W. Rogers, "Follow-On Force Attack (FOFA): Myths and Realities," <u>NATO Review (NR)</u>, (December 1984), p.6; and "Sword and Shield: ACE Attack of Warsaw Pact Follow-on Forces," <u>NSN</u>, (February-March 1983), p.26.

NATO's responses at the strategic and higher operational levels. ¹⁴⁸ Firstly, it was felt that the interdiction of the isolated follow-on forces, (whose elements were yet to join the battle), in WP territory offered a cost-effective solution compared to having to fight them in contact battle. ¹⁴⁹ It was thought that attacking choke points, such as major road junctions and railway systems, or interdicting with the enemy body while on the move, would be a very effective means of slowing down the advance of the WP forces. Secondly, as a part of FOFA, Offensive Counter-Air (OCA) operations would attack the enemy air force on their airfields. This was viewed as a more economic option than fighting the enemy aircraft one-to-one in the air. In short, it stressed the realisation of a combined multi-depth interdiction operation by air and land forces with which to take the initiative and start attrition from the early stages. ¹⁵⁰

However, it created a major political controversy since the perceived offensive nature of FOFA, and also its reliance on conventional strike capability, caused concern among Europeans, particularly Germans. This concern was over the possibility that strong dependence on the conventional solution of FOFA might replace nuclear deterrence, and that NATO's intention might be viewed as shifting toward fostering a preemptive capability. ¹⁵¹

¹⁴⁸ See McInnes, 1991, p.40; and Kamp, op. cit., p.901. Also see Bailey, op. cit., p.318, for the substitution of the inferiority of the NATO force with FOFA and ET.

¹⁴⁹ See John G. Hines and Philip A. Petersen, "Is NATO Thinking Too Small?" <u>IDR</u>, (May 1986), p.572.

¹⁵⁰ See McInnes, 1990, p.150.

¹⁵¹ See Kamp, op. cit., p.902.; and Richard Mills, "Follow-on Force Attack: The Need for a Critical Reassessment," <u>RUSI and Brassey's Defence Yearbook 1990</u>, (London, 1990), p.136. This question, as well as other debates, was addressed by General Rogers' 1984 article.

Furthermore, the success of FOFA depended heavily on the effectiveness of emerging surveillance, targeting, and weapon technology. Indeed, when FOFA was first conceived, it was based on technologies which were still on the drawing board. 152 Thus, FOFA would have seriously drained AAFCE's (Allied Air Force Central Europe) strength to conduct the all-important air superiority and counter breakthrough operations, which were two of the most important missions outlined especially by the Germans. 153 Above all, it was felt that the deployment of the new technology was precarious and the complexity of high technology weapons and equipment was susceptible to both counter measures and unreliability. 154

Also, parallel to the criticisms of the ESECS report, it was felt that FOFA was not as cost-effective an option as was suggested by General Bernard Rogers, its most powerful proponent, and then SACEUR. Although the idea of FOFA was very appealing, the cost involved (Rogers claimed that an estimated 4 per cent increase per annum would suffice) was in fact prohibitive considering NATO had an array of other important missions to carry out. Basically, to fully implement the concept to the level that Rogers envisaged would have jeopardised other high priority missions (e.g., initial defence) by absorbing scarce resources.

¹⁵² See Flanagan, 1988, pp. 66-8, for details on such weapon systems as J-STARS (Joint Surveillance Target Attack Radar System), JTIDS (Joint Tactical Information Distribution System) and MLRS-ATACMS (Multiple Launch Rocket System-Army Tactical Missile System).

¹⁵³ The U.S. Congress, Office of Technology Assessment, New Technology for NATO: Implementing Follow-On Forces Attack. (OTA-ISC-309), (Washington, D.C.; US GPO, 1987), p.113.

¹⁵⁴ See Mills, op. cit., p.128; and McInnes, 1990, pp.154-9.

In addition to this, Rogers' over-enthusiastic support was seen as threatening, as well as liable to deplete already scarce assets. General Von Sandrart said in an interview that Rogers was 'running into a blind alley' without properly considering the implications for NATO's overall defence plan. Thus, he had to convince Rogers that, as the COS of the Bundeswehr, unless the FOFA requirements were streamlined to fit the existing NATO defence priority, it would not get the necessary political approval from the Alliance. Von Sandrart added that he suggested the building of a 'Conceptual Military Framework (CMF)' to review FOFA. 155 As a result, his proposed CMF became an official review body within NATO in December 1985 following the endorsement of the initial report on Conventional Defence Improvements (CDI) in May. CDI was a move to conduct a long-term defence planning of NATO's defence priorities which enabled the carrying-out of the CMF review on the original FOFA requirements as a part of its initiative. 156 Thereafter, the emphasis on FOFA was somewhat toned down under the CMF review.

¹⁵⁵ Interview, Von Sandrart.

^{156 &}lt;u>SD 1986</u>, para. 315-7. Also see Dunn, op. cit., p.85; and James Moray Stewart, "Conventional Defence Improvements--Where is the Alliance Going?" NR, (July 1985), p.6.

2.7. THE ORIGINS OF BAGNALL'S IDEAS

2.7.1. THE HISTORICAL FOUNDATION OF BAGNALL'S IDEAS

Despite the fact that many plausible ideas appeared at the time of Bagnall's formulation of a new operational concept, he based his thinking exclusively on studies of the German experience in the Second World War. He paid particular attention to its mobile defence/counter stroke operations on the Eastern front through extensive research of the lessons of the war from books. 157 Some of these books include Panzer Battles by Von Mellenthin, On Tactics by Herman Balck and Von Mellenthin, and The Rommel Papers edited by Liddell Hart. 158 Moreover, talks with such people as Generals Balck and Von Mellenthin proved to be important as well. In fact, Balck and Von Manstein's counter stroke operations were the model which Bagnall used for the development of his mobile defence concept. 159

The logic behind Bagnall's approach was quite simple; by examining the historical references to the Russian defeats in battle by the Germans during World War Two, he hoped to discover how the outnumbered Germans had repeatedly been able to beat the Russians (mainly through mobile defence), so

¹⁵⁷ Interview, Bagnall on 5 May 1993.

The list was provided courtesy of Field Marshal Bagnall. Other titles include: Ordnung in Chaos and Panzer Operationen by General Herman Balck; Verlorene Siege by Mellenthin; Der Gegenschlag by General Von Senger und Etterlin; Korpsabteilung by Lt. General Wolfgang Leuge; Mittlere Ost Front and Panzer Operationen by General Cerd Nicpold; Deutschen Panzerwaffe by Wachzer Nehriging; Der Geschichte Der Panzer Lehr Division by Brigadier General Helmut Ritgem; Panzer Operationen by General Herman Hoth; etc.

¹⁵⁹ Interview, Bagnall on 5 May 1993. See chapter 8 for more on analyses of the validity of the concept.

that he might apply the principles behind the former's success to the situation at his own time. This approach was largely justified in that he himself had to defend against the Russians, whose operational thinking remained similar to that which they had applied in the past--deep attack and OMG.

Specifically, Bagnall was attracted by the fact that a small but highlymotivated force conducting offensive action with surprise was able to defeat a big army, as the German forces often did during 1943 when they were retreating from Russia. 160 Thus, the German operations offered a small force a viable alternative to successfully counter a considerably larger one. Also, the Germans succeeded in securing surprise by offensive action, and their effort to dislocate the defenders in depth was accomplished quickly through the maintenance of the initiative and momentum of forces by deliberately attacking the defender's weakness while avoiding his strength. Furthermore, the Germans were equipped, both physically and psychologically, to conduct such a high-tempo operation. They had command flexibility, which was governed by directive control (Auftragstaktik), while maintaining clarity of direction and purpose of attack (Schwerpunkt). 161 Meanwhile, their forces consisted of armoured and mechanised infantry forces with dedicated CAS (Close Air Support) by the Luftwaffe, all of which were committed to maximising the speed of their operation. This was a classic joint land/air operation at the operational level. 162

¹⁶⁰ Interview, Bagnall on 6 November 1993. See Macksey, 1991, chapters 5 and 6 for the details of the German operations in the Eastern Front.

¹⁶¹ See Edward Luttwak, <u>Strategy and Politics</u>, (New Brunswick: Transaction Books, 1980), p.299, for a comparison between the German and British command styles during the Second World War. Also see Lind, op. cit.. p.18, for Schwerpunkt. See 7.2.2. for more on Auftragstaktik.

¹⁶² See Luttwak, 1980, p.300.

Bagnall did not utilise the British literature and experience (such as the Arras counter stroke in 1940) in formulating his concept, unlike some British officers and academics who seemed keener to use the British experience in Arras as the main example of a successful counter stroke. 163 After all, the Arras counter stroke, during which a handful of British armoured and infantry forces were able to stop Rommel's 7th Panzer division, was a model example of how a hasty counter stroke by a small disorganised force could bring about spectacular results, if surprise was achieved. 164 Although the operation was a glorious failure, it did succeed in slowing the enemy down, and showed that even a failed counter stroke could have a major benefit at the operational level. 165 While understanding such an advantage and wishing a tactical battle to be fought in such a manner, Bagnall nevertheless managed to mitigate the arbitrariness and peculiarity of his choice of the German World War Two practice as his guideline by stressing that the Arras experience was too small and isolated to be used as the general background for his concept, whereas the German successes offered a wider and more concise set of concepts to be utilised. 166

The same applies to Bagnall's ignorance of the Israeli operations during the 1967 and 1973 wars, although the kind of operation he envisaged would be closer to the combination of the Israeli operations in the Sinai and Golan Heights

¹⁶³ See Halbadier, op. cit., passim; and Brian Bond, "Arras, 21 May 1940: A Case Study in the Counter-Stroke," in Barnett, Bidwell, Bond, Harding and Terraine, op. cit., passim.

¹⁶⁴ Halbadier, op. cit., pp.31-2; and Bond, op. cit., in Barnett, Bidwell, Bond, Harding and Terraine, op. cit., pp.82-3.

¹⁶⁵ See McInnes, 1988, p.385; and Bond, op. cit., in Barnett, Bidwell, Bond, Harding and Terraine, op. cit., passim.

¹⁶⁶ Interviews, Bagnall on 6 November 1993 and 4 May 1994.

during the Yom Kippur War as will be discussed in chapter 8. It can be argued that perhaps he paid more attention to the German experience partly because he was able to read and speak German, which enabled him to consult the German material from early on in his career. ¹⁶⁷ Another major factor was his recognition of the fact that what the Israelis did was not dissimilar from what the Germans had done earlier, and he verified this during his visit to Israel when he was a Defence Fellow in Oxford during 1972-3. ¹⁶⁸ He was thus persuaded to stick with the original German concept, of which he felt he had more knowledge.

2.7.2. RELATIONSHIP WITH THE EARLIER PROPOSALS

Since Bagnall's concept was developed based on his own assessment of 1) the various political, strategic, and operational situations during the 1970s and the early 1980s (see next chapter for details); and 2) the conditions the British and other corps in NORTHAG had to face, the evolution of his idea was quite an isolated and independent process. A number of interviews I have conducted with him revealed that the foundation of his ideas was indeed the work of an individual, the origin of which lay with the all-important goal of finding an alternative style of warfare to the attritional posture under which NORTHAG would not be able to offer an effective defence against the WP. He concluded that such a deficiency would result in a rapid collapse of the army group's defence, and it would be forced to use nuclear weapons at quite an early stage of

¹⁶⁷ Interview, Bagnall on 6 November 1993.

¹⁶⁸ Interview, Bagnall on 6 November 1993. Also see Carver, op. cit., chapter 4, for the intellectual root of and the German influence on the Israeli operations.

the conflict (in fact he postulated that their use would be necessary from day one). 169

In relation to contending notions of conventional improvement at the time, his earlier ideas, more than those of any other reformer, shared a similar logical foundation with the military reformers--finding a way to increase the prowess of the NATO forces with a doctrinal rationalisation and improvement in command performance, which would then enable its forces to exploit more manoeuvre-oriented warfare at the operational level.

However, there were several fundamental differences between the two. Most of all, as I shall argue in chapters 4 and 5, Bagnall's ideas were certainly neither about undertaking a defence-in-depth for the sake of mobile defence, nor about taking unnecessary chances by embracing an all-mobile battle. In fact, Bagnall's concept could be summarised as a combination of positional defence in strong areas and mobile defence while taking advantage of firepower, initially to deny the WP quick penetration, and then to rapidly exploit the successes by counter attack, or counter stroke, throughout the front during the early hours of the conflict to create an opportunity for an operational counter offensive to defeat the enemy's main force. In this sense, Bagnall's concept did not suffer from the same ambiguity and simplicity as the reformers' concept did (as criticised by Betts), but had a clear purpose, and the plans and means with which to achieve this goal.

Nonetheless, as will be discussed in chapters 4, 6 and 7, technology was to play a major role in the implementation and expansion of his concept because it was seen by him as a major force-multiplier, whereby a better use of the resources, as well as significant improvements on existing firepower without an

¹⁶⁹ Interviews, Bagnall on 5 May and 6 November 1993 and 4 May 1994.

increase in the number of assets or overhead, could be achieved. Meanwhile, because of the dubious strategic logic which did not consider the vital requirements for deterrence, NOD was quickly and persistently resisted by Bagnall and the military as a whole. 170 At the same time, although he accepted that the conventional retaliation concept was too ambitious and could have a number of political and strategic ramifications, Bagnall did see its operational logic and validity. In fact, as will be discussed in chapter 6, Bagnall's concept unwittingly evolved into something similar to the conventional retaliation concept once NORTHAG achieved substantial growth in its capacity and confidence by way of the reforms.

In sum, other than sharing some intellectual and logical roots, Bagnall's concept of operation was neither influenced by, nor did it ever rely on, the debates and contending ideas at the time. Moreover, it had no relation to the US AirLand Battle Doctrine and the FOFA sub-concept (I shall discuss this further in chapter 4). At least this was the case when the new concept was developed and being implemented in the Army during the early stage of reforms and until Bagnall retired. ¹⁷¹

However, despite Bagnall's earlier lack of interest, it was inevitable that the new concept eventually paid more attention to other Allies' doctrines, especially the American thinking and practice, because of the necessity to operate effectively under the joint environment in an Alliance-wide operation. Also there were some lessons to be learned since the US Army was the only force which was capable of conducting an operational level operation

¹⁷⁰ Interviews, Bagnall on 5 May 1993, Farndale on 21 June, Kenny and Inge.

¹⁷¹ Interviews, Bagnall on 4 May 1994, Farndale on 19 May 1994 and Inge.

independently. ¹⁷² As will be discussed in chapter 8, such an effort paid off during the Gulf War, when the British Army was able to effectively conduct joint operations with the US Army, and this was why the Army's new doctrine, <u>Army Doctrinal Publication (ADP)--Operations</u>, attempts to use similar language and the operational terminology as the US AirLand Battle Doctrine.

¹⁷² See Holden Reid, op. cit., in Mackenzie and Holden Reid, 1989, p.8.

2.8. CONCLUSION

The purpose of the discussions of various subjects in this chapter has been to show the historical background which gave rise to Bagnall's reforms. There were many political and strategic factors which determined the size and capacity of the British Army and BAOR; however, the main policy consideration remained domestic economic conditions. Over the thirty-plus years from the end of the Second World War to the end of the 1970s, the Army had to accept the gradual dilapidation of its strength. The changes in structure and operational thinking during this period were a constant balancing act between the shrinking resources and the requirement of maintaining a certain degree of efficiency in the force. There were conscious efforts to offer the best plausible solution under the circumstances, but they had a limited effect, and BAOR's operational thinking remained fundamentally tactical because of the overall shortage of resources and the enduring reliance on positional defence. Nor did the British Army's tradition, which embraced the regimental system and the traditional set-piece approach to a war, offer any help to solve this problem. As a result, the British corps concept until the end of the 1970s was based on a battle of attrition which involved successive withdrawals to the next planned defence line while offering some ambushes and tactical counter attacks.

Other corps in NORTHAG were suffering from similar economic and operational constraints. Most of all, the trouble with such passive operational thinking was its lack of credibility. For instance, as Field Marshal Inge pointed out in an interview, the British operational concept, as well as others, was so static and unrealistic that even the numerous exercises in Germany failed to test

its conceptual integrity.¹⁷³ As a result, few people, especially in the 1970s, believed that NORTHAG would hold the position conventionally for long.¹⁷⁴ Hence, NORTHAG's fighting-power and prospect for successful defence of the army group suffered a great deal due to both the diminishing financial resources and the negligence demonstrated by some members, especially by the Belgians and Dutch.

Therefore, the principal determinant, and the most influential impetus, underlying Bagnall's reforms was to find an alternative to this problem once and for all, and to allow for a better utilisation of limited resources, while promoting a more active and positive spirit that could offer a realistic chance of defending the NORTHAG sector. To Bagnall, and many others who supported his efforts, the adoption of the operational level concept, which could be taken up by all members of the army group, was the only plausible solution towards achieving this goal, as well as the best remedy to correct the previous deficiency-both mental and physical--of the army group.

This was one of the major reasons underlying the isolated nature of the development of Bagnall's concept; it was formulated exclusively for use in NORTHAG, whereas other major contending ideas at the time looked at the overall aspects of NATO's conventional defence. In this sense, Bagnall's sometimes skewed and dismissive views on incorporating historical experience other than that of the Germans could be justified because of his conviction that this particular experience offered the best lessons to his corps and army group.

¹⁷³ Interview, Inge.

¹⁷⁴ Interviews, Bagnall 5 May 1993 and Farndale on 14 April 1993. Also see Hackett, op. cit., p.328.

CHAPTER 3

POLITICAL AND STRATEGIC DEVELOPMENTS BEFORE THE REFORMS

3.1. INTRODUCTION

The aim of this chapter is to identify and examine the major political and strategic developments during the 1970s and early 1980s which had a profound bearing in the formulation of the reforms. Understanding the British Army's perception of these issues, all of which were identified by Bagnall and the supporters of his reforms as seriously compromising for NATO's deterrence, is critical in tracing the logic of the formulation and the course of the implementation of the reforms.

The main arguments and rationale which were offered by Bagnall and others were as follows: firstly, they were becoming progressively more discontented with the existing implementation of NATO's Flexible Response. It was felt that the strategy was becoming increasingly less feasible as the Soviet Union had achieved substantial improvements in both tactical and strategic nuclear capability in the 1970s. Due to the inadequacy of NATO's conventional defence, nuclear weapons had to be used quite early in a conflict, but this in turn could trigger a devastating nuclear response. Secondly, they believed that the Soviets and WP acquired de facto conventional superiority over NATO as a result of a persistent build-up during the 1960s and 1970s. One of the major strategic implications was that the WP would be able to launch a conventional-only standing start (or short warning) attack. Thirdly, Bagnall recognised that NORTHAG's posture in the 1970s was a liability as the West German 'over-literal interpretation' of forward defence ignored the mal-deployment of forces near the IGB. 1 It was thought that, without modifying the German perception of the strategy, NORTHAG's defence would rapidly succumb to the WP onslaught. Thus this chapter examines these various perceptions in more detail.

¹ Bagnall, 1984, p.60.

It also assesses the impact of the 1981 defence review, which was the first major reassessment of Britain's defence policy by the new Conservative government. This is examined in order to evaluate the role of the government in supporting the initiation and promotion of the reforms, and thus to determine the political gains which the new right-wing government established by openly supporting the reforms, as well as the benefits which the Army enjoyed through such actions.

3.2. THE BRITISH ARMY LEADERSHIPS'S PERCEPTION OF NATO'S NUCLEAR DETERRENCE

3.2.1. NATO'S NUCLEAR DETERRENCE

• Flexible Response

NATO's hope of reinforcing deterrence with the adoption of MC (Military Committee) 14/3 Flexible Response disappeared soon after it was formally endorsed in 1967 by NATO. It was a hope of the US that flexible response would eventually convince Europe to foster an adequate capability to conduct conventional war, although they acknowledged that the adoption of a strategy based on a major non-nuclear option was not possible.²

However, Europe saw the US argument, and especially the possibility of a WP limited attack, to be implausible and decided that there was no need to prepare for such a contingency. Even in the case of conventional war, it was thought, Europe would not escape ravages which would be little better than the destruction caused by a nuclear war. As a result, Europe put its faith firmly in nuclear deterrence, and opposed any move which it regarded as weakening deterrence.³ Furthermore, along with the persisting notion that deterrence was best served by the nuclear threat and the serious disparity in the conventional balance with the WP, both the economic and

² See Jane Stromseth, <u>The Origins of Flexible Response</u>, (Oxford: Oxford University Press, 1989), p.60, and p.177; and Stephen Flanagan, <u>NATO's Conventional Defenses</u>, (London: Macmillan, 1988), p.18.

³ See Lawrence Freedman, <u>The Evolution of Nuclear Strategy</u>, (New York: St. Martin's Press, 1989), pp.294-5; and Stromseth, op. cit., p. 176 and p.181.

nstitutional hesitation of Europe against an increase in the defence budget to nplement the goal proved to be additional barriers.⁴

As a result, the controversy caused a major rift in the Alliance as de Gaulle's rance withdrew from NATO's military structure, arguing from a position of extreme leterrence. Germany, too, was disappointed by such hesitation. It placed its trust irmly in the Alliance to adhere to the principles of forward defence, as it was felt that he strategy fulfilled the ultimate security aim of the Federal Republic of Germany FRG) and justified its membership of NATO. Therefore, any move which was seen as a weakening of such a security framework and nuclear deterrence, thus exposing ts territory to a possible war, was bound to face major opposition and discontent in Germany. Thereafter, the FRG played an increasingly assertive role in NATO, especially after the French withdrawal, to compensate for the supposed weakness reated by the new strategy and to secure its own security imperatives. In short, the eactions of Europe to Flexible Response were negative as they began questioning the US commitment and nuclear guarantee.

Strong FRG insistence on forward defence without a substantial conventional mprovement in the end left NATO agreeing on Flexible Response, while failing to evise the fundamental flaw in Massive Retaliation. Ultimately, it was only ready for a nodest improvement of its conventional strength.⁷ The controversy yielded no

See Stromseth, op. cit., pp.189-192.

See Hew Strachan, <u>European Armies and the Conduct of War</u>, (London: George Illen and Unwin, 1980), p.195.

See Phil Williams, "Nuclear Weapons in Europe in the 1990s," in Holden Reid and Dewar, op. cit., pp.47-52, for background.

See Flanagan, 1988, p.18. See chapter 3.4.1. for more on the conventional balance.

substantial improvement while creating a major political split in the Alliance in the early days. Meanwhile, regardless of the earlier problems, it did succeed in at least laying down a framework on which NATO's conventional improvement, which came later, would be based.

• Nuclear No-Early-Use

The impetus for strengthening the conventional pillar of NATO's Flexible Response came in the early 1970s. The new decade began as the US accepted nuclear parity with the Soviet Union as the first Strategic Arms Limitation Treaty (SALT I) was signed in May 1972. The acknowledgement of nuclear parity made it difficult for the US to maintain a strategy based on the threat of nuclear weapons against the Soviet Union. Europe also realised that it could not enjoy the same degree of protection under the US nuclear umbrella and, under the circumstances, the improvement of conventional forces would actually strengthen deterrence.⁸

The European perception was further galvanised by growing public discontent with NATO's deterrence posture, and in particular against its handling of the ERW and INF controversies. Naturally enough, the European public became opposed to the very idea that nuclear weapons could be used in Europe, since it was they who would have to bear the consequences. Furthermore, the nature of those short and intermediate range weapons, which were both easier to use and confinable to nuclear

⁸ See William Park, <u>Defending the West</u>, (Brighton: Wheatsheaf Books, 1986), p.140; and Freedman, 1989, p.384.

exchange within Europe, reinforced the European public's abhorrence of the fact that the US would be able to fight a limited nuclear war.⁹

These developments in the 1970s, along with the US pressure on Europe to comply with the LTDP (Long Term Defence Programme) goals, acted as a strong influence fostering the rise of a nuclear no-early-use consensus throughout Europe in the late-1970s and early-1980s. ¹⁰ The major debate on nuclear no-first-use was initiated when the so-called 'gang of four' of former US officials, Robert McNamara, McGeorge Bundy, George Kennan and Gerard Smith, contributed an article to Foreign Affairs in 1982. ¹¹ They emphasised that 'rather than depending on the option of responding to a WP conventional attack with nuclear weapons if necessary--as provided under Flexible Response--NATO should make an explicit commitment to deter and defend against a non-nuclear attack with non-nuclear forces alone. ¹² They claimed that this would enhance the political cohesiveness of NATO and facilitate a serious effort to improve its conventional defence.

The major argument of opponents of the no-first-use option both in Europe and the US was that it would, most of all, weaken deterrence, as well as endanger the political cohesion of the Alliance because it would be seen in Europe, and especially by Germany, as a weakening of US commitment. Moreover, there were many

⁹ See Freedman, 1989, pp.385-6; and Lawrence Freedman, "Europe between the Superpowers," in Gerald Segal, Edwina Moreton, Lawrence Freedman, and John Baylis, <u>Nuclear War and Nuclear Peace</u>, (London: Macmillan, 1983), p.98.

¹⁰ Stromseth, op. cit., pp.195-197.

¹¹ McGeorge Bundy, George Kennan, Robert McNamara and Gerard Smith, "Nuclear Weapons and the Atlantic Alliance," <u>Foreign Affairs (FA)</u>, (Spring 1982), pp.753-768.

¹² Stromseth, op. cit., pp.200-202.

political and economic difficulties in achieving the necessary improvements in NATO's conventional forces, and it was felt that such a declaration would automatically strengthen the Soviets' operational hand. 13

By the early 1980s, no-first-use was already receiving widespread support throughout Europe, and although NATO did not admit that it would officially adopt such an option, there was a tacit acknowledgement that it would consider 'no-early-use.' 14 As a result, the notion of a more effective conventional defence began receiving growing support, while it was stressed that the purely conventional deterrence option should not be considered. 15

3.2.2. THE BRITISH ARMY LEADERSHIP'S NUCLEAR NO-EARLY-USE THINKING

In the late 1970's, many senior British Army officers came to hold the view that raising the nuclear threshold by prolonging conventional resistance would reinforce

¹³ See Karl Kaiser, George Leber, Alois Mertes and Franz-Josef Schulze, "Nuclear Weapons and the Preservation of Peace," <u>FA</u>, (Summer 1982), pp.1157-1170; R.A. Mason, "Military Strategy," in Edwina Moreton and Gerald Segal, ed., <u>Soviet Strategy Toward Western Europe</u>, (London: George Allen & Unwin, 1984), pp.194-195; and Stromseth, op. cit., pp.203-5. See Neville Brown and Anthony Farrar-Hockley, <u>Nuclear First Use</u>, (London: Buchan and Enright, 1985), pp.102-3, for the British opposition against 'no-first-use.' Also see two articles, one by Michael Carver, "Towards a No-First-Use Policy," and the other by Jonathan Alford, "A Sceptical View of "No-First-Use," in "Nuclear Weapons in the Defence of Europe: Two Viewpoints," <u>Conflict Quarterly (CQ)</u>, (Winter 1984), pp.5-16, for an example of a British debate on the issue.

¹⁴ Stromseth, op. cit., pp.206-207.

¹⁵ See Michael J. Bell, "Flexible Response--Is It Still Relevant?" NR, (April 1988), p.14 and p.17.

the deterrent value of nuclear weapons by making the threat of their use more credible in the era of nuclear parity. ¹⁶ Most of all, they felt that Flexible Response at the time meant little more than nuclear early use due to NATO's inability to put up a convincing conventional defence against the WP. ¹⁷

One of the most serious consequences of the lack of strong conventional capability was that, as Bagnall said in an interview, the possible paralysis of the political leadership could result in its failing to draft specific options and responses according to the developing situation, because it might not have sufficient time as NATO's defence collapsed rapidly. Is Indeed, the military was apprehensive of the possibility of failing to reach a consensus on the use of nuclear weapons in time when this was genuinely required. Farndale added: 'When we had Massive Retaliation [and in the early days of Flexible Response], we relied on politicians to fire nuclear weapons as soon as the Russians set a foot on the IGB. What if politicians didn't do that?.... If politicians couldn't make the decision in the first minute, we were in trouble.' The aim of the military, he said, was to be assured of its own capability, and ready to counter any unforeseen eventuality to assist the political leadership in maintaining control of the crisis.

It was thus hoped that no-early-use would mitigate the risk of the Alliance failing to authorise nuclear release at a critical stage, and so avoid a crack in its cohesion. Simultaneously, NATO's successful defence would bolster the confidence

¹⁶ Interviews, Bagnall on 5 May 1993, Carver and Farndale on 21 June 1993. Also see Michael Carver, A Policy for Peace, (London: Faber and Faber, 1982), pp.10-12.

¹⁷ Interviews, Bagnall on 5 May 1993 and Farndale on 21 June 1993.

¹⁸ Interview, Bagnall on 5 May 1993.

¹⁹ Interview, Farndale on 21 June 1993.

of the defenders to go on fighting, demonstrating in the eyes of the enemy its stern resolution and capability to resist and, if it became necessary, to go to the top of the nuclear ladder to defend its interests. Farndale emphasised that:

We had to take all these [political] factors into consideration as well as the military.... There were those who weren't very keen on fighting at all. There were some people who even said if [war] had come, it would be better to surrender.... So it was to mould together a collection of different national armies into one plan, and they all had slightly different national priorities, and different national capabilities and so on.²⁰

Indeed, if the WP succeeded in pulling off a spectacular penetration of NATO's defence in depth using conventional means alone, some countries in the Alliance could have chosen to surrender rather than suffer horrific damages to their population from a nuclear exchange. NATO had to be able to show both to the enemy and the allies that it was capable of maintaining solidarity even under extreme pressure.

Under the circumstances, Bagnall and Farndale's assumption that a higher threshold in nuclear deterrence would offer many strategic and operational advantages was correct. One of the most visible benefits would be that the threat of nuclear use would have been credible because it would be logical rather than forced. It was felt that the early-use option could have led to retaliation from the WP and, eventually, to an early full strategic exchange. Moreover, both Bagnall and Farndale emphasised in interviews that, in many ways, the threat of nuclear use was a bluff based on the uncertainty in Soviet minds about the risk of escalation and the fact that no-early-use provided better options in strengthening NATO's hand.²¹ Above all,

²⁰ Interview, Farndale on 14 April 1993. See Beatrice Heuser, "Warsaw Pact Military Doctrine in the 1970s and 1980s: Findings in the East German Archives," Comparative Strategy (CS), (Vol. 12, 1993), p.441, for the Soviet intention to exploit such a weakness to neutralise some members' determination to fight a war.

²¹ Interviews, Bagnall on 5 May 1993 and Farndale on 21 June 1993.

Bagnall's intention was focused on the strengthening of Flexible Response to the level which had been initially envisaged in 1967.

3.2.3. THE BRITISH ARMY LEADERSHIP'S VIEWS ON TACTICAL NUCLEAR WEAPONS: INF VS. SNF (SHORT-RANGE NUCLEAR FORCES)

Bagnall's vision of the higher nuclear threshold, however, did not imply an indefinite delay in the use of nuclear weapons, like that of no-first-use advocates. In other words, he thought that nuclear 'no-first-use' was an incredible option, whereas 'no-early-use' could be beneficial for both deterrence and defence. In fact, Bagnall explicitly stated that, 'you can never reduce first use because it is lowering deterrent value.... but the use should be the last resort rather than the first.'22

In his view, nuclear no-early-use had three critical consequences, which cast doubt on the utility of short-range TNWs, or SNFs. Firstly, delaying their use until the conventional battle was already lost would have meant that target acquisition and information about the location of NATO troops would have made their selective application virtually impossible; one would have had to fire them at unconfirmed targets in depth with no certainty of achieving effective results.²³

Secondly, unless the release of SNFs was authorised at an early stage, their use would have to be made in NORTHAG's territory. Quite apart from the civilian damage, this would have made the defender's own defensive operation impossible,

²² Interview, Bagnall on 5 May 1993. Also see, Nigel Bagnall, "The Future of Land/Air Warfare," in Boyd-Carpenter, op. cit., p.153.

²³ Interview, Bagnall on 6 November 1993.

because they would have caused extensive damage to the NATO forces which would be intermingled with the WP forces. Particularly, considering the speed of an OMG advance racing towards the army group's rear areas, the use of SNFs at the later stage would have been impossible.²⁴

Thirdly, even if their use was eventually authorised, it would be doubtful whether the SNF attack would be sufficient to persuade the WP to stop its assault while it was making significant progress in breaching NATO defences in depth; their use at that stage would trigger a Soviet response--in Farndale's words, 'a reply in kind but on a much increased scale'--by the WP to accelerate NATO's capitulation.²⁵ In response, NATO's nuclear retaliation would have to be even larger in scale to be credible because any lesser or equal reply would only reaffirm its fear. As Simpkin postulated, this would quickly result in, at least, an immediate theatre nuclear exchange as NATO and the WP would compete to establish control against each other.²⁶ It would, therefore, have started a rapid escalation of the conflict to a full-scale nuclear war.

In short, their delayed use would have effectively dismissed the utility of SNFs, while the inevitable initial hesitation of politicians to cross the nuclear threshold would make early use almost impossible anyway. What these conditions pointed to was that, in order to use SNFs, NORTHAG would have to utilise them at the early stage of the conflict in a timely manner.

²⁴ See more on 3.4.2. on the OMG.

²⁵ Farndale, 1988--A, p.23.

²⁶ Simpkin, 1985, p.xxiii.

However, this was the very thing which Bagnall wanted to avoid by providing stronger conventional defence, which was to prevent this situation from developing in the first place by aiming at reaching a level of conventional improvement at which reliance on SNFs for initial defence could be avoided.²⁷ Under his vision, therefore, the utility of TNWs in NORTHAG's defence, and particularly the operational utility of SNFs, was considered to be 'just about nil.'²⁸

Essentially, the logic of Bagnall's thinking was founded on the fact that nuclear use at the early stage of a war to compensate for NORTHAG's weak conventional defence would make it impossible for him to maintain control of the battle, as well as inevitably causing a rapid escalation of the conflict. Also, the role of SNFs, which were designed for battlefield use, was a fallacy because, regardless of size, they were still nuclear weapons which could change the nature of the conflict altogether. Thus, if what NATO wanted was the maintenance of deterrence, the threat of nuclear use had to be credible, and this required NATO to be prepared, once it was ready to cross the nuclear threshold, to go all the way up the nuclear ladder in quick succession so that the WP would not get away with an easy victory. In any case, the use of SNFs would not be sufficiently credible as a sign of NATO's determination.

The rationale behind his reforms was that NATO would have to take a 'thoroughly offensive response to an act of aggression,' on the basis of a strong conventional defence to convince the WP that it could only win by resorting to *its* own nuclear use--something which both sides knew could not result in any kind of

²⁷ A similar view can be found on Von Mellenthin and Stolfi, op. cit., p.121.

²⁸ Nigel Bagnall, "The Central Front: A Strategic Overview," in Holden Reid and Dewar, op. cit., p.241.

victory.²⁹ As a result, Bagnall wanted to discard what he called the deployment of the 'militarily valueless' short-range TNWs altogether, and replace them with long-range weapons (possibly the Lance replacement) to complement the use of the INF.³⁰

Bagnall's operational and strategic considerations were echoed in the prevailing debates on the utility of SNF in the Alliance, which were triggered by the INF deployment decision in 1979. It was noted, especially by the FRG and Britain, that the operational vulnerability of the SNFs, and the fallacy of the way of thinking which viewed them as pure battlefield weapons, the primary task of which was to stop enemy breakthroughs.³¹ In fact, they concluded that the early use of SNFs would create an array of problems, including the command and control difficulty. Also, the fact that their survivability would be in doubt due to their proximate deployment to the front (given the WP doctrinal emphasis on deep attack), and thus the inevitability of their use inside or near the IGB, became a serious concern.³²

²⁹ Bagnall, op. cit., in Boyd-Carpenter, op.cit., p.153.

³⁰ Bagnall, op. cit., in Holden Reid and Dewar, op. cit., p. 241. The British capability to deliver nuclear weapons did not really suffer even after the signing of the INF treaty in 1987 because it has traditionally depended more on aircraft delivering them to the intermediate-range. Interview, Farndale on 21 June 1993. Also see Tom Halverson, The Last Great Nuclear Debate: NATO and Short-range Nuclear Weapons in the 1980s, (Doctoral Thesis: King's College London, 1992), p.297.

³¹ Halverson, op. cit., p.67, p.70 and pp.388-9.

³² Halverson, op. cit., pp.67-74. See Freedman, 1989, p.399 and pp.417-20; Lawrence Freedman, "Britain's Nuclear Commitment to Germany," pp.191-7; Hugh Beach, "Flexible Response and Nuclear weapons: A British View," pp.131-3; Franz-Joseph Schulze, "Conventional and Nuclear Forces and their Interaction in the Defence of Europe," pp.116-121, all in Kaiser and Roper, op. cit.; David Schwartz, NATO's Nuclear Dilemmas, (Washington, D.C.; The Brookings Institution, 1983), chapter 7, on the subject of the INF and SNF debates.

This judgement closely paralleled what Bagnall had outlined, and led to the question of whether it was credible to use nuclear weapons against a WP conventional attack. This mirrored the increasing desire of the Alliance, and particularly the FRG, to counter a WP conventional attack with conventional means alone, despite the knowledge that the process of the Bundeswehr adopting this view was slow in coming. In fact, the FRG's heavy reliance on nuclear deterrence remained as strong as ever when Bagnall introduced his reforms.³³

Nevertheless, this indicated that the Germans began recognising the attraction of a strong conventional defence, which was the only viable alternative to the early use of SNFs; and namely that the use of nuclear weapons should be to send a political message and for the purpose of defence alone.³⁴ By the mid-1980s, the SNFs were pushed to the back of the British Army's mind and the sort of rationalisation which Bagnall developed became widely accepted by the Alliance, including the FRG.³⁵ It was a recognition by the FRG that a strong conventional capability was a measure aimed not only at strengthening defence, but also at reinforcing deterrence—the core on which Bagnall's reforms were based.³⁶

Eventually, the role of SNF in NATO was significantly reduced--in fact, to a level close to Bagnall's and Farndale's ideas on the use of TNWs in NORTHAG's defence. Where SNFs (especially long-range systems) were still thought to play an important part was in a major strategic or theatre nuclear retaliation, especially when

³³ Interview, General Leopold Chalupa on 12 May 1993.

³⁴ Halverson, op. cit., p.75, p.224 and p.389.

³⁵ Halverson, op. cit., p.298 and p.388.

³⁶ Interviews, Bagnall on 5 May 1993, Farndale on 21 June 1993 and Von Sandrart.

used concurrently with INFs in a major retaliatory or warning strike. Farndale labelled them as 'vital to stop the conventional breakthrough.' Specifically, Bagnall and Farndale thought SNFs would be vital in preventing the WP from winning the war as it would still be pushing towards the west amidst the strategic and INF exchanges. 38

This in fact verified that the use of nuclear weapons for many in the British Army's eyes had become a last resort. Yet, according to Bagnall and Farndale, although the changes in the views in the leadership of the Army coincided with the no-early-use and SNF debate at the time, the logic behind its perception was not developed to satisfy the growing public and political desires at the time. ³⁹ In fact, its primary logic was formulated to offer solutions to many operational problems stemming from nuclear early use, especially of SNFs. Nonetheless, as Halverson wrote in his thesis, the governments of the UK and West Germany became firmly supportive of INF as the weapon of the first line use for warning purposes as their dissatisfaction with the US nuclear thinking led them question its policy more openly. ⁴⁰ The changes in the Army's views were in line with the changes in the perception of political establishments.

Consequently, Bagnall's reforms had to secure sufficient conventional capability to be able to undertake missions which were previously assigned to, or depended upon, nuclear weapons. As I shall show in chapters 4, 5 and 6, this was the

³⁷ Farndale, 1988--A, pp.23-4. Also interview, Farndale on 21 June 1993. Also see Halverson, op. cit., pp.388-9.

³⁸ Interviews, Bagnall on 5 May 1993 and Farndale on 21 June 1993.

³⁹ Interviews, Bagnall on 6 November 1993 and Farndale on 21 June 1993.

⁴⁰ Halverson, op. cit., p.390.

reason why the reforms emphasised the creation of a large operational reserve to be employed in an operational counter offensive. This was because only with a counter offensive could NORTHAG hope to stop the WP and recover territory without using nuclear weapons, and, in this sense, the reserve was the substitute for SNFs.

3.3. THE STRATEGIC IMPLICATIONS OF FORWARD DEFENCE

3.3.1. WEST GERMANY AND FORWARD DEFENCE

The formal adoption of forward defence during a meeting of the North Atlantic Council in New York in 1950, as well as the decision to rearm the FRG in 1955, were mainly intended to increase the conventional capability of NATO so as to offset the much larger Soviet presence in Europe. All Nevertheless, contrary to the earlier hope, and with the advent of nuclear weapons and the overall reluctance of the Allies to improve conventionally, forward defence became a corollary of nuclear early-use. Also, the Allies' pledge on forward defence was literally interpreted by the West Germans as a defence of the FRG as far forward and to the east as possible by all NATO forces. This meant there would be no voluntary ceding of its territory, even for the purpose of mobilisation and counter-offensive; a notion which left NATO with few choices in defence by making Flexible Response less flexible, but satisfied the German belief that forward defence was more of a guarantor for nuclear deterrence than a strategy for defence.

⁴¹ See <u>SD 1988</u>, p.15, para.1 and 2, for dates. Also see Park, op. cit., p.15. For the details of the intellectual root and overall aspects of the development of forward defence, see sources outlined in footnotes 42 to 53.

⁴² See Gary L. Guertner, <u>Deterrence and Defence in a Post-Nuclear World</u>. (London: Macmillan, 1990), p.14. Also see Leopold Chalupa, <u>The Defence of Central Europe--Implication of Change?</u> (A Lecture given at RUSI on 13 November 1984); and A.J. Garf Kielmansegg, "A German View of Western Defence," <u>RUSIJ</u>, (March 1974), p.14, for the emphasis on first use of nuclear weapons.

⁴³ See Freedman, 1989, p.289 and 325; T. Cross, "Forward Defence--A Time for Change?" RUSIJ, (June 1985), p.19; and Park, op. cit., p.130. Interview, Chalupa.

Of course the FRG, among all the allied nations, had most to lose, since any war would be fought on its soil; NATO had to take this factor into account and reassure it, through the reinforcement of forward defence, that it would be defended and that no territorial sacrifices would be made. 44 Given the strength of German feeling, as emphasised in The FRG Was naturally more convinced of the benefits of nuclear deterrence than its allies, not least because, as General Chalupa who was COS of the Bundeswehr and CINCENT explained, such an eventuality would have imperilled all nations equally, thus engendering a we-are-all-in-this-together mentality. 45 There was neither a chance that Germany could question its safety under NATO, nor seek independent measures to reinforce its own security or even reconsider its membership of the Alliance. If German sensibilities of this sort had not been properly addressed, some signs of strain would have appeared in the Alliance. Moreover, as already mentioned, the more extreme feeling in Germany could favour surrender under attack on the grounds that it would be better to meet the demands of the WP than face destruction under the allied obligations.

So, it had to be clear to the Germans that NATO's first objective was not to fight a war but, should this come to pass, to ensure that the Alliance would commit itself to full-scale nuclear response rather than to a long conventional war. 46 Nor should such thinking be seen in merely idealistic terms since Germany provided a

⁴⁴ See Rennagel, op. cit., in Gabriel, op. cit., p.126; and Hans Henning Von Sandrart, "Defence Concepts and the Application of New Military Thinking," <u>RUSIJ</u>, (Summer 1989), p.24. Also interviews, Chalupa and Farndale on 21 June 1993.

⁴⁵ Interview, Chalupa. Also see the FRG MoD, <u>The Defence White Paper 1985</u>, para. 60 and 73; Schulze, op. cit., in Kaiser and Roper, op. cit., p.116; and Kaiser, et. al., 1982, p.1161.

⁴⁶ Interviews, Farndale 21 June 1993 and Chalupa.

substantial conventional contribution to NATO.⁴⁷ Of course, this was primarily due to its desire to protect itself regardless of the approach NATO eventually opted for, but it also provided the country with a powerful voice within the Alliance. Therefore, whenever the Alliance's attention shifted towards strong conventional defence, the German reaction was one of abhorrence. This was particularly the case with Bagnall's reforms in the early 1980s. Thus, to pacify German objections, the British officers always had to reaffirm their commitment to nuclear deterrence and forward defence in public, despite having different ideas.⁴⁸

3.3.2. THE BRITISH PERCEPTIONS OF THE SHORTCOMINGS OF FORWARD DEFENCE

West Germany advanced several operational justifications for forward defence. One was that the FRG lacked strategic depth and that the most favorable terrain for defence was near the IGB, so that, if the WP were allowed to penetrate forward defence, it would quickly move through open terrain behind the border to threaten areas and cities of major strategic importance. Secondly, it was argued that, to provide sufficient time to fly in reinforcements from the US and UK and to allow NATO time to build up its defences, the WP advance had to be contested as far forward as possible. Thirdly, if nuclear weapons were employed, NATO wanted to

⁴⁷ See Cordesman, op. cit., chapter 3, for details on the FRG contribution to NATO.

⁴⁸ Chris Bluth, "British-German Defence Relations, 1950-80: A Survey," in Kaiser and Roper, op. cit., p.33.

⁴⁹ See details in Chalupa's speech in 1984, Rennagel, op. cit., in Gabriel, op. cit., p. 123; and Farindon, op. cit., pp. 329-332.

avoid their use inside the FRG to safeguard its own forces and prevent damage to the population. ⁵⁰ Finally, the successful defence of forward areas was said to be able to stop the enemy building up the momentum of an attack, thereby demoralising its forces while strengthening NATO's fighting spirit. ⁵¹

However, developments in the WP, the OMG, and the prominence given to deep attack, were sufficient to discredit all such arguments. After penetrating NATO forward defence, enemy deep attack formations could intercept NATO's reinforcements in their assembly areas, as well as attack forward deployed forces from behind. So, although NATO's ground-based defence would be effective when the WP envisaged an attack on a broad front, the WP could choose to concentrate in areas where it could achieve major breakthroughs easily because NATO's positional defence at the time limited its ability to counter-concentrate, and thus, its forces could simply be outflanked or ignored by the attackers. In short, under the circumstances, nuclear use had to be committed very early near the IGB to prevent enemy concentration and penetration, but such an obvious lack of ambiguity in NATO's posture and conventional capability would convince the WP to calculate the risk more readily. Any nuclear use after the WP achieved major breakthroughs to NATO's strategic depth would only amount to mutual suicide. 52

British commanders, therefore, never really accepted forward defence as it was understood by the Germans, although they did persevere in reaffirming Britain's

⁵⁰ See Frank Kitson, Warfare as a Whole, (London: Faber and Faber, 1987), p.24.

⁵¹ See Schulze, op. cit., in Kaiser and Roper, op. cit., p. 116; and Kitson, 1987, p.24-5.

⁵² See, for example, Hansard, <u>Debate on Army</u>, 22 October 1984. Comment by D. Davies, for the view that the strong British adherence to forward defence would only bring more dangers to Britain itself. Also see Guertner, op., cit., p.11.

pledge, at least in public. Despite the official position, they continuously thought and planned their defence 'in terms of tactical retreat to regain some depth of territory for defence.' ⁵³ Furthermore, they were of the opinion that once a war broke out, the operational imperatives would overtake the political ones, and, as Hackett assumed, defence would inevitably develop in depth. ⁵⁴ This was the operational consideration on which Bagnall eventually based the development of his ideas.

It did not mean that the British, and specifically Bagnall, intentionally attempted to discredit the political imperative and strategic logic of forward defence. Bagnall was trying to modify the deficiency of the strategy, in which the Germans themselves had become trapped. As Chalupa stressed, under forward defence, the penetration of NATO's defence meant the start of a nuclear war. 55 It was true that such an unambiguous stance could be beneficial for maintaining deterrence, as the Germans took nuclear deterrence more seriously than any others in the Alliance precisely because of its powerful effect. The British acknowledged this benefit, and as Farndale stressed in an interview, they accepted and respected German views. 56

Nevertheless, the overriding dependence on nuclear weapons for the defence of the FRG, as the Germans concentrated on fighting a short conventional war near the IGB, would only expedite their use. Regardless of their deterrent value, once deterrence failed, it was in the Germans' own interest to delay their use. Therefore,

⁵³ Bluth, op. cit., in Kaiser and Roper, op. cit., p.33.

⁵⁴ Hackett, op. cit., p.54. Also see T.J. Granville-Chapman, "The Importance of Surprise: A Reappraisal," in Mackenzie and Holden Reid, 1989, p.59; and T. Wright, "Surviving Soviet Encirclement Operations," ibid., p.207, for allowing some defence-in-depth in the case of a war.

⁵⁵ Interview, Chalupa.

⁵⁶ Interview, Farndale 21 June 1993.

what Bagnall wanted to achieve was to highlight the benefits of conventional defence within the political guidelines of forward defence, and this was best implemented by fostering a capability to counter and destroy the WP attack as quickly and as near to the IGB as possible.⁵⁷ This, in fact, was what the Germans wanted, and thus his concept eventually became a major instrument with which to bolster forward defence, so that his idea of 're-interpretation' did not entail abandonment of the strategy at all.

In short, the German paradox over forward defence was a typical example of the German dilemma. These debates reconfirmed that Germany always had to balance between the political and strategic (and operational) realities, and a search for a compromise was always the biggest source of paradox in their thinking. There was no doubt that political imperatives were the most important considerations in determining their policy, but this often led them, and the Alliance, to a strategic and operational deadlock, resulting in their agreeing upon strategically and operationally invalid decisions.

⁵⁷ Interview, Bagnall on 5 May 1993.

3.4. THE BRITISH ARMY LEADERSHIP'S PERCEPTION OF THE SOVIET-WARSAW PACT THREAT

3.4.1. THE PROSPECTS OF A SURPRISE ATTACK

Despite the fact that nuclear use, especially TNWs, was closely integrated in Soviet military thinking in the 1960s, ⁵⁸ there was a shift towards stressing on the conventional attack as it entered the 1970s. The renewed emphasis on the conventional option by the Soviets was strongly advocated by Marshal Orgakov from the 1970s. He thought that the availability of more capable weapon systems, in conjunction with all-arms conventional formations, would enable a more dynamic and mobile form of warfare to secure early retention of the initiative. Eventually, this thinking played an instrumental role in the Soviets embracing a deep, fast-moving all-arms attack doctrine, which was to become engraved in their deep-attack concept. ⁵⁹

This was accompanied by a growing belief that the WP's 'sufficiency of force', both nuclear and conventional, would allow it to launch a successful offensive, including a conventional attack, provided it could maintain surprise and quickly pulverise NATO's defence.⁶⁰ This would deprive NATO of adequate time for mobilisation and preparation for a coordinated defence, and delay or even deter the decision to use nuclear weapons due to the WP's speed of action and the numerical

⁵⁸ See Strachan, op. cit., p.199; and Harriet F. Scott and William F. Scott, <u>Soviet Military Doctrine</u>, (London: Westview Press, 1988), p.39.

⁵⁹ See McInnes, 1990, p.104.

⁶⁰ Heuser, op. cit., p.449.

superiority of its battlefield and theatre nuclear capability.⁶¹ Thus, its rapid success might have convinced the US not to proceed with the strategic exchange over the already defeated Europe. Furthermore, it could avoid potential operational problems in starting a war with massive nuclear use, such as radiation and fall-out, which could inhibit its own forces' movement at the outset of hostilities.⁶² Hence, dependence on nuclear weapons was reduced; the WP would refrain from nuclear use unless NATO used them first, or was about to do so.⁶³

Consequently, the importance of surprise was highlighted. Its value lay in the fact that, above all, it would render NATO's reinforcement plan largely unworkable by preemption, and satisfy the need of simultaneously surprising its WP allies, thus depriving them of the time necessary to reconsider their position in a war with NATO. Operationally, it would be a valuable force multiplier and could compensate for the logistics penalties as such an attack was bound to involve a smaller number of forces. 64 On the other hand, the WP realised that, once significant mobilisation had been achieved on both sides, the chances of carrying out a swift and successful campaign would be diminished. 65

⁶¹ See Scott and Scott, 1988, p.85 and p.257. Also see Freedman, 1989, pp.420-423, for the Soviet no-first-use thinking.

⁶² See Joseph D. Douglass Jr. and Amoretta Hoeber, <u>Conventional War and Escalation: The Soviet View</u>, (New York: Crane, Russak and Co., Ltd., 1981), p.10 and pp.21-3.

⁶³ See Heuser, op. cit., p.444.

⁶⁴ Dewar, op. cit., pp.205-6.

Once mobilisation was fully implemented (e.g. M+ 120), the overall force ratio would be less than 2 to 1 in WP's favour, a situation in which it would not have a significant overall advantage over the technically superior NATO. See Andrew Hamilton, "Redressing the Conventional Balance," IS, (Summer 1985), pp.120.

Such a change in Soviet operational thinking, which was accompanied by the renewed stress on deep attack and the advent of the OMG, and the significant reinforcement of the GSFG (Group of Soviet Forces in Germany) since the late 1970s, aroused deep concern among many people in the British Army and NORTHAG.66 This had a major influence on the perception of Bagnall and others that the growing capability of the Soviet Union and WP in the 1970s was an ever greater threat to NORTHAG's defence, and although the WP's numerical superiority was one of the major concerns, they felt that the possibility of a surprise attack from a standing start, or more specifically, 'short-warning following a stop-go situation,' to be the most serious menace.⁶⁷ Such an assumption stemmed from the realisation that a possible Soviet-WP attack could be launched with conventional means alone, and in order to win a war under such circumstances, it would have to be a surprise attack. As Farndale emphasised, for the WP, defeating NATO before its nuclear use was an irresistible option if war had to come, and if it could find a way to secure surprise.⁶⁸ In fact, this view was one of the most influential reasons for Bagnall's reforms and adoption of the new army group operational concept which exploited the benefits of manoeuvre and the offensive. 69

The GSFG had been substantially reinforced since the late 1970s with the following increases in strength: 5 per cent tank, 100 per cent attack helicopter, 50 per cent in artillery and 35 per cent in mechanised infantry. (See Richard Aboulafia, "The Soviet Operational Response to FOFA," <u>Jane's Soviet Intelligence Review (JSIR)</u>, (February 1989), pp.78-9.)

⁶⁷ Bagnall, op. cit., in Boyd-Carpenter, op. cit., p.152.

⁶⁸ Interview, Farndale on 19 May 1994.

⁶⁹ Interviews, Bagnall on 5 May 1993, Farndale on 21 June 1993 and Inge.

Under the standing start attack scenario, there would be approximately fifty Category 1 (full-strength) divisions available for immediate combat for the WP, among which some ten to twelve divisions, with immediate follow-on forces of some eight to thirteen, would attack the NORTHAG area. 70 Although it was estimated that the overall ratio of the in-place forces between the two would be roughly equal with no mobilisation, 71 this ratio could increase if the WP achieved some mobilisation under a stop-go situation. This assumption would be more plausible since the leading elements would quickly be reinforced by the follow-on echelons within the WP first strategic echelon (including the forces of Soviet Western TVD: Theatre of Military Operations) as they would travel far less distance compared to NATO's reinforcements. 72

Due to the lack of de facto superiority in force ratio, the WP could not have launched an attack on a broad front, but it could instead choose to achieve higher force density by selectively concentrating on a few narrow sectors to create breakthroughs since it was assumed that the WP could achieve local superiority of

Threat to Europe: Prospects for the 1980s, (Boulder: Westview, 1984), pp.260-1.

⁷¹ Hamilton, p.118.

⁷² See Simpkin, 1985, p.81. Also see David M. Glantz, <u>Military Strategy of the Soviet Union</u>, (London: Frank Cass, 1992), p.201, for the composition of the WP attack formations under the scenario.

between 5 and 7 to 1 at the selected axis of advance even under this scenario. 73 This approach was particularly plausible since NATO's force density would be low, with the bulk of its forces scattered throughout its territory, and when surprised, it would be more difficult to achieve a counter-concentration of forces at all. Under the circumstances, the WP might be able to penetrate NATO's defence in depth before NATO had properly prepared its defences, and this could cause a premature nuclear use by NATO to stop the WP onslaught. For Bagnall, this was the worst case scenario, and he firmly believed that the Army and NORTHAG had to have capabilities to counter this contingency and be ready to fight surprised in order to delay nuclear use, and to buy time to fly in the reinforcements and start mobilisation. 74

Many sources newly available from the eastern bloc since the fall of the Berlin Wall have confirmed that Bagnall's assumption was a credible one as they show that the Soviet Union was indeed planning an offensive war against NATO. The highlight of its offensive plan was the conduct of 'operations along the front with and without nuclear weapons,' with heavy emphasis on conventional attack. Most of all, evidence of its intention to launch a standing start attack was discovered. For example, the barracks in the GSFG and East German Army were always kept on a high alert status to facilitate instantaneous preparation for war which could start in less than a day. Their equipment was kept in peak condition at all times, their

⁷³ See George Richey, <u>Britain's Strategic Role in NATO</u>, (London: Macmillan, 1986), p.70.

⁷⁴ Interview, Bagnall on 5 May 1993.

⁷⁵ Mark Karma, "Warsaw Pact Military Planning in Central Europe: Revelations from the East German Archives," <u>Cold War International History Project Bulletin</u> (CWIHPB), (Fall 1992), pp.14. Also see Heuser, op. cit., p.437.

ammunition dumps were maintained at a very high standard, and the amount of stock therein was enough to shock western visitors. ⁷⁶ Also, to avoid detection by NATO of its communication traffic, all the barracks were wired up to underground cables. ⁷⁷ Above all, Farndale stressed that, after visiting the barracks of GSFG after the fall of the Berlin Wall, he was able to confirm his suspicion that at least the enemy first operational echelon could have come very quickly without NATO's detection. ⁷⁸

Nonetheless, it is questionable whether Bagnall's argument that the standing start attack was the worst case scenario was justified. Many commentators at the time argued that, despite its theoretical attractiveness, the standing start attack was not a feasible scenario. For example, the scenario which General Hackett offered in his book The Third World War, in which he assumed that a war would follow a general political deterioration, was often accepted as a more plausible one. ⁷⁹ Other possibilities included: a miscalculation; an artificially generated crisis; or a preemptive strike. ⁸⁰ There was also a chance that the WP would launch a simultaneous nuclear and conventional attack without the initial conventional phase.

Most of all, many thought that the worst case scenario for NATO would have emerged in a short-term mobilisation scenario (between M+15 to M+30) in which

⁷⁶ Interviews, Farndale on 19 May 1994 and Brigadier Harry Brown on 23 March 1993.

⁷⁷ Interviews, Farndale on 14 April 1993, Kenny and Brown.

⁷⁸ Interview, Farndale on 19 May 1994.

⁷⁹ See Hackett, op. cit., chapters 1 to 10. Interviews, Carver, Chalupa, Von Sandrart.

⁸⁰ See Philip Sabin, <u>The Third World War Scare in Britain</u>, (London: Macmillan, 1986), pp.71-77, for more.

case the WP could be assured of at least 2 to 1 overall superiority to NATO.81 This ratio would be enhanced if NATO was suffering from indecision or a split, which would delay the decision for its own mobilisation.82 In this case, the WP would have achieved both higher force ratio and density in Central Europe, and any delay in the decision to mobilise by NATO would further enhance WP's advantage. Truly the worst case scenario would have unfolded if, due to political splits and indecision, NATO failed to give sufficient time for its forces in the front to prepare defences while the WP was committed to a full-scale mobilisation. Furthermore, such a delay would prevent the timely arrival of the reinforcements when the WP's onslaught against NATO would be making significant progress.

⁸¹ See Hamilton, op. cit., p.118, for in-depth discussion on the debate. There were numerous different interpretations of the force balance between the WP and NATO, which put it overall between 2.5 to 1 and 1.2 to 1, depending on the degree of mobilisation and on the method whereby analysts chose to calculate it. The method varied from the simple 'bean count' to Armoured Division Equivalent (ADE), Standard Division Equivalent (SDE) and Heavy Division Equivalent (HDE). One estimate was that the force ratio on M+60 days would be: 2 to 1 in ADE; 2.25 to 1 in HDE. (SDE in M+90 would be 2.31 to 1). (See Hamilton, op. cit., pp.120. See more in Eliot A. Cohen, "Toward Better Net Assessment--Rethinking the European Conventional Balance," <u>IS</u>, (Summer 1988), pp.67-81; and Stephen D. Biddle, "The European Conventional Balance," Survival, (March/April 1988), pp.90-121.) In the case of Britain, an official estimate, the 1981 Statement on the Defence Estimates, spoke of a 2.5 to 1 WP advantage in tank strength, and 2.8. to 1 in artillery. (p.17.) Meanwhile, when Chalupa was the CINCENT in 1984, he provided a figure of about 2 to 1 to 3 to 1 in land force and 2.5 to 1 advantage in force ratio in favour of the WP. (See his speech in 1984 at RUSI) Yet most analysts thought that the WP would no longer attain a favourable force ratio with NATO after full mobilisation (M+120), falling to only about 1.25 to 1 superiority--particularly in tank strength. (See Malcolm Chalmers and Lutz Unterseher, "Is There a Tank Gap?" IS, (Summer 1988), p.7; Stanhope, op. cit., in Leebaert, op. cit., pp.50-2, for the estimate. Also see Steven Zaloga, "The Tank Gap Data Flap," IS, (Spring 1989), pp.180-194, for an opposing opinion.)

⁸² Hamilton, p.118 and p.121.

Bagnall also recognised the problem stemming from the short term mobilisation scenario. In fact, despite having said that the standing start scenario was the biggest concern, Bagnall emphasised, concurrently, that he did not expect an attack out of the blue without any prior deterioration of the political situation, and he indicated that he was anticipating the possibility of a short term mobilisation attack as well as the standing start one.⁸³ In essence, regardless of a strong perception that the short mobilisation scenario would be the worst case, it was the standing start attack scenario's theoretical plausibility about which Bagnall and others in the British Army were concerned, as their conclusion was based on the understanding that the standing start attack was an ideal military option if the WP wanted to secure a victory in a conventional war.⁸⁴ This contingency planning based on a theoretical possibility, which disregarded all other subjective variables but considered only those calculable factors which could be predetermined in peacetime, played a major part in the formulation and implementation of the reforms. In short, although a short term mobilisation scenario was more plausible in reality, it was felt that having a credible ability to counter a surprise attack was vital and desirable since it enhanced the capacity of in-place forces to prepare against both contingencies.

Indeed, Bagnall's new concept was focused on giving the in-place force more capability to withstand the enemy onslaught without depending on mobilisation. This was critical to counter various scenarios including the short-mobilisation and the standing start attack. For instance, to counter the short term mobilisation scenario, Bagnall's new concept stressed reinforcing the overall NORTHAG conventional

⁸³ Interview, Bagnall on 5 May 1993. Also interview, Farndale on 14 April 1993.

⁸⁴ See, for example, P.H. Vigor, "Doubts and Difficulties Confronting a Would-be Soviet Attacker," <u>RUSIJ</u>, (June 1980), p.33, and Hackett's scenario in op.cit.

capability by improving the fighting-power of its in-place forces in order to: a) deter a war from breaking-out by presenting a strong defence capability in the theatre; b) provide sufficient time for the leadership of the Alliance to draft its options without pressure (which could be instrumental in preventing a political split among the Allies); c) buy time for reinforcements to arrive if war broke out; and d) avoid nuclear early use which could be both strategically and operationally suicidal. Most of all, the capability to delay the WP attack would be crucial in maintaining high morale and giving a major psychological boost to the Allies.

As for the standing start scenario, NORTHAG a) would not be overwhelmed even if surprised, due to heightened readiness; b) could achieve counter concentration of forces with in-theatre reserves; c) could actually win the battle if its counter offensive against the enemy main body was successful; and d) could prevent a war from escalating and dissuade the WP from using nuclear weapons. Above all, planning the defence against the standing start attack would have ensured that NORTHAG would explore the best way to achieve almost immediate preparation of the army group defence, and introduce its full fighting-power without committing to instantaneous mobilisation. Also, countering a surprise attack by destroying the enemy initial attack was crucial for the morale and cohesion of the Alliance, and such a capability would even provide NATO with the ability to preempt if it became necessary. Furthermore, eschewing the need for immediate mobilisation, unless the WP did so, would have prevented a further deterioration of the relations between the two, leaving a further chance for negotiation.

In short, the highlight of the new concept was to enhance readiness and allow more stringent preparation of the in-place forces, which was beneficial in countering both a surprise attack and an attack following a short mobilisation. It would offer not only flexibility and choice (including an early cross IGB operation) in the preparation for war, the capability for which did not exist in the past, but also psychological assurance and confidence to the politicians. Therefore, there were many political, strategic and operational benefits secured by such a posture and enhanced fighting ability, and this was what Bagnall wanted to achieve.⁸⁵

Consequently, the most attractive aspect of Bagnall's counter offensive concept, which was the heart of the new operational concept, was its ability to counter the standing start scenario by avoiding the need to maintain a higher density of standing forces through making the best use of the force one had. Ref. As discussed in chapter 2, as the NORTHAG leadership postulated, since the WP would have to achieve concentration quickly in one, or possibly two, sectors, under the scenario, it was likely that the WP attack would be pushed through the Hanover Plain in a large single-echeloned onslaught in an effort to avoid difficult terrain in other sectors due to lack of resources. This would allow NORTHAG's counter concentration of forces to achieve a significant (if temporary) superiority in numbers in an offensive counter manoeuvre against the enemy. In this sense, the success of the operation by the operational reserve at the early stage of the conflict could achieve an early disruption of the WP operational plan by forcing it to counter this threat. The effect of this would be a significant slowing down of its advance since there would be no immediate follow-on forces available, thus preventing it from launching a meaningful

⁸⁵ Interviews, Bagnall on 5 May 1993 and Farndale on 14 April 1993.

⁸⁶ See McInnes, 1990, p.83, for support.

⁸⁷ Interviews, Bagnall on 5 May 1993 and Farndale on 21 June 1993. They postulated that the WP could achieve no more than one, or maximum two, penetration(s) under the surprise attack scenario.

retaliation or counter attack. Hence, Bagnall's logic that the success of this operation would by and large stabilise the original border and slow down the progress of war, and that the launching of such an attack would be possible due to the low force density of the battlefield, was persuasive. Most of all, this would be entirely feasible due to the low density of the battlefield, allowing easy movement of a large counter offensive force. In other words, Bagnall's concept was a measure whereby counter surprise could be achieved, which was indeed a considerable factor in deterring a WP surprise attack as it provided the necessary means to check this gamble.⁸⁸

Moreover, the main attraction of the reforms was that their implementation was relatively cost-free since there were few visible trade-offs in resources, and this was reflected in the motto of the reforms, which was to do more with less. Rather than providing expensive new standing forces, the changes were concentrated on providing enhanced C3I systems, establishing the principles of the joint and combined battle throughout the army group and ATAF, and accepting the new operational concept, which facilitated more imaginative use of available forces. 89

In this sense, regardless of the fact that Bagnall's thinking on the WP threat, which gave rise to the reforms, did not wholly conform to the mainstream view at the time, his desire to focus on the standing start attack as a means to address various contingencies was quite plausible. Essentially, what Bagnall wanted was to secure a capability to maintain deterrence through the demonstration that such an ability existed. He saw the cold war as a psychological game, and this required a player to have a good hand, which was vital in calling the opponent's bluff. Therefore,

⁸⁸ See chapter 4, 6 and 8.

⁸⁹ See chapter 4.

Bagnall's effort to prepare his forces under the standing start scenario was not only a wise choice, but also a crucial one because it enhanced NORTHAG's confidence and gave a major psychological boost. This could have not been done under forward defence where NORTHAG's passive defence would have prevented successful employment of reserves and resources to counter the WP surprise moves.

Above all, this approach provided a tool with which to evaluate NORTHAG's capability, enabling the leadership to take a sober look at what their options were in this desperate situation. Rather than assessing one's capability under optimum conditions, this allowed for a more critical and balanced review of one's existing capability, and put a premium on one's ability to fight with what one had rather than what one might be able to get. This was a product of the prudence of Bagnall and others in the Army and their hope to counter *whatever* contingencies might develop; to a certain degree, as Sabin pointed out, it agreed with the necessity and habits of NATO, i.e. to plan for the worst in order to calculate the deterrent requirement. ⁹⁰

As NORTHAG's surveillance capability improved and some changes in the Soviet and WP military, which indicated a shift from the offensive to the defensive, became evident after Gorbachev came to power in 1985, the perception of threat was toned down and NORTHAG began to think in terms of the stop-go situation following a mobilisation.⁹¹ Nevertheless, NORTHAG was preparing to fight the enemy's standing start attack throughout the 1980s, starting with the 48-hour warning preparation in 1983.⁹²

⁹⁰ Sabin, 1986, p.100.

⁹¹ Bagnall, op. cit., in Boyd-Carpenter, op. cit., pp.151-2

⁹² Interviews, Bagnall on 5 May 1993 and Dewar. Also see Dewar, op. cit., p.207; and Cross, op. cit., p.20, for the time allowance to counter a standing start attack.

In this sense, Farndale's expansion of the reforms (see chapter 6) was a logical development of Bagnall's ideas to counter different contingencies, but his attempt to do so by risking a large counter offensive force in a manoeuvre battle was both dangerous and infeasible. This was because the higher force density and ratio in the theatre would probably have prevented the movement of such a force, and most of all, because the need to take such a risky option had substantially subsided. In short, Bagnall's ideas were plausible and warranted, but only in specific circumstances of the early 1980s when the risk of a WP surprise attack was at its highest and NATO's resources and ability to counter this threat were not available.

3.4.2. SOVIET-WARSAW PACT OPERATIONAL THINKING

The British Army and NORTHAG's major operational concern was the OMG and the WP armies' alleged ability to conduct a series of encounter battles. Surprise was essential to WP's success, and it was felt that the OMG was crucial in supporting the idea that the WP might attack from a standing start. 93

The OMG was designed to maximise the effect of surprise, speed, and shock, all of which could substitute for mass, to accomplish the rapid collapse of NATO's defences. It was a highly mobile, self-contained combined arms formation which would quickly link up with airborne and air assault forces already deployed deep inside NATO territory. 94 Such a capability was demonstrated in the Zapad-81

⁹³ Frederick Hogarth, "Dynamic Density: A Deterrence for the OMG," <u>RUSIJ</u>, Vol. 132, No.2, (June 1987), p.30. Interview, Bagnall on 5 May 1993.

⁹⁴ See Starry, "Forward," in Simpkin, 1985, p.ix; and C.L. Donnelly, "The Development of the Soviet Concept of Echeloning," NR, (December 1984), p.17.

exercise.⁹⁵ The OMG's role was to achieve the following operational aims: 1) destroy or neutralise as many NATO air and nuclear assets as possible; 2) keep attacking forces dispersed; 3) make a number of penetrations so as to confuse the enemy as to the direction of the main thrust; and 4) get their own forces close enough to NATO forces and centres of population to discourage nuclear use.⁹⁶ Thus, once in NATO territory, the OMG would try to avoid any unnecessary engagements in order to reach its objective as soon as possible.⁹⁷

Another rationale for the OMG was to compensate for the inflexibility of rigid echeloning in WP forces and allow the operational commander to exploit a sudden chance, which could not be done by the regular formation. In some ways, the OMG was a reserve formation for exploitation, but it was 'a free reserve,' which reflected a different way of thinking in the Soviet military, i.e. an effort to redress the problem of the inflexibility of echeloned formations with a clear-cut mission. 98

The success of the OMG operation thus depended on how fast it could move once it was in NATO territory. They had to be able to fight a series of fast and violent encounter battles (or meeting engagements) while avoiding unnecessary

⁹⁵ Steve Doerfel, "Meeting the Strategic Challenge," IDR, (March 1984), p.253.

⁹⁶ Chris Bellamy, "Trends in Land Warfare: The Operational Art of the European Theatre," <u>RUSI and Brassey's Defence Yearbook 1985</u>. London, (1985), p.231. Also see C. L. Donnelly. "The Soviet Operational Manoeuvre Group--A New Challenge for NATO," <u>IDR</u>, (September 1982), pp.1777-1186; and John G. Hine and Philip A. Petersen, "The Warsaw Pact Strategic Offensive--The OMG in Context," <u>IDR</u>, (October 1983), pp.1391-1395, for more on NATO's perception of the OMG in the early 1980s.

⁹⁷ Henry S. Shields, "Why the OMG?" MR, (November 1985), p.5.

⁹⁸ Interview, Von Sandrart.

ones.⁹⁹ The main advantages of encounter battle were as follows: 1) the WP could fight NATO forces in the open rather than be forced to attack against prepared defence, and hence could fight on 1 to 1 terms; 2) it could achieve tactical surprise and overwhelm the defender if he was caught on the move; 3) it could accelerate the OMG's speed, thus increasing the chance of its survival and penetration; and 4) it would 'hold the enemy's centre of mass forward' so as to slow him down before encircling and destroying him in coordination with regular echeloned forces. ¹⁰⁰ The Soviets were believed to have placed a premium on the training for encounter battle, which constantly practised deployment from line-of-march, and it was felt among the Alliance that such an ability was a grave threat indeed. ¹⁰¹

Nevertheless, there were numerous inherent deficiencies in the WP capability to implement such a form of attack in real-time. One of them was the lack of flexibility in the lower level of command, as well as its propensity to depend on extensive planning based on adequate reconnaissance and intelligence. Therefore, it would take longer for the WP to plan the attack in the first place, and when its initial plan failed, it would take considerable time to re-plan its attack. ¹⁰²

⁹⁹ See A.I. Radzievsky, <u>Dictionary of Basic Military Terms</u>, (Moscow: Voenizdat, 1972), USAF Trans. Washington, D.C.: US GPO, 1976), para. 373, for the Soviet definition of encounter battle.

¹⁰⁰ Simpkin, 1984, p.183. Also see Paddy Griffith, "A Concept of Armoured Warfare on the Central Front," <u>SJMS</u>, (March 1990), pp.61-5; English, op. cit., p.196, for more on encounter battle.

¹⁰¹ See Niklas-Carter, op. cit., in Harris and Toase, op. cit., p.220; and Vigor, 1983, p.204.

¹⁰² Peter Millar, "The Central Region Layer Cake," in Mackenzie and Holden Reid, 1989, pp.22-3, and Leonhard, op. cit., pp.54-5.

Moreover, the WP capacity to fight encounter battle with the OMG, as well as the ability to handle the formation itself, was treated rather too cautiously by the West. Even if the OMG was more flexible than other formations, its insertion would depend on the ability of those first echelon formations to let it pass through their own lines. ¹⁰³ Also, command rigidity and the general lack of high standard training remained major barriers. ¹⁰⁴ Farndale confirmed this by saying in an interview that OMGs were not as good as NATO was led to believe, nor did evidence from the WP exercises suggest that they would be any better in real battle, especially in encounter battle. ¹⁰⁵

Since the most serious menace the OMG posed was the amount of tempo and momentum it could generate for the first operational echelon through the successful initial penetration, if NATO were able to force the WP to revise its plan consistently by continuous offensive actions, the WP would have a very difficult time making progress in the attack. Therefore, it became the operational imperative to identify the location of the OMG as soon as possible and destroy it before it could make a breakthrough through which the first operational echelon could concentrate to create an operational penetration. Also, the OMG's location would probably indicate the areas of the enemy main effort. This would enable NORTHAG to concentrate its local (corps) reserves to counter the enemy's initial breakthrough by preventing it

¹⁰³ John S. Hyden, "Soviet Deep Operation," <u>IDR</u>, (June 1987), p.724. See Simpkin, 1985, p.44, for criticism of the OMG. Also see Millar, op. cit., in Mackenzie and Holden Reid, 1989, pp.22-3, for the difficulties involved in coordinating the insertion of an OMG.

¹⁰⁴ See Von Mellenthin and Stolfi, op. cit., p.123; and Cordesman, 1990--C, pp.206-8.

¹⁰⁵ Interview, Farndale on 21 June 1993.

from making an operational penetration. If NATO failed in the timely committal of reserves, this would bring a number of serious problems, resulting in reserves 1) colliding head-on with an OMG and being overrun because of the lack of time to prepare defence, or 2) being altogether dislocated and failing to intercept the OMG due to the delay in their committal. Failure stemming from such blunders, and from the reserves' not managing to counter the enemy's initial breakthrough, would prevent NORTHAG from committing its reserves against the enemy's first operational echelon. 106

Although its capacity to destroy the OMG and the WP first echelon as part of a counter offensive became the highest priority, there were contradictory views on how serious the OMG threat was to NORTHAG. 107 Farndale commented that:

[The] OMG didn't force the concept. And counter stroke was not just against the OMG, but a wide variety of attacking forces.... We had a good chance of destroying OMGs if we got them correctly. OMGs were best trained to fight head on meeting engagements.... thus we needed to avoid that situation.... If it didn't upset the Germans, I would let them loose and even let them run to the coast of France. Then, I would chop it off.... We would have dealt with them later as long as we were holding the front. ¹⁰⁸

Thus, Farndale considered the two operations separately: the local reserves were to deal with the OMG while NORTHAG's operational reserve was to be concentrated against the first operational echelon.

¹⁰⁶ Millar, op. cit., in Mackenzie and Holden Reid, 1989, pp.22-3.

¹⁰⁷ One other reason for this discrepancy again originated from the perception between the worst-case and optimum scenarios, and hence the different views on the role of the local and operational reserves in countering the OMG. See 6.2. for more detail on how Bagnall and Farndale's views differed.

¹⁰⁸ Interview, Farndale on 21 June 1993.

However, this opinion differed from Bagnall's. It was true, as Farndale said, that Bagnall did not design the new army group operational concept specifically against the OMG, but that the purpose was to counter the OMG by the combined local and operational reserve operation as a part of the counter move against the first operational echelon. Bagnall stressed that letting the OMG loose would bring 'fatal consequences' as it would wreak havoc in the army group's rear by destroying HQ and threatening the logistics chain. ¹⁰⁹ Thus, Bagnall placed more emphasis than did Farndale on the destruction of the OMG as a main part of the reserve operation.

Despite some difference in views, it was clear to both of them that the aim of the new operational concept, which stressed a number of counter offensive options, was to exploit the WP weaknesses so as to enhance its own defence. Bagnall stressed that he was confident the WP would not be able to carry out an effective attack if its plans were disrupted because of its lack of flexibility, even if this was being improved. Thus, he said, it should have been possible to destroy the OMG during the early days of a conflict. 110 This, nonetheless, would only be likely if NORTHAG abandoned the strict interpretation of forward defence to enhance its readiness and created an intheatre operational reserve. The ensuing debates in both Europe and Britain were on the feasibility and necessity of acquiring such capabilities.

¹⁰⁹ Interview, Bagnall on 6 November 1993. There will be a further discussion on the difference in each COMNORTHAG's opinion on the counter offensive priority in chapters 6 and 7.

¹¹⁰ Interviews, Bagnall on 5 May 1993 and Farndale on 14 April 1993.

3.5. THE IMPACT OF THE 1981 DEFENCE REVIEW ON THE REFORMS

3.5.1. BRITAIN'S DEFENCE POLICY BEFORE THE REFORMS

The so-called four pillars of Britain's defence: 1) the provision of UK nuclear forces for NATO's deterrence; 2) the defence of the UK; 3) the defence of the European mainland; and 4) the maritime forces, were spelt out clearly for the first time in the 1974 defence review. This was a watershed in Britain's strategic thinking as it signalled the shift in its security interest to the defence of NATO. Also, the review facilitated the conventional rearmament of Britain; it legitimised what the military had to purchase in order to implement the goals identified in the four-pillar strategy. 111 The continental commitment was upheld by the new Conservative government, whose strategic and political priorities became the honouring of the domestic pledge for strong defence and the Alliance pledge to fulfil the LTDP commitment. 112

The LTDP was one of the most comprehensive conventional defence improvement packages which NATO countries adopted in order to improve the Alliance's existing defence posture. With the enthusiastic support of the Carter administration, the LTDP was formally endorsed by the NATO Heads of State in 1978. The central component of the plan was the Allies' pledge to implement a 3 per cent annual real growth in defence spending to support a series of conventional defence improvements. It was envisaged that the LTDP would encourage

¹¹¹ Interviews, Carver and Jackson.

¹¹² See Greenwood, op. cit., in Murry and Vlotti, op. cit., p.279.

improvements in NATO's posture (including readiness and reinforcement capability) through the more efficient use of resources. 113

Ultimately, the programme *did* largely yield positive results, despite some adverse effects which shook NATO cohesion through internecine recriminations over issues such as defence co-operation and meeting the budget pledge. ¹¹⁴ It favoured further initiatives in conventional improvements in the 1980s, and provided a useful mechanism under which longer-term defence planning could be implemented. ¹¹⁵ Furthermore, the LTDP was an important event which initially consolidated the Allies' growing desire to reinforce Flexible Response. For the British Army, the government's intention to comply fully with the plan was to become a major factor which enabled the initiation of the reforms. ¹¹⁶

The Thatcher government's views on strong defence were based on the development of Soviet military power, which it considered to have become more 'a potential threat to the West.'117 Therefore, reinstating the strong leadership of the US was considered critical for the security of the west. In fact, this view coincided with the Reagan administration's efforts to restore its strategic position in the world so that the two governments were to share an intimate relationship based on the similar personalities of the leaders and their perception of the international

¹¹³ See Flanagan, 1988, pp.22-3.

¹¹⁴ See Flanagan, 1988, pp.22-3; and "Emerging Tensions over NATO's Conventional Forces," <u>IDR</u>, (January 1987), p.33.

¹¹⁵ See Flanagan, 1988, pp.24-5; and 1987, p.33.

¹¹⁶ Also see Baylis, 1989, pp.127-8; and SD 1981, para. 112, for more on the background of the LTDP.

¹¹⁷ SD 1981, para.105.

system. ¹¹⁸ This intimacy was confirmed with the Thatcher government's move to adapt to the US concepts of conventional improvement, which it viewed as critical in reinforcing its position in NATO. ¹¹⁹ This was also quickly followed by the Trident decision and the accommodation of US Cruise missiles in Britain. ¹²⁰

Yet, economic constraints remained a hurdle to the new government in implementing both conventional and nuclear forces improvements. ¹²¹ By the early 1980s, Britain was facing a major economic crisis brought on by recession. Consequently, the MoD's financial pool was rapidly diminishing, and it had no ability to continuously pay for both the LTDP commitment and the rise in other costs in the military. ¹²² By 1985, in addition to the overall cutbacks of the 1981 review, this had resulted in the abandonment of the LTDP's 3 per cent goal. ¹²³

3.5.2. THE 1981 DEFENCE REVIEW--THE WAY FORWARD

The most controversial issue in the 1981 defence review, <u>The Way Forward</u>, was the choice between Britain's continental and maritime contribution to NATO. Because

¹¹⁸ See Bluth, "The Use of Force," in Croft, op. cit., p.61; and David Allen, "British Foreign Policy and West European Co-operation," in Byrd, 1988, p.11.

¹¹⁹ See Rees, op. cit., in Byrd, 1991, pp.98-9.

¹²⁰ See more on Trident in the speech by Michael Heseltine at King's College London in Autumn 1983.

¹²¹ See David French, <u>The British Way in Warfare 1688-2000</u>, (London: Unwin Hyman, 1990), p.236; and Chichester and Wilkinson, op. cit., pp.67-8.

¹²² See Baylis, 1989, pp.23-4; and Chichester and Wilkinson, op. cit., p.67.

¹²³ See 7.6. for the impact of the abandonment of the LTDP and other resource constraint on the continuing implementation of the reforms in the mid-1980s.

the role of the RN was considered less crucial than that of the Army and RAF, which were essential in reinforcing the government's strategic priorities, it was inevitable that John Nott would choose the RN to bear the brunt of the cuts. 124 As a result, the Navy's surface fleet was severely reduced and its role shrunk to nuclear deterrence and anti-submarine warfare, while the Army and RAF escaped with only minor cuts-the former losing 7,000 personnel. 125

There were obvious advantages, and some inevitability, behind the decision to spare the Army and RAF from the cuts. A reduction of the Army, and particularly in that of the BAOR, could be seen by NATO as deviating from Britain's pledge and would have drawn criticism from the other Allies. It could also provoke the US to curtail its commitment to Europe, as well as result in the weakening of the British leadership within the Alliance. This would be a very serious blow to the government, undermining its stance on strong defence and deterrence. 126

For the Army and BAOR, the review paved the way for a rationalisation of its structure and helped obtain a guarantee of continuous governmental support of the earlier weapons procurement programme outlined after the 1974 review and the LTDP, as well as securing funds for additional weapons purchase. Meanwhile, the RAF initially benefited from the review as the previous improvement programmes (i.e. acquisition of new aircraft and missiles) were allowed to continue. 127 Above all,

¹²⁴ See Boren, op. cit., pp.11.

¹²⁵ See Dockrill, op. cit., p.115.

¹²⁶ See Baylis, 1989, pp.23-4; and Carver, 1992. p.133. Also interview, Carver.

¹²⁷ Interview, Jackson. Also see Boren, op. cit., p.348.

the 1981 review permitted the Army to carry out a critically needed re-examination of the capability of BAOR, and to begin the subsequent reforms under Bagnall.

The reorganisation of 1 (BR) Corps, which was outlined in the 1981 review, was completed by 1984. 128 Under the new plan, the corps retained three armoured divisions and one infantry division, comprising seven armoured, one airmobile, two regular infantry and two TA (Territorial Army) infantry brigades and substantial corps troops, including a reconnaissance brigade equivalent and strong artillery assets. 129 The British Army returned to the idea of the peacetime maintenance of three divisions of 12,500 men in three brigades each, with the fourth stationed in Britain and ready to re-deploy to Europe at the first sign of danger to reinforce the corps' rear areas. 130 The new structure was seen as a measure offering flexibility in order to fight an immediate tactical battle, particularly in a short warning attack, and to provide substantial corps reserves, the capabilities for which the previous four-division structure was unable to provide. With each division having eight to twelve battle groups formed into a number of flexible task forces, or into large defensive and major counter offensive forces, this represented a significant increase in both fighting power and flexibility in defence. 131

The list of new weapons introduced after the 1981 review was impressive. 132 Overall, the most significant aspect of the new weapon procurement programme was

^{128 &}lt;u>SD 1984</u>, para. 416.

¹²⁹ SD 1985, para. 418.

¹³⁰ Bellamy, 1987, p.146.

¹³¹ See Terry Gander, <u>The Modern British Army</u>, 2nd ed., p.19. Also see ibid., p.18 and p.22, for details on the BAOR divisional structure.

¹³² See SD 1983, para.323; SD 1984, para.424, for some details.

the emphasis on the exploitation of emerging high technologies, which allowed for the exploitation of the other ET weapons advantages outlined before. ¹³³ This was thought to compensate for the small decrease in manpower, while actually expanding the Army's fighting power. ¹³⁴

Parliamentary support for the government on the increase of the ammunition stocks and provisions for forward ammunition storage to enhance the sustainability of forces, the implementation of this promise was slow in coming. Also, a pledge was made to allocate more funds for training and exercises; but in reality, the government pursued cuts in the Individual Training Organisation (ITO). ¹³⁵ This was an adverse action by the government, especially when lack of training and sustainability was being severely criticised by Parliament. One of the 1981 Parliamentary Defence Committee reports acknowledged that the training of forces in BAOR was restricted to conserve spares and fuel in such a way that it was 'affecting the training of the forces in BAOR and operational effectiveness must be diminished if problems of this kind continue.' ¹³⁶ Furthermore, it was criticised in a Commons debate as causing 'general low morale' in the Rhine Army. ¹³⁷ In another report, meanwhile, it was

¹³³ Also SD 1983, para. 412.

¹³⁴ Boren, op. cit., p.298.

¹³⁵ See Boren, op. cit., p.351. Also see First Report from the Defence Committee Session 1979-80: <u>Ammunition Storage Sites for British Forces Germany</u>, para.31; and Hansard, <u>Debate on Army</u>, 9 July 1981. Comment by Minister of the Armed Forces, John Stanley.

¹³⁶ First Report from the Defence Committee Session 1981-2: Allied Forces in Germany, para. 19.

¹³⁷ Hansard, Debate on Army, 22 October 1984, Comment by Cyril Townsend.

pointed out that the lack of sustainability in the BAOR might force the commander 'to recommend the premature introduction of tactical nuclear weapons into the battle. These problems had largely been corrected by 1984 with the increased allocation of funds, although the abandonment of the LTDP and other resource problems were to cause some restrictions in implementing the reforms as they were initially envisaged (I shall discuss this further in chapter 7). Meanwhile, the cuts in ITO were successfully resisted by the Army's bureaucracy and by strong opposition from the General Staff, which argued that such a move would demoralise the troops and cripple their operational effectiveness. 139

Secondly, the government wanted to expand the role of the TA to a direct defensive one on the Central Front. Accordingly, the strength of the TA was increased from 76,000 to 86,000 to reinforce the BAOR in an emergency. 140 However, the government's view of the TA's increased role was opposed by the Army on the grounds that Regulars were more cost-effective and the TA was not well trained to undertake a role other than reinforcing the Regulars in the BAOR. 141

The first major test of the 1981 reorganisation and the credibility of the new reinforcement plan was carried out during the 1984 exercise LIONHEART. The deployment scheme for the TA was tested earlier through exercise CRUSADER 80 in September 1980, which largely reaffirmed its reinforcement plan. However, LIONHEART was designed to test the combined reinforcement plan of both TA and

¹³⁸ First Report from the Defence Committee Session 1979-80, para. 31.

¹³⁹ Hansard, <u>Debate on Army</u>, 22 October 1984. Comment by Townsend. Also see Boren, op. cit., p.351.

¹⁴⁰ See Carver, 1992, p.133 and p.136.

¹⁴¹ See Boren, op. cit., p.351.

Regulars from Britain to Germany, which involved the largest single transfer of British troops to the continent since World War Two. 142

The second phase of LIONHEART in Germany, exercise SPEARPOINT, involved 120,000 British troops in a major FTX and successfully demonstrated the credibility of the new corps structure with most of its reinforcing units in place. Finally, the 1985 Statement on the Defence Estimates acknowledged that the 1981 reorganisation of 1 (BR) Corps was a major accomplishment which resulted in the creation of 'a better-balanced force' with more effective reserves. 143

3.5.3. THE 1981 DEFENCE REVIEW AND THE REFORMS

By the mid-1980s, the British Army enjoyed greater capability and fighting power than many in Britain and the Alliance had estimated. To recap: 1) Instead of four weak divisions, 1 (BR) Corps ended up having three full-strength divisions. Thus, 2) BAOR was able to plan its defences with fully-trained, well-furnished and high-morale forces already in the theatre. Furthermore, since it no longer had to rely on reinforcements to plan its initial defence, although it did depend on them in order to maximise its strength, it became less reliant on 2 (BR) Division, which consisted mostly of TA troops. This resulted in a major enhancement in its readiness, which was a significant boost in the forces' ability to counter a surprise attack--especially a standing start attack. Above all, 3) it provided Bagnall with several important leverages with which to implement his reforms.

¹⁴² SD 1985, p.23, para. 4. Also see McInnes, 1988, p.379.

¹⁴³ SD 1985, p.23, para. 6.

In reality, however, the resources needed for the reforms were initially to come from assets already available to the Army through the rationalisation of the structure and equipment in the early days of conceptualisation along with, as mentioned, provisions made after the 1974 review and the LTDP. 144 Without knowing this intention, therefore, some (especially in the Bundeswehr) thought that the reforms were a government-induced development, the implementation of which was only made possible because of the new organisation and equipment introduced in the 1981 defence review. 145 However, such an opinion was too dismissive and hasty. Although some areas of the reforms at the later stage of their implementation became dependent on the purchase of weapon systems and equipment secured by the new government's pledge, Bagnall initially planned the reforms based on what the British Army already possessed in the early 1970s, and thus he would have gone ahead with his reforms regardless of the 1981 review or any other developments. 146 As will be discussed in chapter 6.2., his strong personality and immense confidence had a greater impact on the realisation of the reforms than any other factor, especially in the early days.

One of the psychological causes of such a dismissive view of the reforms was, again, growing German assertiveness and influence in formulating and implementing the course of the Alliance's strategy, while BAOR had been sluggish and passive in undertaking a leading role in NORTHAG. This was due to the earlier tendency of the British Army to treat the defence of Germany in a 'business as usual' manner, and the

¹⁴⁴ Interview, Bagnall on 5 May 1993.

¹⁴⁵ This view was offered by officers of other NORTHAG armies. Interviews, Chalupa, Fischer, Colonel V. Kunzendorf on 22 June 1992 and Stoetermeer.

¹⁴⁶ Interview, Bagnall on 6 November 1993.

overwhelming reliance on the use of nuclear weapons in defence. ¹⁴⁷ So, although Britain was the most important European partner, providing both the nuclear deterrent and substantial conventional power through NORTHAG's leadership, its opinion had had a less than enthusiastic reception in the past.

For example, as Bagnall pointed out in an interview, the position of COMNORTHAG before him was considered as more of an administrative one, through which authority was delegated via the international staff at NORTHAG without actually presiding over and controlling the affairs of the army group and its four different national corps. This was also partly due to the sensitivity of other nations, who did not want any external direction determining the course of their own policy. 148 Thus, it seemed only natural for the Germans and others in the Alliance to have doubts as to the originality and feasibility of the concept, as well as its ability to stand independently of the 1981 review. Moreover, they were only accepted with much suspicion and contempt by some Germans, who actually saw them as a dangerous move which could jeopardise their operation by draining its reserves for the operation in the British sector and by endangering Allied cohesion. 149

So, what role did the 1981 defence review actually play in Bagnall's reforms? Firstly, it reaffirmed the government's pledge on the weapons procurement decisions in 1974 and 1978, which were critical assets ensuring the success of the operational concept. Principally, the value of new weapons lay in the fact that they would allow the corps to undertake a larger-scale operation than initially planned with more

¹⁴⁷ Interviews, Bagnall on 5 May 1993. Also, interview, Carver.

¹⁴⁸ Interview, Bagnall on 5 May 1993.

¹⁴⁹ Interview, Chalupa. See chapter 5.4. for more on debates.

efficiency and prowess. Also, the review eventually made provisions for more financial and material resources for training, which were vital for the successful execution of the new concept. As Farndale stressed, though the 1981 review did not provide everything the Army wanted, it *did* stop the decline of its capability for the time being by introducing new weapons and resources to reinforce other vital requirements, such as training and ammunition, in order to increase sustainability. ¹⁵⁰

Secondly, the emphasis on the exploitation of ET, especially in C3I systems, and the much-enhanced performance of the new weapon systems, significantly strengthened the Army's efforts and extended the range of the reforms in terms of operational scope. In particular, they had a crucial role in transforming the 1 (BR) Corps' ability to fight a mobile battle and to execute complex operations such as counter stroke. ¹⁵¹ Moreover, since the aim was to achieve cuts in cost while gaining higher operational capacity, it was imperative to exploit the benefits of technology which in fact allowed for better integration of the forces with their supporting elements. This was a way of making the best use of what the Army had in its hands.

Thirdly, the restructuring, which provided three in-theatre Regular armoured divisions, permitted the conduct of high intensity training and the maintenance of unit cohesion. 152 If 1 (BR) Corps had to rely on the TA to build up its strength to the full in the event of war, which was the case with the previous four-division structure, its ability to conduct a difficult operation (i.e. counter stroke) would have been seriously reduced. Thus, although the reorganisation left fewer divisions in Germany, they

¹⁵⁰ Interview, Farndale on 21 June 1993.

¹⁵¹ See McInnes, 1988, p.387, for details of the benefits of new weapons.

¹⁵² Interview, Bagnall on 5 May 1993.

were all battle-ready formations with higher provisions of combat units per division, which increased the 'teeth-to-tail' ratio resulting in a substantial growth in corps' fighting-power. Overall, the changes prepared the British corps to counter the WP surprise attack more effectively than before; this was a positive move which reinforced NORTHAG's conventional defence to such a degree that it no longer had to resort to early nuclear-use.

Therefore, despite the government's appearance as the main catalyst for the changes in the British Army and NORTHAG (due to the 1981 review), its role in influencing the reforms was, according to McInnes, surprisingly limited. He admitted that the assertive use of force fit the image of the new government, and the attention given to a better conventional defence in the reforms coincided with its renewed emphasis on strong defence. Thus, the government was more instrumental 'in creating a permissive atmosphere' within which Bagnall's reforms could occur, rather than actually promoting the changes. ¹⁵³ Above all, it regarded the reforms as a strictly military-operational affair aimed at accommodating changes in organisation and technology. Thus, it was felt to be improper to dictate the initiation or course of the reforms, in which civilians were considered to have no part to play. ¹⁵⁴

It is not even clear that the advent of a Conservative government was vital in facilitating the reforms. Labour had endorsed the LTDP as the stepping-stone for its own build-up programme and might have been just as supportive if it had remained in power. 155 Therefore, although the right-wing element of the new government could

¹⁵³ See McInnes, 1991, p.45.

¹⁵⁴ Interviews, Jonathan Day on 22 March 1993 and Paul Flaherty on 11 May 1993.

¹⁵⁵ Interviews, Bagnall on 4 May 1994 and Farndale on 19 May 1994.

have appeared to have strongly supported measures to strengthen Britain's and NATO's defence, particularly because the Labour Party keenly explored an option of NOD and non-nuclear defence in the early 1980s, its direct influence over the reforms was smaller than one might expect.

Above all, the government had no plausible grounds, either political or strategic, to reject the reforms, especially as they could only strengthen its policy goal. 156 As long as it was made to look good, while being spared the Army's pressure to provide more financial support, it had nothing to lose by supporting the reforms both in public and within the Alliance. In fact, the financial factor was so important in securing the government's full support that, if Bagnall failed to convince the government that the reforms could be implemented within the existing resources and those already authorised by the LTDP and the 1981 review, there was a strong chance that Thatcher could have objected to Bagnall's attempt. 157 In short, the government benefited politically without actually having to go out of its way to aid the military. In fact, the government did not play any positive role other than creating a 'permissive' environment; it neither starved the military of necessary resources nor vetoed the changes.

¹⁵⁶ Interview, Bagnall on 6 November 1993. See chapter 5.3.3. for more on the government's role in implementing the reforms.

¹⁵⁷ See Bagnall's letter to <u>The Times</u> on 3 August 1994, for the frustration he experienced by challenging Thatcher's views on Britain's nuclear capability. In fact, he had offered an opinion that the cost of the Trident system was too extravagant, and the financial resources allocated to the system could be better utilised for improving Britain's conventional capability. As a result, he wrote that he was 'written off as being unreliable thereafter.'

3.6. CONCLUSION

The main findings in this chapter have been that the development of the British logic for the reforms was as much a product of all the changes that were taking place at the time as it was of its own unique views and rationalisations on what was required to bolster the defence of Central Europe. For example, although the British Army leadership's nuclear no-early-use thinking coincided with the growing desire of the public and other nations, it was formulated based strictly on its own interpretation of the utility of such weapons, as it recognised a number of political, strategic and operational benefits of nuclear no-early-use. Conversely, not only did the Army leadership's logic not always conform to the mainstream view, which was the case with its perception towards threat of a WP surprise attack, but also it sometimes ran quite contrary to the established views at the time--it was particularly so with its dismissive views towards the German notion of forward defence.

Nonetheless, despite the fact that the Army leadership's perception of the above developments did not make everyone happy, its logic was not only persuasive but also quite justified because of the situation at the time. Most of all, under forward defence, as it was understood by the Germans, if the WP succeeded in a surprise standing start attack, NATO's defence would quickly collapse as a large portion of its forces would be dislocated and beaten piecemeal by the numerically superior WP. As a result, the Alliance would be forced to resort to nuclear-early-use in the case of war due to the lack of its conventional capacity to stop the WP's initial onslaught. Otherwise, NATO would face the possibility of losing its territory and thus, inevitably, the cohesion of the Alliance. Yet, not only could nuclear-early-use bring a number of political and strategic ramifications, but it could also effectively nullify any

cohesive defensive efforts by the Alliance as it would quickly lead to the loss of control of the battlefield and, eventually, to an escalation to strategic nuclear exchange. Therefore, regardless of what the others in the Alliance thought, this series of logic provided the initial impetus for the Army leadership to pursue the reforms.

Meanwhile, although it did not have any direct bearing on the formulation of the reforms, the 1981 defence review nevertheless had some positive results. The most significant contribution of the review was that it did not make further cuts in the Army's strength under the difficult economic conditions at the time. The undisrupted procurement of weapon systems and equipment to implement the reforms was essential if the reforms were to be effective. In this sense, the role of the Conservative government was an arbitrary and bridging one rather than an active one.

CHAPTER 4

THE REFORMS

4.1. INTRODUCTION

The purpose of this chapter is to review the three core elements of the reforms:

1) operational level planning; 2) Land/Air Battle; and 3) counter stroke. In doing so, I will examine the background and process of their formulation in order to provide an overall analysis of their strategic and operational logic and to determine the validity of their principles.

I argue that the primary aim of Bagnall's efforts to introduce the operational level concept in the British Army and NORTHAG was to enable a rational use of the limited resources available in the army group. Therefore, the acceptance of the new concept of operation was not an attempt to adopt a radically different concept based on newly emerging manoeuvre theory at the time. It was rather an inevitable choice to enhance their ability to simultaneously achieve economy and concentration of forces so as to bolster the existing ideas for defence through better utilisation of mobility and firepower. For this reason, Bagnall paid more attention to reinforcing and extending the already existing capability through better C3I, interoperability, education, etc., to enhance NORTHAG's operations at the operational level, and why his ideas fundamentally differed from the AirLand Battle Doctrine and FOFA.

Thus the adoption of the Land/Air Battle Doctrine should be seen in the same vein, i.e. that it was essentially aimed at achieving a rational distribution of valuable resources (air assets) at the operational level by streamlining the air force's obligations to suit the land force's requirements which, in turn, would enable the recognition of the joint nature of the command of the two forces. This would allow the air force to support only the vital missions, and thus avoid wastage and duplication of effort in supporting the ground war.

I also argue that the endorsement of the counter stroke concept, both at the tactical and operational levels, had the same logical foundation. This would permit a simultaneous achievement of economy of efforts and concentration of forces to strengthen the existing defences (although the counter offensive concept had a larger purpose) by using manoeuvre at the operational level. This was not a purely mobile concept because the positional element remained important to the achievement of the operational goal.

4.2. OPERATIONAL LEVEL THINKING IN NORTHAG

4.2.1.THE IMPLICATIONS OF THE LACK OF OPERATIONAL LEVEL THINKING IN NORTHAG

Before the reforms, the lack of a single operational level concept in NORTHAG took a major toll on the force disposition of the NORTHAG corps, as well as the army group's ability to conduct a theatre-wide joint battle. First of all, the Netherlands and Belgian corps were already criticised for their lack of readiness by many British and German commanders who considered them to be seriously flawed. Also, not only did they have to bring forward the majority of forces from their homes, but also their peacetime barracks had little relation to wartime operational areas. This was also true for the British and German corps, though to a lesser extent.

Secondly, the garrison areas did not coincide with the operational sectors, forcing the NORTHAG corps to travel a long distance while doing much 'criss-crossing' of paths over other corps areas.³ This would undoubtedly cause a serious traffic problem with their deployment to wartime positions, causing them to take longer than expected and paving the way for a WP surprise attack against a vulnerable NATO.

Thirdly, the lack of interoperability in NORTHAG, as the former British and other national commanders whom I interviewed pointed out, hindered the

¹ Interviews, Bagnall on 5 May 1993, Farndale on 21 June 1993 and Von Sandrart.

² McInnes, 1988, p.382. See Cross, op. cit., p.20, for an assessment of the Belgian and Dutch readiness problem.

³ See Faringdon, op. cit., p.339.

achievement of flexibility of command and rendered the conduct of a joint operation difficult.⁴ Cooperation received little attention, and this compelled each corps to use indigenously developed weapons and communications systems, different to those utilised by their counterparts, due to the need to maintain a national industrial capacity. Particularly, the serious problem of the different communication networks, which made the coordination of the battle a laborious task for COMNORTHAG, remained unsolved until the British corps supplied its own signal assets to NORTHAG.⁵

Fourthly, the lack of a commonly understood operational language and military terminology created confusion and encumbered effective joint operations in NORTHAG.⁶ NATO army groups overlooked this element due to the political consideration that the Alliance was a voluntary grouping of sovereign states, each with its own defence policies.⁷ To have ignored this would have been to risk a rift in the Allies' cohesion.⁸

Finally, the overriding dependence on nuclear weapons was also a negation of the requirement for NATO and army group-wide joint operations. Under the nuclear environment, 1) it would be safer if NATO did not concentrate its force for a large operational level manoeuvre because it would

⁴ Interviews, Bagnall on 5 May 1993, Chalupa, Farndale 21 June 1993 and Jackson.

⁵ Interview, Bagnall on 5 May 1993.

⁶ See R.L. Sloane, "REFORGER Interoperability," <u>Armor</u>, (September-October 1979), p.9, for an example of the confusion created during the 1979 exercise due to the lack of common tactical and operational terms.

⁷ Nicklas-Carter, op. cit., in Harries and Toase, op. cit., p.207.

⁸ See Hans Henning Von Sandrart, <u>CINCENT's Operational Principles and Concept of Operations</u>, A CINCENT's Lecture given to the HCSC at the Staff College, Camberley on 2 February 1989.

present a major target for a WP nuclear attack; and 2) the recovery of lost territory, or the maintenance of defensive positions, could be carried out by corps operations as they would have to reoccupy the temporary void created in the target areas after NATO's nuclear attack. As a result, Bagnall claimed that, under such conditions, developing a single army group SOP and a fully integrated GDP was almost impossible. 9

The most serious ramification of this was that each corps was left to fight an essentially separate corps battle. Bagnall expressed his frustration by saying, 'all corps have been told to conduct the battle within their own corps area and have been given a coordinating line behind which they are not to withdraw without authority. Currently this instruction is interpreted in different ways in the four corps, without an overall design for battle at the army group level.' As a result, each corps was trying to 'defend passively and right up to the IGB, regardless of whether this is feasible.' 11

Also, because COMNORTHAG could only take over the command of the army group in war and then coordinate the operations of the corps commanders--as well as the tendency to consider COMNORTHAG as more of an administrator whose role was political rather than as the decision-making theatre commander--he had no power in real time to control a combined army group battle, and most of the fighting would be conducted independently by each national corps commander. Under the circumstances, the role of army group commander before Bagnall, in Chalupa's view, was confined to coordinating manoeuvre, barrier and fire plans, 'to halt and defeat the enemy within an area of

⁹ Interview, Bagnall on 5 May 1993.

¹⁰ Bagnall, 1984, p.62.

¹¹ Bagnall, 1984, p.60.

limited depth.'¹² In other words, COMNORTHAG's role was primarily limited to producing a coordinated fire plan mainly with air assets because he did not have any other means of influencing the army group battle. ¹³

Such a situation would cause a number of problems. Most of all, the overall priorities of the operational level (AFCENT--Allied Forces Central Europe--and army group) could not be identified. ¹⁴ Each corps would consider its own situation to be more grievous than that of the others, and would use most of the available corps resources for its own battle, as each corps commander would try to support his own battle regardless of the operational situation. Furthermore, there could be a conflict between corps over priority in the use of the operational level resources when they became available (i.e. the operational reserves and air assets).

The consequence would be a waste of effort and resources since each corps would be fighting a series of individual tactical battles absorbing a lot of valuable assets while causing chaos at the theatre level as the operational commander would have to cope with each corps' demands to provide support for its operation. As Hines and Petersen said, "Corps battle".... thoroughly pervades operational thinking' since the army group commander would depend upon subordinate corps for the combat resources to react to operational developments. 15 One consequence could entail:

Commanders of Corps experiencing relatively shallow tactical penetrations.... might exaggerate the significance of the enemy's

¹² Chalupa's speech at RUSI in 1984.

¹³ Interviews, Bagnall on 5 May 1993 and Jackson.

¹⁴ Bagnall, 1984, p.60.

¹⁵ Hines and Petersen, 1986, p.565.

successes.... Corps commanders who are holding, or even advancing somewhat, in those sectors where the Pact Front.... chose not to weight the attack.... would be accurately reporting victory-winning the corps battle-while army group and CINCENT could be trying unsuccessfully to fend off operational and strategic encirclement. 16

Under the circumstances, the operational dislocation of corps became a distinct possibility. Given the isolated nature of the corps battle and the different national doctrines, if the WP penetration occurred along inter-corps boundaries (a 'spill over' of the WP thrusts into neighbouring corps), it would have been extremely difficult for two different corps to counter it in an effective joint operation. ¹⁷ Furthermore, the army group would not be able to concentrate its assets because it had to support two separate corps operations. Thus, if one corps stayed on fighting while others were withdrawing, this could have exposed its flanks to the enemy. This was a distinct possibility, since, as Bagnall said in an interview, he could not rely on the Belgians to have sufficient strength to fulfil their tasks--and nor were the Dutch any better, with the exception of the initial defensive battle. ¹⁸ This problem was aggravated by the German corps' determination to fight its own fierce corps defensive battle.

4.2.2. HIGHLIGHTS OF BAGNALL'S OPERATIONAL CONCEPT

The core of Bagnall's idea revolved around finding an alternative to the attritional and static styles of defence. Such approaches would fail against the

¹⁶ Hines and Petersen, 1986, p.570.

¹⁷ See Bagnall, 1984, p.62.

¹⁸ Interview, Bagnall on 5 May 1993. Also interviews, Farndale 21 June 1993 and Day. Also see Faringdon, op. cit., p.370.

¹⁹ Interviews, Bagnall on 5 May 1993 and Farndale 21 June 1993.

WP, because: 1) it would have the initiative of attack by being on the offensive, whereas NORTHAG would be reacting to the enemy; and 2) NORTHAG would thus not be able to recover lost territory because it would lack the ability to concentrate scattered forces for a major counter attack while remaining on the defensive. Moreover, as mentioned previously, such a situation would have been further exacerbated if the WP succeeded in launching a standing start attack.

In order to strengthen deterrence, Bagnall felt that NATO needed to foster a credible conventional capability which would be enough to secure a quick cessation of a conflict without yielding German territory in the case of war. Otherwise, NATO's deterrence was only a tenuous remedy, and he thus made sure everyone understood his view that actually having such a capacity would be the critical factor in preventing a possible war with the WP. This also required the army group to 1) contain the WP advance at the earliest hour without using nuclear weapons; and 2) deter further aggression by the WP by maintaining a major counter offensive capability.²⁰

Bagnall perceived two overriding and irreconcilable political and operational realities in the defence of Central Europe. Firstly, under no circumstances could he breach the forward defence imperative regardless of his own views on the subject. Secondly, the amount of resources available was finite, confined to what was already available to NORTHAG during the early hours. Therefore, he concluded that only accepting the principles of the operational level of war would offer an alternative with which to strengthen conventional defence within the above confines.²¹ The most attractive aspect of

²⁰ Interviews, Bagnall on 5 May and 6 November 1993.

²¹ See next section for more on the British understanding of the operational level.

conducting a war at the operational level was the rational management of existing resources, which could allow for the necessary degree of operational flexibility within the political guidelines.²²

The requirements for Bagnall's operational level concept were designed to alleviate the problems listed at the beginning of this section, i.e.: 1) to allow the rearrangement of NORTHAG's posture, under which the rationalisation and reallocation of resources would be determined according to the priorities; 2) to permit the creation of a large operational reserve by achieving economy of force at the operational level; 3) to provide a common language and concept of operation to enable a joint and cross-corps operation within NORTHAG; and, 4) to free 2ATAF from constantly having to support the army group operations so that it could pursue its own aim of air superiority. This was to be done by identifying the priorities and by accepting the joint planning and coordination between the two, under which the ATAF would provide extended and intensive support when needed.²³

Thus, the multi-faceted aims and directions of the reforms, as already mentioned earlier, can be summarised as follows: 1) the adoption of a jointly agreed concept of operation in the form of a single army group operational doctrine, which could be understood throughout the NORTHAG corps; 2) the acceptance of mobile defence and manoeuvre warfare in the NORTHAG doctrine; 3) the formulation of a more offensive-oriented defence concept in the form of counter offensive and counter stroke with the consequent nurturing of a more positive attitude and dynamic spirit among NORTHAG forces; 4) the

²² Interviews, Bagnall on 5 May and 6 November 1993. Also see Bagnall, 1984, passim.

²³ See more in chapter 4.3.

creation of a large army group reserve for COMNORTHAG's operational battle; and 5) the adoption of the joint land/air battle doctrine for the effective management and rational use of resources within the corps, the army group and the ATAF under one command.

The core of Bagnall's plan, and a recurring theme in the British Army and NORTHAG operational concept, was the creation of a large mobile operational reserve within the existing resources for the army group counter offensive. The ultimate aim of the operational reserve and its timely committal was focused on, as Lt. General Mackenzie emphasised, preventing 'either a catastrophic penetration of the linear defence or a strategic turning manoeuvre around one of the flanks of the Central Region' which was crucial in order to avoid 'a loss of cohesion and total collapse of the defence of the Central Front.'24

Taking the initiative at an early stage by offensive was another such theme. Bagnall wrote in emphasis: 'let us be quite clear there is no alternative to us attempting to seize the initiative at an early stage. Unless we achieve this we will only be reacting to the Soviet moves and would inevitably be ground down in a battle of attrition which we could never hope to win.'25 It would most of all allow the army group to force the enemy to react to its move and not vice versa. As a result, the army group would be able to cause confusion and friction to the enemy's plan to slow him down and allow time to prepare for the army group counter move. This would not only cause a delay in the enemy operation, but could also induce the army group to further expand its initiative--which could create extra blunders and confusion in the enemy and permit additional

²⁴ J.J.G. Mackenzie, "The Counter-offensive," in Holden Reid and Dewar, op. cit., p.164.

²⁵ Bagnall, 1984, p.60.

disruption by the army group at the time and place of its choosing. This also meant that each corps would take on offensives based on tactical counter stroke whenever feasible to maximise the chance of taking back the initiative and foster the environment within which the army group operational counter offensive could be committed.²⁶

Finally, NORTHAG was to move away from the static mentality in order to enhance its ability to undertake offensive mobile battle and counter offensive. This would both achieve concentration of forces at the critical point and permit a smaller NORTHAG force to offer effective defence against the numerically superior WP, a more viable option because of the lack of resources. The operational planning would enable the conduct of daring operations such as mobile defence and manoeuvre warfare, which could compensate for NORTHAG'S numerical inferiority.²⁷

All in all, Bagnall hoped that the combination of these actions would unhinge the enemy at the theatre-wide level.²⁸ Particularly under the standing start scenario, the WP could not concentrate on more than one or two major breakthrough points, while attempting to disguise them by fake attacks in other areas. Thus, NORTHAG's delaying and disruption of the WP progress in general would force the WP to reveal its main efforts early because it would have to concentrate its attempts on achieving a quick breakthrough, and this, in turn,

²⁶ This was the main issue on which misunderstandings about the NORTHAG concept most frequently occurred, i.e. most observers could not distinguish between the corps and army group counter stroke and the aims of such an operation on two different levels. See details in chapter 4.4.

²⁷ Interviews, Bagnall on 5 May and 6 November 1993, Farndale on 14 April and Von Sandrart.

²⁸ Interview, Bagnall on 5 May 1993. Also interview, Farndale on 21 June 1993.

would make it difficult to prolong the deception. Thus, NORTHAG's operational planning would allow it to establish a coherent counter measure against the enemy's surprise penetration. Firstly, it would enable the corps to avoid positional dislocation and wastage of corps reserves by being deployed forward in separate corps battle. Secondly, the covering forces would fight an aggressive delaying battle to reveal the enemy main efforts. Thirdly, the operational reserve could be concentrated after the enemy's main efforts were identified. Fourthly, with covering force and main defensive battles, the army group could coordinate tactical counter attacks to further disrupt the enemy. Finally, the army could commit to a counter offensive to destroy the enemy main effort(s).

While NORTHAG's major concern was the WP surprise standing start attack, it was also expected to vastly enhance its ability to counter other scenarios, including a post-mobilisation one.²⁹ Under this specific contingency, the army group's ability to prevent the enemy from making any significant progress in the initial stage of the conflict, and to increase the odds of committing a counter offensive (with either in-theatre or external reserves), would markedly improve NATO's political stance against the WP, and the Alliance's threat of nuclear use would be more credible. Also, as Bagnall repeatedly--and ironically--emphasised during a number of interviews with me, every commander in NATO could win a war against the WP if full mobilisation could be achieved, and NORTHAG could defend itself without all this intricate

²⁹ Interviews, Bagnall on 5 May 1993 and Farndale on 21 June 1993. See chapter 6 for the expansion of the reforms, under which the NORTHAG concept was extended to counter other scenarios, including a post-mobilisation one, and more strikingly, a conventional retaliation.

and difficult planning if it could be assured of the arrival of the full contingent of 3 (US) Corps in its area before the outbreak of war.³⁰

An additional benefit would be to permit COMNORTHAG to plan a cohesive defence without a dispute with other national commanders at a critical time, and to gain the initiative by influencing the battle at the operational level. He could also avoid confusion in language and concepts with subordinate commanders of different national corps, which would allow for a smoother distribution of resources throughout the army group. In short, it could achieve doctrinal interoperability in NORTHAG in terms of the concept and language used. In addition, it could provide a basis on which conceptual and operational interoperability could be achieved with other NATO and national concepts (i.e. FOFA and the AirLand Battle Doctrine), by adopting a compatible concept which was based on similar operational principles.³¹

Finally, the army group was able to achieve a rational management of resources by avoiding the redundant deployment of weapon systems and equipment. As mentioned, the advances in C3I technology significantly enhanced the army group's ability to coordinate operations with the corps and air force. If the C3I systems in each corps could be integrated, it also meant that the corps were not required to maintain extensive intelligence-gathering assets, and that information could be distributed quickly and reliably by the army group, offering cost-effective, yet substantial, improvements to the army group's defensive capability.

³⁰ Interviews, Bagnall on 5 May and 6 November 1993 and 4 May 1994. Also see 4.2.4. for detail on NORTHAG's reserves.

³¹ Interviews, Bagnall on 5 May and 6 November 1993 and Farndale on 14 April and 21 June 1993. The compatibility of the British and US doctrines proved to be a very useful element which enabled cooperation between the two armies during the Gulf War. See details in chapter 8.3.

4.2.3. THE BRITISH AND NORTHAG UNDERSTANDING OF THE OPERATIONAL LEVEL

So as to minimise the impact of the changes when the new operational concept was to be introduced to the British Army, it was accepted that the reforms should not be too different from the operational and tactical ideas, as well as the languages, already in use. Therefore, attention was focused on the formulation of a concept which utilised the fundamentals of war at the operational level, while focusing on achieving 'considerable flexibility from the actual organisation of the regimental system, while still trying to preserve its inspiration and motivation.'32

The Army's principles of war contained ten tenets which represented the British experience of war. The Army was expected to apply the ten principles as appropriate in the general conduct of war.³³ Therefore, it was planned that the adoption of the operational doctrine, and the revision of the fundamentals of war to supplement the new concept, would not constitute an attempt to create a series of new rules which the Army was expected to follow. The following explanation by Inge clearly shows Bagnall's operational philosophy:

You will adhere to the fundamentals of war and the right size reserves at [operational] level under the operational commander who can influence the campaign. You can't plan the next move without reading the current situation, and planning in advance is not wise. You have to develop a skill to read the battlefield.

Thus, when the principles of war were used to provide an operational concept, the main purpose was to provide an ideal linguistic and conceptual platform on

³² Edwin Bramall, "British Land Forces: The Future," <u>RUSIJ</u>, Vol.127, No.2, (June 1982), p.22.

³³ See The BMD, Annex A, for details of the British Army Principles of War.

which the British and NORTHAG's operational level concept could be developed.³⁴

As a result, 'operational level' became understood in the British Army, as defined in the BMD, as the level which 'is concerned with the direction of military resources to achieve the objectives of military strategy' as opposed to the 'tactical level,' which 'involves the direction of military resources to achieve operational objectives.' The definition continues:

The vital link between the setting of military strategic objectives and the tactical employment of forces on the battlefield is the exercise of command at the operational level. The skilful execution of the operational level of command is described as 'Operational Art'. That art embraces both decisions taken at the operational level and the outcome of those decisions, often tactical activity but bearing on the strategic level. For actions at the operational level must be planned with a view to seeking a decisive result. ³⁶

Yet recognising the operational level and operational art did not signify, as Inge emphasised, setting up a set of rules for the conduct of operations. For instance, mobile defence was not the sole prescribed method of conduct of a war at the operational level. Rather, the idea was to provide a broader view and understanding of the nature of warfare, under which various options for defence could be formulated and executed. Such options included counter stroke and offensive or defensive operations by fostering, as the BMD emphasised, a 'better understanding of what is required of the Army and how it will operate.' A Lastly,

³⁴ See more in chapter 4.4.2. for application of the principles.

The BMD, pp.38-9. For a more detailed discussion and definition, see Bellamy, 1987, p.105, chapter 4; Luttwak, 1987, p.69, pp.91-2 and p.260; Simpkin, 1985, pp.23-4; Leonhart, op. cit., pp.8-9; and Lind. op. cit., p.24.

³⁶ The BMD, p.39.

³⁷ See The BMD, p.vii.

one of the inevitable and recognisable benefits of the operational level was that it gave NORTHAG a better chance of conducting more mobile operations--although this was not always the preferable choice.

Above all, the major aim of the new operational doctrine was to allow the overall priorities of the army group to be identified, thus permitting the simultaneous achievement of concentration and economy of forces through rational resource management.³⁸ This meant that forward defensive positions had to be held with *elasticity* in mind as the army group did not have the resources to man them throughout the frontage. This was to allow NORTHAG to retain a ready army group reserve in order to react quickly to the WP penetrations at selected points.³⁹ It was also recognised that a series of tactical successes could be broadened by the principle of synergism at the operational level, which would be created by fighting a manoeuvre war in a fluid battlefield. Lind wrote:

What is the operational art? Broadly, it is the art of winning campaigns.... [It] is the art of using tactical events--battles or refusals to give battle--to strike directly at the enemy's strategic center of gravity. For the commander, it is the art of deciding where and when to fight on the basis of the strategic plan.... Why is the operational art important if you are to do maneuver warfare? Because it is through excellence in the operational art more than through maneuver in tactical battles.... that a small force can defeat a larger one.⁴⁰

Therefore, accepting the principles of the operational level of war and operational art, which permitted elastic defence (in combination of positional and

³⁸ See Bagnall, 1984, p.60. Also see Simpkin, 1987, pp. 23-4; and Leonhard, op. cit., p.8.

³⁹ Bagnall, 1984, p.62.

⁴⁰ Lind. op. cit., p.24. See 4.4.2. for further discussion on the Centre of Gravity.

mobile defence with reserves) under the manoeuvre principles, was a logical alternative.

Meanwhile, there was a need for clarification of the operational level in the NORTHAG armies, if the joint operational concept was to be adopted. As mentioned, Germany understood the operational level to mean the handling of divisions and corps, in which the corps would exercise exclusive power. The British started with the same understanding. Yet the thought evolved gradually, initially to the notion that the command between the corps and the army group was the linchpin between the tactical and operational levels.

However, Bagnall soon realised that the corps defensive battle was still tactical, and that focusing on this level would result in an operational dislocation by the WP.⁴¹ Thus, the British came to stress that NORTHAG's operational level should be identified with the army group operation. The logic was, again, how to use the limited resources of NORTHAG effectively. For example, the reason why CENTAG did not have a joint army group concept like NORTHAG was that, because of the strong US and German corps deployed on the difficult terrain, they did not have to emphasise the use of operational reserves as much as NORTHAG as long as they could have effective corps-level operations.⁴²

After agreeing upon this fundamental question, COMNORTHAG's authority was eventually expanded to include many important tasks under the new operational concept. According to Farndale, they were: 1) monitoring his corps Commanders whose task was to destroy the lead attacks without calling on army group reserves; 2) finding out what the enemy was doing and where his point of main effort was; 3) attacking the enemy at long range with concentrated

⁴¹ Interviews, Bagnall on 5 May 1993 and Von Sandrart.

⁴² See Karber and Palmer, op. cit., in Pfaltzgraff and Schulze, pp.178-80.

air power and artillery; 4) committing his own reserves of several armoured and airmobile divisions; 5) committing any extra external reserves allotted to him by the strategic commanders; 6) continuing his long range attack so as to prevent any follow-on enemy formation arriving fresh into battle; and, 7) being ready to move into the battlefield nuclear phase, once authorised.⁴³

4.2.4. NORTHAG'S OPERATIONAL RESERVE

As repeatedly expressed, the most important aim of the acceptance of the operational level by NORTHAG was to permit the creation of the army group reserves. The situation had been such that while each corps had its own reserves, COMNORTHAG had very little. As the operational commander, he did not have much to do without reserves, not to mention launching a counter offensive. 44 There were two obstacles to remedying this situation. Firstly, the corps did not want to provide them for COMNORTHAG because they were national reserves. Secondly, there were no dependable resources either inside or outside NORTHAG from which COMNORTHAG could create the army group reserve. For example, the British TA divisions, which were to reinforce NORTHAG's rear areas, were too weak, while 3 (US) Corps was in fact CINCENT's operational reserve with some obligation to NORTHAG. Moreover, the political

⁴³ Farndale, 1988--A, p.26.

⁴⁴ Interviews, Bagnall on 5 May 1993, Farndale on 21 June 1993, Inge and Von Sandrart.

sensitivity concerning their mobilisation during a crisis would have jeopardised their immediate availability.⁴⁵

Most of all, although no one disagreed with the necessity of the operational reserve and on the potential operational and strategic benefits which could be gained from the success of its operation, there were simply not enough forces available within NORTHAG. 46 Under the existing deployment plans, an alternative which was available to Bagnall was, as he stressed, the reinterpretation of forward defence to release some troops from it and earmark them as the exclusive army group reserve without responsibilities during the initial defensive (covering and main defensive) battles. The only problem was that it had to be done through the thinning-out of forward defence. Eventually, after heated debates, this resulted in the reallocation of some FEBA (Forward Edge of the Battle Area) divisions. 47

What Bagnall required of the operational reserve force was that it be made up of a mobile all-arms formation of corps size with 'a lot of punch, which was solely tasked to undertake counter offensive.' It also needed to have flexibility, high counter-mobility and substantial firepower. Mobility not only assured high speed action and a high degree of responsiveness but also enhanced

⁴⁵ Interviews, Bagnall on 5 May 1993, Farndale on 21 June 1993 and Von Sandrart. Also see McInnes, 1988, p.388, for the political difficulty involved in deploying the operational reserves.

⁴⁶ See Bagnall, 1984, p.60.

⁴⁷ See more in 4.4.1. for a specific battle plan after this change.

⁴⁸ Interview, Bagnall on 5 May 1993. Also interview, Dewar. See Mackenzie, op. cit., in Holden Reid and Dewar, op. cit., pp.177-178, for more on the description of the counter offensive force.

⁴⁹ See E.F.G. Burton, "What Measures Should be Taken to Strengthen NATO's Deterrence Strategy?" in Mackenzie and Holden Reid, 1989, pp.222-3.

survivability. Furthermore, superior firepower would have further improved its flexibility and chance of survival as it would have been able to cope with many different enemy formations.

Previously, COMNORTHAG had 7 Panzer Division as his sole reserve in the theatre. Initially, Bagnall was able to reach a preliminary agreement with the Germans on the provision of 3 Panzer Division as an additional reserve while reassigning 3 (BR) Armoured Division to the same role. His successor, Farndale, who replaced him in 1985, was eventually able to officially designate them as the army group reserve, although some uneasiness concerning the term 'official' remained within the Bundeswehr. ⁵⁰ Indeed, they were a formidable corps-size force with strength, agility, and 'a lot of punch.' Moreover, they were solely tasked to carry out counter offensive under COMNORTHAG's control, and were not to be dual-tasked (e.g. having an additional role as the covering force). ⁵¹ As mentioned, this was possible only after Bagnall insisted that the principle of forward defence be reinterpreted to allow the adoption of the new concept.

The logic of releasing the Netherlands and Belgian corps from the task of providing more forces for the army group reserve role was based on the fact that they needed their in-theatre force to cover the deployment of the bulk of their corps forces and reinforcements. Furthermore, they generally lagged behind the Germans and British in terms of their standard of training and competence.⁵²

Nonetheless, the army group reserve, which was made up of forces from two different national corps with different weapon systems and tactical concepts

⁵⁰ Interviews, Farndale on 21 June 1993 and Von Sandrart.

⁵¹ Interview, Bagnall on 5 May 1993.

⁵² Interviews, Bagnall on 5 May 1993, Farndale on 21 June 1993 and Inge.

(as opposed to an operational one in the army group which was being gradually formulated under Bagnall's guidance), could have caused some problems. For example, the kind of operation envisaged was the highly complicated and mobile counter offensive. Thus, the reserve principally required interoperability and should preferably be made up of homogeneous formations so as to maximise its capability. This problem nevertheless persisted until the US decided to officially designate 3 (US) Corps as the NORTHAG reserve—and establish its HQs in the area—a formation which eventually became the major NORTHAG counter offensive reserve. This was, in a way, a reflection of the desperate situation in which COMNORTHAG had previously been left; with only one division as his reserve, he had to get hold of anything he could lay his hands on.

While Bagnall was COMNORTHAG, however, he did not rely on the availability of 3 (US) Corps. Planning a defence with this corps in mind would have been an action which contradicted his own conviction--preparing for the worst. In fact, if NORTHAG was completely surprised, despite the fact that Bagnall would be allowed to use 3 Panzer Division, he felt that he could use only 7 Panzer and 3 (BR) Armoured Divisions for a counter offensive since 3 Panzer Division might have to cover for the deployment of the Netherlands corps as well as reinforce the covering force and main defensive battles. ⁵³ In short, depending on the situation, the number of operational reserves available to COMNORTHAG for the army group counter offensive phase of the battle was between two armoured divisions (7 Panzer and 3 (BR) divisions) and two corpsequivalents (3 and 7 Panzer and 3 (BR) divisions and 3 (US) Corps) by the mid-

⁵³ Interviews, Farndale on 21 June 1883 and Kenny. See more in 4.4., chapters 5 and 6.

4.3. THE FORMULATION OF THE LAND/AIR BATTLE CONCEPT

4.3.1. THE AGREEMENT WITH THE RAF AND 2ATAF

Airpower was the only asset in NATO with marginal superiority, technological if not numerical, over the WP. 2ATAF alone had 370 to 550 or more combat aircraft if immediately reinforced from the forces in the UK and US.⁵⁴ Furthermore, the cooperation among national contingents and between the two ATAFs in the AAFCE was good due to doctrinal and conceptual harmony as the necessity to plan and organise combat in a highly integrated fashion in both ATAFs barred 'incompatibility between national doctrines.' The major obstacle was how to identify the common objectives between NORTHAG and 2ATAF, the success of which was vital for the implementation of Land/Air Battle.

The necessity of joint land/air operations for the British Army had been highlighted as early as the years right after the end of the Second World War. 56 However, the RAF's major concern was the fact that the Army would have a strong influence on the Air Force, thereby enabling it to overlook the RAF's requirements and priorities, if the RAF were too acquiescent. Therefore, a tendency which dismissed inter-service cooperation between the two as a 'diversionary activity' persisted until the early 1980s. 57

⁵⁴ Jonathan Price, <u>Air Battle Central Europe</u>, (New York: The Free Press, 1986), pp.1-2.

⁵⁵ Stratmann, op. cit., in O'Neill, op. cit., pp.196-7.

⁵⁶ See Dawson, op. cit., p.214.

⁵⁷ See C.E. Carrington, "Land/Air Warfare," <u>RUSIJ</u>, (June 1981), p.15. Also see Dawson, op. cit., p.214; and N. Crookenden, "Land/Air Warfare," <u>BAR</u>, (April 1966), p.55, for more detail.

However, the relationship between the RAF and the Army was not as discouraging as it looked. In fact, Air Chief Marshal Jackson had something better to say about this matter in an interview: 'the relations were actually very cooperative, not like in the US.... Fights, if there were some, usually surrounded weapons systems and equipment. But it would be resolved in [the MoD] building.' He commented that one of the reasons for such a good relationship was that the RAF developed its own policy which actually supported the army's operations. For example, the RAF had Tornados for deep interdiction, Jaguars for shallow interdiction, and Harriers for CAS. Hence, relations between COMNORTHAG and COM2ATAF were closer than those between the corps commanders, despite the fact there was no visible opposition from corps commanders. This was also helped by the fact that the commanders of both were British. Above all, what prevented a major disagreement was that the RAF and 2ATAF's priority and policy coincided with Bagnall's requirements, and thus, when he requested the expansion of the cooperation through closer coordination and prioritisation of the ATAF's missions according to the army group commander's need, his pursuit was not hampered.

Bagnall identified three priorities for the application of air power: firstly, winning the air battle to keep the enemy air force off the army group's back (i.e. by Battlefield Air Interdiction (BAI)); secondly, concentrated use of air power to create a vacuum between the WP first and second echelons; and, thirdly, it would be used for close support *only* in an emergency.⁵⁸ In fact, he even said that land forces might not see a single aircraft at all during the early days of a war.⁵⁹ 2ATAF's priority remained thus: first, air superiority and OCA; second,

⁵⁸ Interview, Bagnall on 6 November 1993. Also see, Bagnall, 1984, p.60.

⁵⁹ Price, op. cit., p.28. Also interview, Bagnall on 5 May 1993.

FOFA and BAI; and finally, CAS.⁶⁰ Furthermore, in direct support of the land operations of NORTHAG, two of the most important missions of 2ATAF were:

1) counter breakthrough operations, and 2) air superiority and support operations for the counter offensive and counter stroke.⁶¹

Above all, what Bagnall sought to achieve was to free COM2ATAF to do what he was supposed to do--win the air battle. In other words, the aim was not to separate the operations of the two, which would inevitably cause a waste of effort as each would identify and assign different priorities for different missions. What was critical for COMNORTHAG might not have been so important for COM2ATAF. The prioritisation of the ATAF's operation in the order of: 1) winning the air battle; 2) FOFA (which replaced the British term 'BAI'); 3) counter breakthrough; and, 4) close support (e.g. counter stroke support), assured COM2ATAF that COMNORTHAG would not hinder his effort by requesting air support for non-critical land operations. 62

However, when the request was received, COM2ATAF would make the necessary support available to assist COMNORTHAG's operation. By amalgamating the NORTHAG concept of operation and air force doctrine, both commanders would avoid the time-consuming joint planning of air support every time it was requested; by using the same language, further time would be saved without creating confusion. Above all, it was hoped that it would foster a more

⁶⁰ Interviews, Bagnall on 5 May 1993 and Jackson. Also see John Warden, <u>The Air Campaign</u>, (New York: Pergamon-Brassey's, 1989), pp.133-5, for the benefits of the prioritisation of missions.

⁶¹ Interviews, Bagnall on 5 May 1993 and Jackson.

⁶² See more on BAI in 4.3.4.

active role of the ATAF in the overall defence of NATO as 2ATAF would maintain more freedom of action within the priorities.⁶³

This was a very reassuring development which enhanced NORTHAG's ability to counter the WP. As Bagnall stressed in an interview, he was certain he could stop the WP as long as the air war was won and air superiority could thus be maintained. Inge agreed by saying in an interview that, 'the WP would undoubtedly have had initial successes.... [But] if 2ATAF was reasonably successful, they would have had a very difficult time maintaining that momentum, and we had the edge in that.'64

4.3.2.COMMAND AND CONTROL OF THE JOINT LAND/AIR BATTLE

The highlight of adopting the joint concept was the establishment of the joint NORTHAG-2ATAF HQ. Although the increased demands and pressures on the HQ in support of an array of complex joint land/air operations were considerable, and it would face severe congestion problems unless the requirements for C2 (Command and Control) were streamlined, as Farndale and Kenny said during interviews, the capability of the HQ was substantially enhanced with the deployment of the new high technology C3I systems (e.g. Ptarmigan, Wavell, etc.). 65 Also, the joint HQ accepted the principles of directive control (mission-orders or Auftragstaktik) in C2 between NORTHAG

⁶³ Interviews, Bagnall on 5 May 1993 and Jackson.

⁶⁴ Also see Richey, op. cit., p.72, for the importance of air power in NATO's defence.

⁶⁵ Interviews, Farndale on 21 June 1993 and Kenny.

and 2ATAF, which achieved some reductions in the number of staff and the size of the HQ.⁶⁶ Farndale added that, despite some difficulties in the early days, the C2 problem of air support for the counter offensive was finally resolved by the time it was put to the test during REFORGER 87.⁶⁷

4.3.3. AIR SUPERIORITY

The highest priority of the joint land/air battle was the maintenance of air superiority. As was noted quite early by commentators like Liddell Hart, 'there is fatal folly in dreaming that armoured divisions can operate in mass and deliver concentrated punches under an enemy-dominated sky.'68 Indeed, everything depended on the accomplishment of air superiority at the earliest possible hour. Most of all, it would enable the concentrated use of air power, which would substantially improve the chance of successful counter breakthrough operations; this was NORTHAG and SHAPE's highest priority.⁶⁹ Also, it would render friendly air interdiction (AI) and BAI both effective and affordable.⁷⁰

For example, the Israeli mobile defence in Golan in 1973 was possible because the Israeli air force succeeded in minimising air interference which enabled its support for the land forces during the defence. In the case of

⁶⁶ Interview, Farndale on 21 June 1993. Also Bagnall, op. cit., in Boyd-Carpenter, op. cit., p. 155.

⁶⁷ See more in 7.2. for more discussion on the subjects of C3I and Auftragstaktik.

⁶⁸ Liddell Hart, op. cit., p.182.

⁶⁹ Interview with Jackson.

⁷⁰ Warden, op. cit., p.84.

NORTHAG's initial defence, reaction time would be substantially reduced against sudden enemy breakthroughs, which could cause a sudden collapse of NORTHAG's defence in the front. Under the circumstances, air power would be the only responsive means with a short enough reaction time to counter the contingency. Furthermore, air superiority was absolutely essential in preventing the enemy from conducting interdiction or giving CAS to its forces. Hence, it would force the enemy to divert its air assets to defensive air operations rather than allocating them against the defenders.

This was very relevant to NORTHAG's counter stroke. 72 Firstly, air superiority would, above all, allow air interdiction against the enemy forces countering the counter stroke. Secondly, it would enable the air force to protect the attack corridors and flanks of the counter stroke force. Finally, it would prevent the counter stroke force from being interdicted. Above all, it would create a favourable environment within which NORTHAG's counter offensive could be launched.

In the case of a counter penetration operation by NORTHAG, which would be launched in order to seal off the enemy breakthrough in a particular sector, both interdiction of the enemy and maintenance of air superiority would be vital in covering the deployment of reserves while preventing the enemy ground forces from reacting against the NORTHAG reserve committal.

In the case of an operational counter offensive by NORTHAG, continuous air interdiction would be vital in degrading the progress of the enemy thrust, as well as maintaining air superiority to prevent enemy air interference in the

⁷¹ Interview, Jackson.

⁷² See 4.4.1. for the definition and application of counter stroke, as well as counter penetration, counter attack, and counter offensive.

counter offensive operation. During the counter offensive, the role of the air commander would be decisive because he would be responsible for the synchronisation of the committal of the ground operational reserves based on his progress. Without the sustenance of a favourable air situation and interdiction of the enemy vanguard, the committal of operational reserves would be very difficult. Most of all, the air commander would be in a very good position to select, or create, the target for operational reserves. 73

Since ATAF would take a lot of punishment, de facto air superiority might be difficult to accomplish, but COMNORTHAG would have requested temporary, and--at least--local, air superiority during the counter offensive. In response, COM2ATAF would have provided it by throwing in everything he had at the time regardless of the cost. 74 Meanwhile, the land forces would have contributed to the ATAF's effort by coordinating air defence operations. COMNORTHAG would attempt to create and protect the air corridor for ATAF fighters with the SAM belts (Surface-to-Air Missile--in this case Nike Hercules and Patriot). 75

As a part of air superiority, 2ATAF paid a lot of attention to OCA operations. The aim of OCA in support of NORTHAG was to prevent enemy aircraft from interdicting NORTHAG forces concentrating for the counter offensive. OCA was, indeed, high on the agenda as it fitted Bagnall's request ('get them off my back!'). ⁷⁶ Furthermore, it represented seizing the initiative by taking the fight to the enemy as early as possible. The acquisition of Tornado

⁷³ Also see Williams, op. cit., in Mackenzie and Holden Reid, 1990, pp.28-29.

⁷⁴ Interviews, Farndale on 21 June 1993 and Jackson.

⁷⁵ Interview, Farndale on 21 June 1993.

⁷⁶ See Price, op. cit., p.10.

aircraft with JP 233 runway denial weapons offered major improvements in the ATAF's capability.⁷⁷

There were a few problems in accomplishing OCA to a degree which would cause severe disruption of the enemy airpower, however. Firstly, OCA would achieve the destruction of runways, but might not be able to destroy the enemy aircraft which were sheltered in hardened hangers with their crew. Therefore, OCA would have to pay attention to the capability to attack those targets, as well as runways. 78 Otherwise, OCA would only delay the enemy operation by merely inconveniencing them. Secondly, the cost of keeping the enemy air force out of action by OCA might be prohibitive as the ATAF would be forced to repeat OCA operations in order to do so. Most of all, the aircraft would be extremely exposed not only to the enemy SAMs, but also to AAA (Anti-Aircraft Artillery) fire as well. The Gulf War experience showed that 2ATAF aircraft assigned to an OCA role would suffer heavily since the RAF Tornados suffered punishing casualties flying low-level missions during the war, despite the lack of the effective Iraqi air defence. Time and time again in previous conflicts, AAA fire proved to be one of the most lethal weapons and caused the majority of aircraft casualties. 79

One of the solutions would be not to endanger the aircraft themselves by forcing them to fly right over the runway in order to dispense JP 233 type weapons. The alternative weapons, the long-range stand-off munitions and

⁷⁷ McInnes, 1991, p.39.

⁷⁸ Garden, op. cit., p.124.

⁷⁹ See Jefferey Ethell and Jonathan Price, <u>Air War South Atlantic</u>, (New York: Macmillan, 1984), pp.212-215, for the vulnerability of Harrier GR3s flown by the RAF pilots during the Falklands War. One was lost to AAA and the other to small arms fire. Also see chapter 8.3. for the Gulf War experience.

missiles (e.g. SLAM--Stand-off Land Attack Missile), however, were not available at the time, and it was only during the Gulf War that a limited number of those weapons was used. As MacIsaac emphasised, aircraft must be spared from such heavy pounding by making use of 'weapon performance (e.g., use of stand-off missiles)' instead of stressing 'platform performance.'80 In short, the survival of aircraft would critically depend on providing them with those weapons to prevent them from exposing themselves to such a danger.

Hence, if OCA forced so much attrition of the ATAF's airpower without achieving a significant result, it would not only be futile, but would also endanger its further efforts. Regardless of the outcome of OCA operations, the counter offensive, among other operations, would at least require temporary air superiority in vital local sectors. Thus, the ATAF would have to maintain the balance between NORTHAG's and its own requirement for OCA in order not to jeopardise the counter offensive. For this reason the acquisition of SLAM-type weapons should have received more attention. The use of such weapons could save aircraft, and, in turn, they could be assigned to an air superiority role which would enhance the success of the counter offensive.

4.3.4. BATTLEFIELD INTERDICTION AND FOFA

• BAI and CAS: The Different Views

The dilemma over the priority between BAI and CAS operations by fixed-wing aircraft gave rise to numerous arguments. CAS operations were critical in certain circumstances, such as in countering breakthroughs or in support of a counter

⁸⁰ David MacIsaac, "Voices from the Central Blue: The Airpower Theorists," in Peter Paret, ed., <u>Makers of Modern Strategy</u>, (Princeton: Princeton University Press: 1986), p.647.

offensive.⁸¹ However, it was agreed that, since fixed-wing aircraft were valuable assets, they should not be committed to risky and low-profit missions like CAS. Bagnall's ideas on CAS were quite clear about this. He said in an interview that:

When the breakthrough occurs in the Hanover Plain, you will be tempted to regain the ground by whatever means available. The most stupid thing is to divert airpower to do exactly that when your air is doing well. I would have never authorised CAS except in a critical emergency because it could seldom arrive in time to strike the right target in a fluid, fast-moving battle 82

The air force's philosophy also reflected his idea that the RAF, for example, wanted Harriers, which were primarily CAS assets, to be assigned in a BAI role as far as possible. 83 Air Marshal Hine emphasised this point earlier:

Although CAS can still be very effective, it is usually more profitable to use airpower in the BAI role against the concentrated target groups, leaving the land forces with their organic weapons to deal with the enemy in contact.... The main thing would be to identify massed and lucrative targets and not fritter away our assets in penny packets.⁸⁴

Also, the aircraft's survivability would be much better in the BAI role since the exposure time against the enemy AAA fire would be shorter than in CAS.85

In addition, Hine stressed that BAI should only be used in a concentrated manner. 86 For instance, it would be most effective when the enemy's 'own plans

⁸¹ Hine, op. cit., p.66. See 7.4. for the helicopter's role in BAI and CAS.

⁸² Interview, Bagnall on 5 May 1993.

⁸³ J.D.L. Feesey, "Fixed-Wing Close Air Support--Is There a Future?" in Mackenzie and Holden Reid, 1990, p.171.

⁸⁴ Hine, op. cit., p.66.

⁸⁵ See Feesey, op. cit., in Mackenzie and Holden Reid, 1990, p.171.

⁸⁶ Price, op. cit., pp.23-4.

demand mobility. 187 It meant that, given the nature of WP doctrine, it would be inevitable for the WP to concentrate its forces at some point in a particular sector to achieve the breakthrough even if it succeeded in dispersing its forces until then. Concentrated BAI against such a target would yield considerable success for NATO's defence. Therefore, if it were carried out by a small number of aircraft in a sporadic manner, the effect would be negligible. In fact, during the D-day landing, the Allies' persistent and concentrated air interdiction prevented the Germans from concentrating on the counter attack. 88 2ATAF's priority, thus, would and should be BAI--as was NORTHAG's--not CAS, unless the situation deteriorated seriously.

Nonetheless, CAS would be very important for NORTHAG's counter offensive as well. There were limits to how much the land forces' assets could do in support of a fast-moving counter stroke force. MLRS, which was the main corps and army group deep attack asset, did not possess the necessary flexibility of airpower to satisfy all the needs of the mobile forces. Above all, MLRS could not replace CAS's flexibility. Under the circumstances, CAS would enhance the success of the initial committal of the operational reserves by preventing the enemy forces from taking counter action, or the enemy main body from gaining time to take defensive positions.

Also, airpower could act as an operational reserve itself in the place of the ground forces to counter unforeseen contingencies, against which the ground forces would be unable to react quickly.⁸⁹ For example, when the counter attack

⁸⁷ Warden, op. cit., p.72.

⁸⁸ Warden, op. cit., p.91; and David Craig, "The RAF's Contribution Today," in Philip Sabin, ed., <u>The Future of UK Airpower</u>, (London: Brassey's, 1988), p.12.

⁸⁹ Warden, op. cit., p.90 and 142; and Craig, op. cit., in Sabin, op. cit., p.4.

forces' flanks were threatened, CAS could act as the reserves for flank protection instead of the valuable armoured assets. In addition, CAS would be quite effective in the preparation of a target for the counter stroke by disrupting the enemy main body and isolating the part that was about to be attacked. 90

• NORTHAG and 2ATAF's FOFA

FOFA was an integral part of the conduct of the NORTHAG concept of operation. As mentioned, it replaced the term BAI in the British Army, the agreement on which was reached between Bagnall and Hine before the official adoption of FOFA in 1984. Therefore, the NORTHAG FOFA concept was developed independently of, and prior to, SACEUR's, to cater for its own specific needs. Hence, even after the formal adoption of FOFA, some differences remained between the army group and SACEUR concept. In fact, SACEUR's had a strategic and a higher operational level design while COMNORTHAG's maintained an operational-higher tactical level aim. The difference lay in the fact that the technology used in FOFA did not exist when the concept was initially adopted by NORTHAG and 2ATAF. Thus, the focus of the army group FOFA was the combination of 2ATAF's assets and the land force's long-range artillery for the operation in tactical depth, while SACEUR would conduct his FOFA primarily with the AAFCE assets in the operational depth.

Also, NORTHAG's emphasis on shallow-FOFA was both logical and comparatively cheap. In a standing start scenario, there might not be immediate follow-on echelons--so it would be more important to interdict the enemy tactical follow-on echelons, particularly for the purpose of the committal of the operational reserve. In this case, the corps and army group's integral long-range

⁹⁰ Mackenzie, op. cit., in Holden Reid and Dewar, op. cit., p. 168.

artillery assets (e.g. MLRS) could keep the enemy leading divisions isolated, and would limit the number of the enemy arriving to a manageable level. It would enable NORTHAG to maintain a favourable force ratio for the contact battle, and delay the enemy's coordinated introduction of the follow-on echelons which could interfere with its reserve committal.⁹¹

Thus, its tactical FOFA (up to division) would be targeted against the interdiction of the enemy artillery, C2 facilities and immediate reserves within 30 km of the FLOT (Forward Line of Own Troops) with the corps assets (artillery, MLRS, attack helicopters, etc.) while coordinating the ATAF's operation to fix and delay the enemy advance. 92 At the operational level, it would be centred on the disruption of the enemy operational echelon and higher command system. The corps would have the primary responsibility as they would have to deal with threats posed to each corps sector. The army group coordination would focus on the use of the long-range corps weapon systems (mainly MLRS) and ATAF assets across the corps boundaries and beyond their areas of responsibility to support a particular corps under threat, or in support of the committal and battle of the army group reserve. 93

Although this was agreed upon, the question of whether COMNORTHAG would have exclusive control of the FOFA operation, which was what Bagnall wanted, remain unresolved. 94 The main reason was for this that the corps were in a better position to conduct FOFA because they had most

⁹¹ See Stratmann, op. cit., in O'Neill, op. cit., pp.198-9; Bellamy, 1987, p.134. Also the GDP, p.14, for supporting views.

⁹² See Hans Henning Von Sandrart, "Operational Considerations on the Battle-in-Depth," <u>AQ&DJ</u>, (October 1987), p.280.

⁹³ See Von Sandrart, 1987, p.281.

⁹⁴ Interviews, Kenny and Bagnall on 5 May 1993.

of the necessary assets. Eventually it was settled, according to interviews with Bagnall and Von Sandrart, that while corps would take primary responsibility for FOFA, COMNORTHAG would coordinate FOFA when he committed reserves and when he decided to intervene in support of a particular corps battle which required higher formation support. 95

In this framework, COMNORTHAG would support a counter offensive operation, as Bagnall stressed, with 'the deep attack battle at the 40 to 150 kilometre range.... [which] should be the responsibility of the army group and ATAF, and should have nothing to do with the corps whatsoever. '96 In this case, the corps, army group, and ATAF assets would be merged to create a maximum effect. Von Sandrart explained such thinking in the following manner:

While the counter-attacks are taking place against the front of the enemy, I will instruct my AG [army group]/ATAF Commanders to conduct FOFA operations against the enemy forces in depth which could critically interfere with my decisive counterattacks. I would like to emphasize here that FOFA should not be considered as an independent operational concept. On the contrary, FEBA defence and FOFA are governed by the same operational campaign concept.... Therefore, the key role in determining the operational FOFA objectives in context with the land forces scheme of manoeuvre rests with the land force commander, mainly at Army Group level, in close coordination with the ATAF commander. However, our FOFA capabilities, especially our air attack assets are scarce and therefore the operational FOFA requirements have to be balanced against other operational tasks in the mission framework of OAS [Offensive Air Support], AI and most importantly OCA. The rapid technological developments being made at the moment will enable the land forces, mainly at the corps level, to take a much greater part in the FOFA battle.97

⁹⁵ Interviews, Bagnall on 5 May 1993 and Von Sandrart.

⁹⁶ Bagnall, op. cit., in Boyd-Carpenter, op. cit., p.155.

⁹⁷ Von Sandrart, speech as CINCENT in 1989.

4.3.5. THE ESSENCE OF AIR POWER IN LAND/AIR BATTLE

The symbiosis between the Army and RAF (NORTHAG and 2ATAF) was based on the fact that the use of air power at the operational level of war rested on principles similar to those which governed the operational level thinking of the land forces; the air force was expected to do more with less, within the limitation of fewer resources. In turn, this meant the prioritisation of missions in order to give a proper level of support to only *urgent* missions as opposed to spreading assets thinly to cover everything. Moreover, only at the operational level could the air force and army identify high priority missions by selecting targets which could bring most benefits at the theatre level.

The operational concept prior to the reforms, (e.g., the British AKA or the US Active Defense) was by nature a dangerous drain on air power, calling for CAS every time a counter attack was mounted. Given the WP's initial air superiority, the ATAF would be bound to suffer heavy losses in support of mere tactical defensive and counter attack operations.

Conversely, the new concept relieved the ATAF from the pressure of providing continuous support to the ground forces and left it free to do its own job. Once committed to the NORTHAG counter offensive, however, the ATAF would concentrate air power to provide simultaneous BAI (shallow-FOFA), CAS and OAS in support of ground forces while continuing to maintain friendly air superiority as well. This would be facilitated by devoting most of the available assets to the particular mission, and by the first signs of success against the enemy from previous concentrated actions. Ultimately, this concept was to allow the successful launch of a NORTHAG counter offensive. Hence, the highlight of airpower in the Land/Air Battle doctrine was to be its *concentration* without dilution by attending to NORTHAG's pettier problems on the ground.

4.3.6. THE DIFFERENCES FROM THE US AIRLAND BATTLE DOCTRINE AND FOFA

As mentioned, Bagnall's idea was developed independently based upon his own personal research of history, without any influence from the US or other sources. However, since the new concept was officially adopted by NORTHAG in 1984 and endorsed by the government and the Alliance in 1986 (which was much later than the adoption of the AirLand Battle in 1982 and FOFA in 1984), some considered the British doctrine to be a copy, or a revised British version, of the AirLand Battle Doctrine, as interviews with many NORTHAG personnel revealed. ⁹⁸ Nevertheless, the ideas for the new operational concept originally came much earlier than the others. ⁹⁹

Although the British doctrine has a lot of similarities with the American, the two are fundamentally different from each other, despite both subscribing to the same theoretical principles--the operational level of war and manoeuvre warfare. ¹⁰⁰ Furthermore, the British concept had already taken into consideration the importance of interdiction, which was the highlight of FOFA, before it was promulgated. Therefore, despite an observation by Holden Reid that the new concept was 'heavily influenced by the American pattern of thought and solutions, '101 it was an entirely unique British innovation, especially when it

⁹⁸ Interviews, Chalupa, Fischer, Colonel B.C. Gilchrist on 28 April 1992, Kunzendorf, Stoetermeer.

⁹⁹ For dates, see Bagnall, 1984, pp.59-62; and <u>SD 1986</u>, p.33.

¹⁰⁰ See "The British Army," <u>Military Technology (MT)</u>, (June 1986), p.48, for Bagnall's explanation on the differences between the two doctrines. Also see 8.3. and 8.4. for growing compatibility between the British and US doctrines.

¹⁰¹ Holden Reid, op. cit., in Mackenzie and Holden Reid, 1989, p.8.

was initially conceived by Bagnall, and it was much later after Bagnall's retirement that more attention was paid to the American line of thinking and practice. 102

Bagnall's concept differed from AirLand Battle, or FOFA, in four major aspects. Firstly, unlike the other two, his concept, when formulated, did not rely heavily on technology, even though his idea was eventually to benefit from it. His original idea emphasised an operational counter offensive against the enemy first operational echelon with existing weapon systems rather than simultaneous close-in and deep battle, which put heavy pressure on resources. In fact, striking deep was technologically too demanding, and could also inhibit the defender's capability to conduct initial defence and close-in battle. ¹⁰³

Secondly, the British doctrine was to provide an army group-wide concept of operation with which to promote doctrinal interoperability in order to enable a single army group operational battle, which the AirLand Battle Doctrine did not focus on. In the case of FOFA, it was, as criticised by Bagnall, an effort to provide modern terminology for what the military had already been doing since the birth of aircraft--air interdiction and cooperation between the air force and army. ¹⁰⁴ It was inevitable that Bagnall's new idea, especially when it was to be supplemented by new equipment and capability, should require new terms to explain the overall concept and how the different weapon systems and capabilities should be applied in an actual operation.

¹⁰² Interviews, Bagnall on 4 May 1993, Farndale on 19 May 1994 and Inge.

¹⁰³ Interviews, Bagnall on 5 May and 6 November 1993 and Farndale on 14 April and 21 June 1993. Also see McInnes, 1990, p.130, for the difficulties involved in the simultaneous conduct of both contact and deep battles.

¹⁰⁴ Interview, Bagnall on 5 May 1993.

Thirdly, his idea on the joint Land/Air Battle was that it could, in effect, lessen the burden on the air force to provide constant close support to the land force. As mentioned, cooperation with the air force was to facilitate the identification of the operational priorities so as to allow the ATAF to provide necessary support only when it became imperative rather than expanding the ATAF's support for the army group operation. The strong accent on both close-in and deep battle in the AirLand Battle would have exhausted the air force's assets, which could endanger its ability to undertake its primary task--the air superiority mission.

Finally, although both the US and NORTHAG operational concepts stressed the importance of the offensive, unlike AirLand Battle's emphasis on deep battle by both air and land forces, the British idea was fundamentally a defensive concept, which did not include an offensive operation outside of the existing NATO territory when it was initially conceived.

The main reason for such differences was, as Bagnall stressed, that NORTHAG was not capable of carrying out the kind of operation envisaged by the US doctrine. ¹⁰⁵ For example, the US had a larger attack helicopter fleet and stronger troop-lift capability than the British, which permitted more offensive manoeuvre operations in greater-depth. Furthermore, the geographical differences between NORTHAG and CENTAG obliged the British concept to be different to the American one. ¹⁰⁶ Thus, the major conceptual difference was that, instead of dispatching troops forward and over the FLOT as in AirLand Battle, the British concept advocated the maintenance of strong armoured

^{105 &}quot;Interview," MT, (June 1986), p.48.

¹⁰⁶ Interviews, Bagnall on 6 November 1993, Farndale on 21 June 1993, Dewar and Von Sandrart.

reserves to deal with enemy penetrations in a more traditional form of tankheavy mobile defence operation.

Ironically, due to its lack of resources compared to CENTAG, NORTHAG had to take further steps in utilising the manoeuvre principles in a joint army group defence which emphasised fighting-power of the force rather than material superiority, which the US corps enjoyed to a certain degree. In that sense, it was inevitable that the NORTHAG concept ultimately become as active and offensive as the US one, if not more so. This is not to say that the emphasis on manoeuvre and offensive replaced the importance of the positional element in its defence, for this was not the case. What was crucial was its ability to go on the offensive as often as it could in order to disrupt the enemy and secure the initiative. The manoeuvre principle was to be applied 1) at the tactical level, to avoid attrition, and 2) at the operational level, to enable the rapid committal of the reserves both in defensive and counter offensive (see more in the next section). As NORTHAG attained some technological and material capacity, though still falling short of the US forces, it was eventually able to obtain the ability to execute the kind of operation envisaged by the AirLand Battle Doctrine in addition to what it was already able to do. 107

In essence, the ultimate departure of the British from the American concept was that the former was a doctrinal and command rationalisation with which to secure maximum potential and fighting-power in the days of diminishing resources. Specifically, faced with no numerical growth of the force, the only alternative was to increase fighting capability. In this sense, manoeuvre and the operational level concept promoted the better understanding of a smaller, but professional force, giving them a chance to offer a strong resistance,

¹⁰⁷ See chapters 5 and 6 for more discussions on this subject.

and it was hoped a victory, against the numerically superior foe. This was the case with the Germans during World War Two, and the Israelis during the 1973 war. In fact, such rationalisation was the only choice available to them. 108

It was the same with the British Army interest in technological innovation, especially in C3I technology and generation of more firepower within a given number of weapon platforms. Since British manpower costs were so high, this was again the only alternative which would help it increase its fighting power. In fact, the place of technology in the British concept was a complementary one with which to support more active defensive operations with the limited number of forces it had. 109 In short, technology became a considerable force multiplier for the British, enabling NORTHAG to achieve economy of force at the operational level and create the operational reserve. Also, it would reinforce the ability to commit a mobile defence, because the new capacities would permit the movement of a large reserve and the subsequent engagement of the enemy breakthrough more accurately at a greater distance. In addition, it would allow for the concentration of the reserve, through which a favourable force ratio could be achieved when the operational reserve was committed to an all-important operational level counter offensive operation.

Many of these were, in fact, what Betts called, 'subjective or intangible factors,' which 'almost always do more to determine the outcome of battle than

¹⁰⁸ See chapter 8 for some examples of the German and Israeli operations. It should be noted that their defence, and application of the manoeuvre principles, was not dominated by fighting a fluid battle, but began with a careful positional defence, especially during the initial defence, before the committal of reserves in a counter offensive.

¹⁰⁹ See 7.2. and 7.3. for more details on C3I and fire support.

numbers of troops and distribution of weapons.'110 In short, the innovative thinking and application (and especially the proper utilisation of technology) of what it has or what it could have in the short term, were vital for the smaller force of NORTHAG if it was expected to fulfil its assigned duty. Although more interest in the US AirLand Battle Doctrine was aroused later, this was what Bagnall had wanted to achieve and what his thinking was based on.

¹¹⁰ Betts, 1983, p. 142. Also see ibid., pp.155-9, for the weakness of the US concept.

4.4. THE FUNDAMENTALS OF COUNTER STROKE

4.4.1. THE BRITISH ARMY'S CONCEPT OF OPERATIONS IN CENTRAL EUROPE

Covering Force Battles

Under Bagnall, NORTHAG's operational defence came to incorporate a four-phase defensive operation: 1) the covering force battle; 2) the battle in the Main Defensive Area (MDA); 3) counter operations; and, 4) the subsequent battle. 111 The first phase would be a covering force battle, the aim of which would be to stop the first operational echelon near the IGB so as to break the momentum of the enemy's initial attack. 112 This was to be done by those troops in corps assigned to this specific role (usually one division in the early days--1 Panzer or 11 Panzergrenadier Division in the case of the German corps, and 1 or 4 Armoured Division in the case of the British) without draining resources being held at the army group level, the action of which could impede its counter offensive. 113

The main focus was the maintenance of elasticity of defence throughout the theatre by using the terrain and fighting an aggressive and offensive covering

¹¹¹ See McInnes, 1990, pp.136-8, for an analogy.

¹¹² Von Sandrart's speech as CINCENT in 1989.

¹¹³ Interviews, Bagnall on 5 May 1993, Farndale on 21 June 1993 and Von Sandrart. NORTHAG's reallocation of two divisions (one each from the British and German corps) under its direct control as reserves did not create a problem, since it was envisaged that at least one division would be assigned to the covering force battle and another one for main defensive battle in each division. This was possible to achieve within existing forces as the German corps had four and the British had three in-place regular divisions.

force battle. 114 The primary task of the covering force was to conduct a delaying battle to allow the full deployment of forces in the MDA. Other missions included: 1) identifying aggression, 2) determining the main enemy thrust lines, and 3) destroying enemy reconnaissance. 115 The force would consist of: 1) a screening force to cover for the main delaying engagement; 2) a delaying force to inflict as much damage on an enemy as possible so as to gain time; and 3) reserve forces to counter unexpected developments or to cover for the withdrawal of forces. It was expected to have good protection and mobility with which to undertake a mobile operation to allow quick engagement in, and disengagement from, combat, while retaining the capability to react quickly to sudden enemy action or to reinforce other defensive areas. 116

Other defensive measures, such as using terrain enhancement and the intelligent use of artificial barriers, would be employed while receiving intensive OAS and while FOFA would be committed at the army group level. 117 In the meantime, the covering force would try to fight from good defensive positions, not in fluid battle, under the above support and cover, so that mobility would be used for rapid movement within the battlefield and not as a means of fighting in the open. Thus, the primary tactical considerations would be to force the enemy to take the defensive position by using mobility to lure him in and firepower from prepared or favourable positions, and also to use mobility to quickly move

¹¹⁴ See John Stanier, "The Covering Forces Battle in the Central Region," NSN, (Special 1, 1985), pp.96-7; and Von Sandrart's speech as CINCENT in 1989. Also see, TDRC 5507A, sec.17.1.

¹¹⁵ TDRC 5507A, sec. 17.1.

¹¹⁶ See Stanier, op. cit., pp.96-7; Kitson, 1987, pp.26-7. For other tasks, see Gander, op. cit., p.24. TDRC 5507A, sec.17.2.b., 3., and 4.

¹¹⁷ Von Sandrart's speech as CINCENT in1989.

to the next defensive position for further resistance. A successful operation of this kind would force the enemy to waste a significant amount of time as he would have to deploy into a defensive position before being allowed to move on, at which time he would have to redeploy into an attack formation. 118

Equally, the flexibility of forces would have been the most important factor. It would allow a rapid shifting of the forces from one role and area to another according to the developing situation. For example, a division in the forward area tied to, and tailored for, the defence of a specific area, would not have been able to disengage itself quickly enough to take another role (e.g. reinforcing the MDA battle) when it was so required by the operational commander. In operational battle, the capability and flexibility of forces to take exactly this kind of action were paramount. 119 In short, accepting economy of force at the operational level required more than a physical reassignment of forces. It required an ability to recognise the opportunity in a certain situation and rapidly exploit the chance by shifting, or concentrating, the available forces against the enemy at an ideal moment.

Therefore, the first thing to be considered was the acceptance and achievement of the principle of 'economy of effort' at the operational level, and this began with determining the role and size of the covering force. Previously, NORTHAG envisaged a strong covering force battle so that the majority of forces could be more or less evenly distributed along the IGB. The depth of the

¹¹⁸ Interview, Farndale on 21 June 1993.

¹¹⁹ This is how manoeuvre warfare in operational battle differs from attritional warfare. See chapter 7 for the training and education for manoeuvre and operational warfare. Also see Mackenzie, op. cit., in Holden Reid and Dewar, op. cit., p.178, for the requirements (e.g. flexibility) for the counter offensive force.

covering force area would have depended on the terrain. ¹²⁰ Behind the delaying zone, each corps would have formed a MDA in varying depth and irregular shape according to the terrain and the available strength. ¹²¹ Behind the MDA, corps reserves in varying sizes would have been located, again according to the availability of force. Therefore, the major consideration in achieving economy of effort in the early days of the reforms was, as discussed, to reassign those forces previously earmarked for the covering force battle to the tactical (corps) reserve role so as not to deplete the strength of the operational reserve. The army group commander would adjust the number and size of the covering forces according to the developing situation, but the principle that the majority of corps reserves was to be created out of the covering force, and they would only be used for offensive and counter operations as far as possible, remained. ¹²² The rest of the covering forces would have to try to compensate for the loss of strength through gaining more flexibility of defence by exploitation of mobility and offence in the covering force areas.

This was based on the thinking that risks would be taken where and when acceptable in order to meet the demand of creating the reserves. 123 For example, COMNORTHAG might take the risk of reducing the number of forces (down to a brigade) in an area such as the Harz where the terrain favoured defence, or leave an area open when he needed to concentrate forces for the counter offensive. Although the requirement for the reserves did not surpass the

¹²⁰ Interviews, Bagnall on 5 May 1993 and Farndale on 21 June 1993. Also see Bagnall, op. cit., in Holden Reid and Dewar, op. cit., p. 242.

¹²¹ Bagnall, 1984, pp.61-2.

¹²² See Bagnall, 1984, pp.61-2. Also interview with Bagnall on 5 May 1993.

¹²³ Interview with Bagnall on 5 May 1993.

necessity for a strong covering force in some sectors, COMNORTHAG might have had to take a decision at some point to take the risk under the operational principle when it became imperative for his operation.

Yet there was no specific plan for the subsequent role of the covering force, except for the assumption that it would either merge with forces in MDA to bolster its defence, or would be re-deployed as army group reserves. 124 Although they would be too battered, and their strength too depleted, to undertake more missions, it was hoped that the army group could still make some use of them for the above purposes.

• Main Defensive Battles

During the second phase of the battle, a main defensive operation would be conducted. Although the size of forces in MDA would strongly depend on the army group's condition after the covering force battle, this was essentially where COMNORTHAG wished to shape the penetration and hoped to impose a halt. Thus the primary task of the main defensive forces would be to stall the enemy advance while inflicting as much attritional damage as possible to reduce the enemy's momentum to foster a favourable environment within which the counter operation would be launched.

The defence of MDA was to be carried out with elasticity in mind. Thus, the pre-selected area (i.e. AKA), as well as other important ones, were to be strongly held to shape the enemy penetration by creating a 'net' to trap the enemy and create a good environment before launching a counter offensive. ¹²⁵ In fact, the MDA defence was crucial if a counter operation was to be conducted. This

¹²⁴ TDRC 5507A sec.17.8., and 9. Also interview, Farndale on 21 June 1993.

¹²⁵ See Von Sandrart's speech as CINCENT in 1989; and Bagnall, 1984, p.62.

meant positional defence would be undertaken where favourable. ¹²⁶ Thus, the MDA force would depend on using positional defence only in vital areas, and they would be defended and recaptured if lost, while local counter stroke would create a sort of mobile AKA to inflict maximum attrition. ¹²⁷ Mobile defence would be committed only when a sector could not be 'held in sufficient strength to achieve mutually supporting positions in depth. ¹²⁸ All in all, at least one division from each corps would be assigned for the MDA battle, while the German, and possibly the British, forces in MDA could be reinforced by the forces of the German Territorial Command-North. ¹²⁹

In theory, out of a total of seven in-place divisions in the British and German corps (since the Dutch and Belgian corps were not asked to provide reserves), three divisions (3 and 7 Panzer and 3 (BR) divisions) were designated as the army group reserves and two divisions each for the covering forces and main defensive battles. Therefore, the British and German corps had a difficult task to provide tactical reserves for the each phase of operation. Moreover, since the corps were not supposed to rely on the army group to provide reserves for their operations, they had to create corps reserves from the divisions remaining under their control, mostly by thinning out the covering force.

In short, it was difficult to distinguish between the covering and MDA forces battle, as was the case with the MDA force and tactical counter operations. Since there would be no significant capacity available for the

¹²⁶ TDRC 5507A sec. 18.3.

¹²⁷ See McInnes, 1991, pp.31-2. Interview, Major Dennis Mills on 23 March 1993.

¹²⁸ TDRC 5507A sec. 18.4.

¹²⁹ Interviews, Bagnall on 5 May 1993 and Von Sandrart.

covering force to conduct an extensive and extended battle, it would have quickly merged with the MDA forces, or withdrawn through them upon accomplishing its mission. Also, the defence of the MDA was to be a combined effort of forces and counter operations by tactical (corps) reserves, which would probably be the reserve brigades of those divisions in the covering and main defensive roles, or the elements of those forces which previously had the role of the covering forces. ¹³⁰ This was why the offensive operations by the corps were emphasised and local counter stroke could not be separately identified away from those two battles, and thus, these three phases—the covering and MDA forces and tactical counter operations—should be seen as one battle which completes the first phase of the first operational (conventional) battle rather than considered in isolation.

Counter Operations

One of the most important components of the British Army and NORTHAG operational concept under Land/Air Battle was the army group's ability to commit reserves, both tactical and operational, in a major defensive counter offensive. These two were distinctively different concepts, each of which was designed to counter different contingencies in two different levels of war. Therefore, this operational level (army group) counter offensive/counter stroke concept must be distinguished from a tactical level (corps) counter stroke operation. In fact, when counter stroke was introduced to the British Army, the initial aim was a purely defensive operation by the 1 (BR) Corps to counter and destroy the enemy penetrations or spearheads in the corps area by the corps mobile reserve (sizes would vary from one brigade to a whole division depending

¹³⁰ Interviews, Bagnall on 5 May 1993, Dewar and Von Sandrart.

on the situation) either in conjunction with, or separately from the main defensive battle. ¹³¹ This operation was outlined by Farndale in 1985 as one of three tactical mobile options available in the committal of the tactical reserve at the tactical and lower operational level (corps-only) operation.

According to Farndale, counter penetration was 'the move of reserves into a blocking position to stop an enemy breakthrough.' 132 He stressed that counter penetration alone could not win the battle as it was a purely defensive application of the reserves which could consume valuable assets in a passive operation, despite the fact that sometimes it would be vital to counter unexpected enemy breakthroughs and support a counter stroke operation. In this case, they could help create a favourable environment for the counter stroke force by imposing a barrier to halt the enemy advance before launching a counter stroke against the enemy's exposed flanks.

Local counter penetration was to be carried out by the corps reserves which mainly consisted of mechanised infantry and armoured forces, and possibly with the army group airmobile reserve, only if there was a chance for this to be developed into a sudden operational breakthrough. It was *hoped* that these areas would be prepared to offer strong resistance before the enemy arrived. ¹³³ Although the airmobile force's main purpose was to be counter penetration, it would not be committed unless the enemy penetration developed

¹³¹ Interviews, Bagnall on 5 May 1993, Dewar and Farndale on 21 June 1993.

¹³² Farndale, 1985, p.6.

¹³³ TDRC 5507A 19.4.a.

into an operational one, because it was earmarked as the asset with which to support the operational counter offensive. 134

Counter attack was 'an operation designed to recapture ground and then hold it.' 135 Its primary aim would be the recovery of lost territory--either a specific or a larger area that had been lost--by using mobility, firepower, and other means. It was a mainly area-oriented operation which would be launched either immediately or deliberately, according to the situation. The former offered the opportunity to dislodge the enemy before he had time to consolidate the captured ground, while the latter would only be committed to the recovery of the area which was critical for successful defence. 136

However, once the goal was achieved, the extension of the initiative by leading to a further offensive would be limited, because the impetus of the operation would generally wind down after the initial victory. ¹³⁷ Furthermore, it usually referred to an attack against the enemy's positions, most of which would probably be prepared with dug-in forces. Thus, counter attack usually required superiority in both firepower and manpower. The 3:1 ratio rule would apply in this case. This scenario was to be avoided as far as possible because it would cause severe casualties in the counter attack force as it had to attack the enemy's prepared positions unless launched immediately before the enemy consolidated his defensive position. ¹³⁸

¹³⁴ Interview, Bagnall on 5 May 1993 and on 21 June 1993. See more in 7.3. for the roles of the airmobile force.

¹³⁵ Farndale, 1985, p.6.

¹³⁶ See Bellamy, 1987, p.146.

¹³⁷ See Farndale, 1985, p.7.

¹³⁸ Interview, Bagnall on 5 May 1993. See more in TDRC 5077A sec.19.b.

Counter stroke, described by Farndale as the 'battle winning' formula, was a fully offensive mobile operation 'designed to seize the initiative and to win.' It was 'an operation designed to destroy an enemy who is either on the move, or temporarily halted, but who has not coordinated his defence.' 139 Thus, the counter stroke force would seek to strike 'an enemy in the flank when he is on the move,' and to hit him 'unprepared, in his weakest moment, and often on ground which the defender knows, but where the attacker was unfamiliar. 140 It would be an attack against the enemy's mind as well as his forces. It would be less deliberate and swifter in preparation than a counter-attack against an enemy in a defensive position. The key to success depended on the correct choice of location and timing. 141 Once the aim of destroying the enemy was achieved, it could lead to a general counter attack to consolidate its successes. Above all, the greatest appeal of counter stroke was that it 'can have greatest impact when a numerically inferior defending force, with a finite number of reserves, is faced with a numerically superior enemy,' and that when 'successfully conducted.... not only can heavy losses be inflicted upon the enemy, but his plans can be severely dislocated and the initiative seized from him.'142 Finally, the recapture of ground would be achieved as an indirect consequence of the successful operation. 143

Indeed, counter stroke was the British corps' favoured choice. Its aim was the destruction of the enemy forces--winning the battle--and thus it was mainly a force-oriented operation. Therefore, it was an operation that usually

¹³⁹ Farndale, 1985, p.6.

¹⁴⁰ Halberdier, op. cit., p.32.

¹⁴¹ Halberdier, op. cit., p.32.

¹⁴² Farndale, 1985, p.7.

¹⁴³ Farndale, 1985. p.7

applied a 1:1 force ratio rule, since both sides would fight exposed on the battlefield, but these odds would shift greatly in the attackers' favour when the counter stroke force had the initiative and surprise. The counter stroke force, consisting mainly of armoured forces, was expected to be constantly on the move so as not to lose tempo; this constituted the intrinsic criterion in maintaining the initiative. 144 Past experiences support such an assumption; the counter stroke at Arras in 1940 and Von Manstein's counter stroke operations were able to achieve disproportionate victories against enemies who usually outnumbered the attacker by 10 to 1. Nevertheless, as Bagnall and Von Sandrart stressed during interviews, counter stroke was only one of the options available to the commander. 145 For example, where and when a careful positional defence was required, counter stroke would not be launched; thus came the stress--it was one option, not a universal panacea.

The highlights of corps counter stroke were to be a combined arms offensive operation (with elements from not only mechanised infantry and armour but also from artillery, combat engineers, air defence (AD) assets, attack helicopters (AHs), and air support) in an offensive mobile operation to hit the enemy's open flank, force the collapse of his defence and thus achieve destruction. ¹⁴⁶ The all-arms nature of the counter stroke force was so important

¹⁴⁴ The composition of the counter stroke force varied, but was usually made up of an all-arms formation with an emphasis on armours. See TDRC 6266, TDRC 6265 and TDRC 5507A.

¹⁴⁵ Interviews, Bagnall on 5 May 1993 and Von Sandrart.

¹⁴⁶ See TDRC 6266 and 6265, passim; and TDRC 5077A sec.19.c. Also see Smith, 1992, p.7.

that without securing such a capability, it would not be able to conduct a successful operation. 147

The principles of application were therefore surprise, speed, simplicity, and flexibility. ¹⁴⁸ The formation of forces differed depending upon the terrain and situation; and could be: 1) tanks leading, 2) mechanised infantry leading, or 3) dismounted infantry alone. Above all, the most important operational considerations were that: firstly, mobility (e.g., by dedicated combat engineering support) and counter mobility must be attained; secondly, air superiority must be achieved, or at least strong AD assets must accompany the force; and finally, flank protection by anti-tank units would be vital for the survival of the force. ¹⁴⁹

If such a series of tactical defensive and counter operations failed to contain the enemy's operational breakthrough, which would result in the loss of territory, or if NORTHAG decided to impose a counter threat to deter further onslaught by the WP, they would then make a decision to launch an operational counter offensive/counter stroke.

The operational counter stroke concept was originally based on ideas offered by the tactical level counter stroke concept. Unlike the tactical level counter stroke concept, however, the operational level counter offensive/counter stroke was not a fighting doctrine with which to fulfil the specific aim of destroying the enemy forces in the target area. It was more of a grand overarching idea which accepted and exploited the spirit of offensive and manoeuvre

¹⁴⁷ See R.H. Gould, "The Validity of Armoured Vehicles up to the Year 2000," BAR, (April 1982), p.35, for possible ramifications.

¹⁴⁸ TDRC 6265 sec.3.

¹⁴⁹ TDRC 6266 sec. 9 and 6265 sec.9 and 15. Also see, TDRC 5077A sec.19.c.

in the tactical doctrine at the operational level for the conduct of an operational counter offensive.

For example, the tactical counter stroke would involve a brigade-size reserve formation, or sometimes a division size in the case of a corps operation in a mobile battle, to counter the enemy penetration at a specific area of a corps sector, and the fighting would have lasted from a couple of hours to a maximum of half a day until the enemy forces were destroyed. 150 Yet, the operational level counter offensive/counter stroke would involve at least a corps-size operational reserve in a theatre-wide operation (although the aim, timing, and size of the army group operation were left to COMNORTHAG's discretion). The aim of this operation would be to bring an initial stabilisation of defences along the IGB, and restore the original status quo, by destroying the first operational echelon to create a favourable environment for reinforcements from the US to launch a further offensive against the second operational echelon. The operation would have lasted several days at least. 151

Although the TDRC documents indicated that the army group counter offensive would be put off until all corps counter operations had been committed, Bagnall and Farndale thought it should be committed as soon as the enemy main effort was identified in order to maximise the effect of surprise and prevent the WP from gathering momentum. 152 Thus, the reserve would be manoeuvred across corps, and hence across the national boundaries of responsibility. Also, the army group's ability to generate sufficient firepower was

¹⁵⁰ See TDRC 6266 and TDRC 6265, for the tactical counter stroke.

¹⁵¹ Interviews, Bagnall on 5 May 1993 and Farndale on 21 June 1993. Also see Mackenzie, op. cit., in Reid and Dewar, op. cit., pp.161-180, for the description of an army group counter offensive.

¹⁵² TDRC 5507A sec.20.1.a and b.

a crucial element in supporting such manoeuvre operations. Moreover, the possibility of a nuclear strike in conjunction with the operation was also contemplated. ¹⁵³ Although this was an unlikely scenario--unless the WP made nuclear use first--because it was contrary to what Bagnall wanted in the first place *and* would make the operation itself very risky as the force would become the major target for WP nuclear retaliation, the possibility nevertheless remained. At the very least the detailed planning for nuclear use would be drawn up and completed by then because the failure of an army group counter offensive would have required escalation to the nuclear phase.

In this sense, the aim of the tactical counter stroke was to achieve victory in a particular battle by destroying the enemy force, whereas the operational counter offensive was to bring about the pause of the enemy's attack itself throughout the theatre, either by destroying the enemy first operational echelon or holding his multi-echelon attack by both destruction and delay. As will be discussed in chapter 6, the aim of the operation became more ambitious than the earlier goal, but the fundamentals of the operation remained the same.

Most of the common misconceptions with regard to the nature and operation of counter stroke revolved, therefore, around aspects of the aim of its operation. Above all, because no clear indication was provided of the fact that there were two different counter stroke operations in pursuit of two different objectives, tactical and operational, some saw counter stroke as primarily a corps operation using one of the divisions in the British corps for the purpose.

¹⁵³ TDRC 5507A sec.20.2.

The mix-up also seemed to occur because of writers' misunderstanding of the extent of the operational level. 154 They viewed it as roughly covering the British corps operation, and later implementation at the NORTHAG level was considered to be a natural evolutionary process, whereas Bagnall actually intended it to be an army group-wide operation from the outset. 155 In short, while the options for reserve operations at the tactical level by the corps consisted of counter penetration, counter attack and counter stroke, the operational level option consisted of counter penetration (e.g., by the airmobile force) and counter offensive by the army group. The success of the initial defence and tactical operations would determine the necessity for, and the size of, the operational reserve operations. In short, the major point of the counter operations was that the army group would take some risks because it lacked the capability to fight a long attritional war. 156

• The Subsequent Battle

The objective of the fourth phase would be determined by the outcome of the corps and army group counter operations. 157 Essentially, COMNORTHAG would face two choices: either to introduce nuclear weapons if the counter operation failed (thus entering the second phase of the operational battle), or to

¹⁵⁴ See Bellamy, 1987, pp.146-7; and McInnes, 1990, pp.137-8, for the description of an army group battle.

¹⁵⁵ McInnes acknowledged the transformation of counter stroke from a corps concept to an army group one, but described it as an evolutionary process rather than an existing idea which was a major part of Bagnall's plan from the outset. See McInnes, 1990, p.140.

¹⁵⁶ Von Sandrart's speech as CINCENT in 1989.

¹⁵⁷ Von Sandrart's speech as CINCENT in 1989.

conduct further conventional defence to stabilise the original FEBA if it succeeded. In the case of the latter, which everyone hoped would be the case, the fourth phase would involve the recovery of lost territory.

There was no clear consensus on primary responsibility after the operational counter stroke, except that it would be carried out by the corps defenders in principle, with counter attack, 158 since the counter stroke force would be hard-pushed to do so. Although it was mentioned during interviews that the counter stroke force might have to do just that if the situation demanded, it was hoped that it would not be subjected to such pressure if 3 (US) Corps, or other assets provided by CINCENT, could assume responsibility. 159

Despite McInnes's criticism of the ambiguity of this phase--since the necessity could not be determined until the above three operations had been committed--the aims of the subsequent battle were clear. ¹⁶⁰ There was hope that winning the first and second battles would be sufficient to convince the WP to stop before the inevitable nuclear exchange. Thus, it could either involve the nuclear operation while continuing fighting in and around the IGB if the army group succeeded in its counter operations (which would also consist of a series of mopping-up operations to clear up the WP penetration), or it would mean maintaining the current position if negotiations succeeded in convincing the WP that there would be no point in escalating to nuclear exchange when it had already failed in its conventional venture. This would be the ideal situation which everyone in NATO could hope for once war broke out.

¹⁵⁸ Interviews, Bagnall on 5 May 1993, Farndale on 21 June 1993 and Dewar.

¹⁵⁹ Interviews, Bagnall on 5 May 1993, Farndale on 21 June 1993, Dewar and Draper.

¹⁶⁰ McInnes, 1988, p.386.

4.4.2. REQUIREMENTS FOR COUNTER STROKE

How did the British Army interpret the manoeuvre principles to be used in NORTHAG's defensive operations and in counter stroke? The BMD identified the fact that the general aim of manoeuvre warfare is 'to defeat enemy intentions by the disposition of forces with only the minimum of essential tactical fighting' through 1) deliberate operations in usually offensive action to engage or defeat an enemy with the minimum of fighting by forcing him into a disadvantageous position; and 2) exploitation to consolidate success gained in deliberate action. 161 Simpkin provided a useful analogy for this; he wrote that manoeuvre warfare, 'draws its power mainly from opportunism--the calculated risk, and the exploitation both of chance circumstances and (to borrow a tennis term) of "forced and unforced errors" by the opposition; still more on winning the battle of wills by surprise or, failing this, by speed and aptness of response.'162 Luttwak stressed that the goal is to incapacitate the enemy by a 'systematic disruption' of his will to fight by 'the application of some selective superiority against presumed enemy weakness, physical or psychological, technical or organisational,' while avoiding the physical substance in which the enemy's concentration of strength is found. 163

Contrary to attrition warfare, it is not a simple aggregate of successful tactical battles that brings victory. 164 Manoeuvre requires an operational level

¹⁶¹ The BMD, pp.75-6.

¹⁶² Simpkin, 1985, p.22.

¹⁶³ Luttwak, 1987, p.94. Also see Simpkin, 1985, pp.22-3.

¹⁶⁴ See Simpkin, 1985, p.20; Mearsheimer, 1983, p.33; and Luttwak, 1980/1981, p.63, for attritional warfare.

design through which the attacker can plan the avoidance of the enemy's strength while seeking a deliberate action against his weakness. In short, this method seeks the dislocation of enemy strength at the operational level, while pursuing to engage the weaker enemy forces at the tactical level, during which the destruction of those forces and the tactical penetration of its defensive line would be achieved. The initial success would be turned into an operational one, and the attacker would seek to dislocate the enemy further by penetrating deeper into the enemy's rear while preventing him from concentrating his strength against the attacker. The attacker would also continuously seek to engage the defender's weakness, during which he could create even more disruption, dislocation, and destruction of the enemy. The complete paralysis of the enemy defence would be achieved and the enemy's will to resist would be destroyed when the attack succeeded in the breakthrough of the defences at the operational and strategic depth.

However, as a political guideline prohibited NATO preemptive action against the WP, the only viable choice available under the manoeuvre approach was to undertake a mobile defence after absorbing the initial WP onslaught, with a combination of relatively static defence in strong points and an aggressive covering force battle, the primary aim of which was to identify the enemy main efforts. 166 After this, NORTHAG could be committed to a series of tactical mobile defence (counter stroke) operations to slow down the enemy.

Nonetheless, it should be emphasised that tactical mobile defence at this time would be strictly designed to delay the enemy in order to make early

¹⁶⁵ Simpkin, 1987, p.140; and Leonhart, op. cit., pp.66-76, for more on dislocation and disruption.

¹⁶⁶ See Mearsheimer, 1983, pp.48-9, for forward-attritional defence.

identification of the main efforts, if there was more than one penetration, to foster the environment for operational mobile defence to be launched. ¹⁶⁷ Thus, tactical level defence in operational mobile defence should focus on facilitating the recovery of vital ground, or, specifically, on concentrating on a series of delaying battles if the counter force's strength was not sufficient. If it had enough fighting power, then the force would launch a series of tactical counter strokes for maximum delay and attrition in order to allow more time and create an ideal situation in which an operational mobile counter offensive could be mounted. ¹⁶⁸

Such a situation would arise when the tempo of the enemy forces would be significantly disrupted and their momentum stalled by the defenders tactical actions by 'repeated and relentless manoeuvre and strikes' to fix and disrupt the enemy advance. 169 Under the circumstances, the leading echelons would be engaged from the defenders' strong points while the follow-on echelons would not have enough space or time to prepare adequately for defence. Therefore, the tactical level defence was to concentrate on creating this effect throughout the operational theatre to act as a pivot for an operational mobile counter to swing on. This would be a model defensive operation using manoeuvre principles. In other words, the main aim was the disruption of the enemy's tempo so as to unhinge it and make 'his mass' become a liability rather than an asset; during this time the enemy could make a series of mistakes and create confusion, which could cause a mental domino effect—once the defending forces achieved the initial disruption of the enemy tempo, it could have been exploited 'by further

¹⁶⁷ See Mackenzie, op. cit., in Holden Reid and Dewar, p.177, for a specific explanation.

¹⁶⁸ Interviews, Bagnall on 5 May 1993 and Farndale on 21 June 1993.

¹⁶⁹ Mackenzie, op. cit., in Holden Reid and Dewar, op. cit., p.177.

attacks, which in turn create more disruption and still further opportunities for deeper and more powerful manoeuvre, leading eventually to the unhinging effect that manoeuvre warfare was designed to create.' 170 Therefore, in essence, the operational counter stroke was a mobile defence concept utilising manoeuvre principles at the operational level of war so as to identify and destroy the enemy's centre of gravity to render it inoperational. 171

The main target of the operational counter offensive thus became the destruction of the enemy centre of gravity (commonly, the rear echelon where most of the C3I, artillery, logistics, and reserves were concentrated). ¹⁷² In the British concept, the centre of gravity was also recognised as the degraded strength of the enemy--his major fighting force which had reached a culminating point, or 'decisive point,' the identified point of weakness. ¹⁷³

If the enemy lost tempo due to NORTHAG's successful tactical mobile defence, his momentum of attack would be disrupted and he would not have enough time to establish a coherent defence. ¹⁷⁴ By then, the enemy's true centre of gravity would be revealed--his dislocated and diffused mass which would be still on the move and exposed on the ground. This would be when the enemy was at his weakest, and for Bagnall, offensive actions against the enemy's

¹⁷⁰ Mackenzie, op. cit., in Holden Reid and Dewar, op. cit., pp.175-6.

¹⁷¹ See Mearsheimer, 1983, pp.50-1, for a definition of mobile defence. However, he does not distinguish between the tactical and operational level operations. In fact, his description is more akin to the British tactical level operation.

¹⁷² Interview, Bagnall 5 May 1993.

¹⁷³ See the BMD, pp.83-4, for the description of the culminating point and the centre of gravity. See Leonhard, op. cit., pp.20-24, for an in-depth discussion.

¹⁷⁴ See Simpkin, 1987, pp.106-112, for elements which degrade tempo.

vulnerable strongest point would be the main army group counter aim. 175 Within the scope of the operational counter offensive, a series of offensive actions and counter strokes would be committed against a number of enemy formations on the move to isolate his head by severing his LOC (Line of Communication), causing him to be defeated piecemeal by a series of envelopment and counter attacks by combined defensive and counter operations.

To achieve this, synchronisation and orchestration of both tactical and operational battles at the operational level were required, involving a rapid exploitation of tactical successes by larger counter offensive forces. ¹⁷⁶ In short, a counter offensive at the operational level would have made use of the synergistic effect of attrition of the enemy forces by tactical and decisive operational manoeuvres in order to defeat the enemy. So, the application of the manoeuvre principle, which exploited the command ability and art of command, became paramount.

To achieve this end, Bagnall stressed that the initiative must be taken at the earliest hour. In fact, this did not require a new set of concepts; instead the Army's ten principles of war could be used as long as the fundamentals of manoeuvre warfare were understood. 1) Selection of aim meant the identification of the enemy centre of gravity. 2) Morale must be kept high at all times, especially during the early hours, so as to absorb the enemy attack and take on the counter action. 3) Offensive Action must be taken to deliver 'a rapid and relentless series of synchronised counter-punches.' 177 4) Concentration of Force was essential to the success of the operation. This implied the

¹⁷⁵ Interview, Bagnall on 5 May 1993.

¹⁷⁶ Mackenzie, op. cit., in Holden Reid and Dewar, op. cit., p.177.

¹⁷⁷ Mackenzie, op. cit., in Holden Reid and Dewar, op. cit., p.179.

concentration of all assets, reserve, air, artillery, etc., for the success of the all-important counter offensive. 5) *Economy of Effort* had to be achieved before concentration was possible. It would be done by not allocating reinforcements for positional defences. 178 Furthermore, synchronisation would be achieved to enable both concentration and economy of force at an appropriate time. 6) *Security* was a critical asset for the protection of the counter stroke force in both physical and psychological terms. Particularly, the flank protection of the counter stroke force's battle area would be paramount. 179 7) *Flexibility* was to be achieved in every possible sector. Command flexibility was especially critical, and this was why Auftragstaktik was adopted. 8) *Cooperation* was another vital ingredient because the operation had to be a true all-arms combined operation, involving not only all the elements of land forces, but also air and other supports. 9) *Administration* in this case would mean logistics. Moving a large force would be a daunting task, and thus without a good logistics capability, such an offensive could not take place. 180

Finally, 10) Surprise was, as Bagnall and Farndale stressed, the most important component if the counter stroke was to be successful. 181 Even the complete destruction of the WP attacking formation would be possible with a numerically inferior counter stroke force if it could maintain stealth to the last moment. Thus, the counter stroke force would have to launch an attack with whatever it had in hand rather than wait to gather more strength, which would

¹⁷⁸ Interview, Farndale on 21 June 1993.

¹⁷⁹ Interview, Farndale on 21 June 1993.

¹⁸⁰ Interview, Farndale on 21 June 1993.

¹⁸¹ Interviews, Bagnall on 5 May 1993 and Farndale on 21 June 1993.

compromise the effect of surprise. 182 Both men added that the sheer speed and offensive nature of the action would limit the chance of failure. Simultaneously, the counter stroke force needed to avoid detection before it was committed. Thus, all the supporting elements (i.e. AHs, air support, combat engineers, etc., and especially, fire support) and other critical efforts outlined in the principles of war had to be ideally distributed and utilised. Farndale described one way to achieve last-minute surprise before committal of the attack. He said that the rapid generation of firepower, particularly by artillery, would be important in the situation as the counter stroke force moved together and emerged from the friendly fire barrage right before the attack. Although it would take some casualties from friendly fire, the enemy would be caught in complete surprise as he would be on his knees hiding from the artillery barrage. 183

Essentially, NORTHAG's counter offensive concept was an operation designed to allow the army group to counter the first operational echelon with both positional and mobile defence by corps forces and reserves, while committing a series of offensives and counter strokes as a part of a larger-scale operational counter offensive against the enemy second echelon during the WP multi-echelon attack, or to achieve a thorough destruction of the enemy in a single-echeloned attack. Above all, these actions would allow the creation of a window of opportunity giving the defender a chance to create surprise and chaos in areas and times of his choosing by using manoeuvre. The enemy would be channelled into a particular sector to be counter-attacked with tactical reserves by luring him into good country where the defender could also make use of mobility. The major aim was to decelerate WP momentum so as to create a

¹⁸² Interviews, Bagnall on 5 May 1993 and Farndale on 21 June 1993.

¹⁸³ Interview, Farndale on 21 June 1993.

culminating point at the operational level, through which the enemy's centre of gravity would be forced to be revealed. By this time, an operational counter stroke would have been launched against the enemy centre of gravity, and if won, it would have more or less stabilised the status quo.

Due to the need to involve and orchestrate all the above elements in pursuit of achieving the defensive objective, Bagnall tried to explain his concept within the framework of the operational level of war, in which manoeuvre was a part of his ideas. Under operational level planning, both the physical movement of force to fulfil a given task and the mental ability of the commanders to maximise their flexibility and creativity would be possible. In this sense, the British understanding of manoeuvre could be summed up as the movement of forces and generation of sufficient (or overwhelming if attainable) firepower in order to secure surprise and the initiative to reinforce its offensive capability to achieve goals at the operational level, and is thus 'more about the movement of mass than masses of movement.' 184 Therefore, the main aims of the defensive operation were to achieve a rapid counter concentration of forces to reinforce existing defences, or to exploit the enemy's vulnerability, which could provide NORTHAG with various options against the WP surprise or other attacks.

¹⁸⁴ A.I.G. Kennedy, "An Approach to Warfare," <u>Doctrine Digest</u> (DD), (Edition 2, 1992), p. 9.

4.5. CONCLUSION

NORTHAG was suffering from a lack of operational thinking, which left its corps to plan their own defence without regard to the army group's requirements. I have argued that the majority of the reasons preventing the formulation of an army group operational concept were political, but without a jointly agreed operational concept and planning, there would have been a wastage of already scarce resources and confusion over the priorities. Thus, NORTHAG's numerically weak forces would not be able to counter the WP attack.

Therefore, Bagnall's reforms, which introduced the operational level and the subsequent formulation of the NORTHAG concept of defence, were to strike a balance between the need for achieving economy and concentration of forces within the existing resources. The operational level created a necessary conceptual framework within which NORTHAG could formulate a jointly agreed operational level doctrine. Above all, the new concept needed to take into account that NATO had to undertake comprehensive defence at both the tactical and operational levels. Therefore, NORTHAG required a concept which could allow the accomplishment of the above goal, and this required flexibility throughout the levels of command and services. This was fulfilled by adoption of Land/Air Battle and by embracing more mobile-oriented and combined land and air operations to bolster the existing defence.

It has to be pointed out that the British Army did not have the necessary traditional background and understanding of joint operations at the higher operational level to enable formulation of the new concept from the British experience in war. Therefore, it was a very daunting and difficult process formulating the reforms to be applied throughout the army group. Nonetheless,

the reforms in the British Army, while being concurrent with the other developments, were indigenous and designed to achieve very specific strategic and operational goals. Moreover, unlike the US AirLand Battle Doctrine, NORTHAG's new concept of operation was, from the outset, designed to be used by all four national-contingents in the army group.

<u>CHAPTER 5</u> DEBATES AND DISSEMINATION OF THE REFORMS

5.1. INTRODUCTION

The aim of this chapter is to provide a comprehensive review of the debates and the process of the dissemination of the reforms in Britain and in the Alliance during Bagnall's tenure as COMNORTHAG. I argue that Bagnall's personality-his assertive attitude, cautious and calculated approach to the reforms (e.g., through the use of the TDC) and plausible operational logic--was a vital factor both in convincing people in the British Army and RAF quickly *and* preventing the formation of any tangible opposition. In fact, he and his subordinates' relentless campaign prevented any significant debate from taking place in Britain.

My next main argument is that as personality was a major component in the introduction and implementation of the reforms in Britain, it was much the same with the debates in the Alliance. Also, it was as much a debate concerning the strengthening of NATO's deterrence and NORTHAG's conventional capabilities as it was a clash between personalities. The cause of this problem was, as discussed earlier, the German hesitation to conform to the views of others in formulating a strategy for the defence of the FRG; the Germans felt that the British were not in the best position to carry out the proposed reforms because the British Army did not have the necessary capability and tradition to make such profound changes in the Alliance. The fiercest debate took place between two people, Bagnall and General Leopold Chalupa who was CINCENT, and the feud was often arbitrated by Von Sandrart who was the COS of the Bundeswehr at the time.

5.2. NIGEL BAGNALL'S PERSONALITY

The majority of the British officers whom I interviewed unequivocally agreed that the reforms were the product of Bagnall and would not have happened without him. For example, the current CDS, Field Marshal Inge, strongly emphasised in an interview that: 'Sir Nigel was the key figure.... There is no doubt about it.... Without a man of his stature and personality, I personally believe [the change] would not have [taken place]. And if it hadn't, we would have stayed the same.... It was not only Bagnall's intellect but also his drive that achieved it.' Many officers in the NORTHAG armies agreed. As these interviews show, it is crucial to understand Bagnall's personality in order to appreciate the origin and course of the implementation of the reforms in the British Army and NORTHAG. This should prove instrumental in answering one major question--Were the reforms really a product of one personality and could they have happened without Bagnall?

Based on the testimonies of many people who worked with or served under him, as well as those junior officers who observed the developments, Bagnall seems to have been many things, sometimes projecting contradictory images depending on the individual. Nevertheless, Bagnall is best described as a very flexible and shrewd person who had the patience and determination to see the reforms through from beginning to end. Sometimes, especially in the early days, he had to go out of his way to convince people of the necessity and feasibility of the reforms almost single-handedly, due to the overall lack of

¹ Interviews, Farndale on 21 June 1993, Inge, Von Sandrart, Steel, Dewar and Draper.

² Interviews, Von Sandrart, Briot, Kunzendorf and Fischer.

interest and enthusiasm.³ In the end, with the success of the reforms, I was told by some that he earned the reputation of a sort of cult leader among many officers of both the British and other NATO armies.⁴ Inge, in particular, had something special to say about Bagnall's personal impact on the officer corps as a whole, i.e., that he 'guided' many young officers with his leadership, and gave them that 'special feeling' of being in the forefront of a new era.

Meanwhile, Bagnall was known to be a very strict and temperamental person who sometimes did not have enough patience in his dealings with some people. Also, some commented that he could sometimes be very intolerant. Most of all, he often did not hesitate to show his discontent to those he thought to be ill-informed and impractical.⁵ Farndale described this side of him in an interview as follows:

Bagnall to me was absolutely straight down the middle, and he always did what he thought was right. If people didn't like it, he didn't care. He would have been a very good wartime commander. He would have made a ruthless wartime commander.... I would have been very brave, I think, to have said *no* to something he said.⁶

Moreover, his sometimes over-enthusiastic approach to the reforms gave rise to some uneasiness within the British Army because he often ignored the chain of command in implementing his ideas. This was particularly the case with the TDC. This side of him had major repercussions on some Germans in the early days of the reforms. For instance, he had a long and famous dispute with General

³ Interview, Bagnall on 5 May 1993.

⁴ Interviews, Inge and Dewar.

⁵ Interviews, Farndale on 21 June 1993, Inge, Kenny and Dewar.

⁶ Interview, Farndale on 21 June 1993.

⁷ Interviews, Farndale on 21 June 1993, Inge and Kenny.

Chalupa at the time. Farndale commented on the matter that, 'I think this is unfortunate. I think if he handled Chalupa better, the whole thing would have been better for us all. I know I had to man quite a few fences trying.'8 The dispute between the two was never satisfactorily resolved, and the full cooperation from the Germans with official support only came after Bagnall left the COMNORTHAG post to become CGS and as Chalupa retired in 1987 as CINCENT (see more later in this chapter). Nevertheless, Bagnall went ahead with his reforms regardless of Chalupa's opposition, while letting his subordinates, Inge and Farndale, take care of many of the practical problems.⁹

Despite some of his less admirable qualities, he was still respected as a strong leader and original strategic thinker by his peers and subordinates. The success of his reforms crucially depended on a favourable perception of his qualities. ¹⁰ For example, while having had trouble with Chalupa, he had a very important ally, Von Sandrart, who later replaced Chalupa as CINCENT, who considered Bagnall as one of the modern strategic thinkers of his time. In fact, Von Sandrart's contributions to Bagnall's plans were instrumental as he convinced Germans of their necessity, and most of all, dissuaded Chalupa from objecting to the reforms. Bagnall admitted in an interview that he was very lucky to have had Von Sandrart as a supporter who shared most of his views, and Von Sandrart was instrumental in introducing Bagnall's reforms in the Bundeswehr, as well as arbitrating disputes with Chalupa while he was COS of the

⁸ Interview, Farndale on 21 June 1993.

⁹ Interviews, Bagnall on 5 May 1993, Farndale on 21 June 1993, Inge, Von Sandrart and Chalupa.

¹⁰ See J.P. Kiszely, "The Contribution of Originality to Military Success," in Holden Reid, 1993, p.33; and Dannatt pp.1-2, for the views of British officers on Bagnall's conceptual contribution.

Bundeswehr. 11 The reforms would have been a failure without Von Sandrart's and the Bundeswehr's cooperation and understanding. 12

Bagnall's ability to secure strong loyalty from his subordinates was extraordinary. He was very confident about his subordinates' ability and trusted them to carry out his wishes with the best of goodwill and faith. ¹³ In fact, he did not hesitate to delegate his authority to his subordinates in matters which he considered them better able to manage (for instance, in dealing with Chalupa). They later came to hold senior positions in the British Army. Farndale for instance commanded 1 (BR) Corps when Bagnall was the army group commander and then became his direct successor; Kenny, Bagnall's COS when he was Commander 4 (BR) Division, became COMNORTHAG after Farndale, and Inge, who was Bagnall's COS when he was Commander 1 (BR) Corps became COMNORTHAG after Kenny and eventually became CGS and CDS, the highest military post in the country.

Finally, although Bagnall was sometimes intolerant and quick-tempered, he was nonetheless a pragmatic person, an opportunist capable of adapting to situations. This was illustrated by the way he seized the chance to show his ideas as a division commander after a long wait and thoroughly prepared the reforms to effectively neutralise opposition before it gathered momentum. If he had not been such a careful person, as well as good with people, above all, he could not have become CGS. 14

¹¹ Interview, Bagnall on 5 May 1993.

¹² Interviews, Bagnall on 5 May 1993, Von Sandrart and Inge.

¹³ Interviews, Bagnall on 5 May 1993, Farndale on 21 June 1993, Inge and Kenny.

¹⁴ Interviews, Bagnall on 5 May 1993 and Inge.

But how original were his ideas? Some would say the changes in the Army would have happened anyway, particularly with the advent of high-technology weapons and the growing desire for the de-nuclearisation of NATO's defence. ¹⁵ However, without a solid framework to exploit the potential of new weapons and equipment, the changes could only have been cosmetic, and would have been limited to the deployment of new weapons and minor tactical adaptations to reinforce existing defences. Bagnall never claimed, during interviews, that his idea was original and radically different from the earlier German, or Israeli, ideas, and he suggested that the reason why his reforms were successful was the fact that he was in the right place at the right time to make a sensible adjustment. ¹⁶

As discussed, his ideas came, originally, from the German experience. Von Sandrart acknowledged in an interview that Bagnall 'thought very much on the same line as old [Reichswehr] generals.' However, while his idea may have borrowed heavily from history, his originality rested in the fact that he was able to modify those lessons to the time, area and available capability so as to allow them to be effectively applied in his own time. Furthermore, he had the ability to correctly assess the political and strategic situation at the time and formulate the necessary concept which could reinforce the Alliance's strategic goal to a credible degree. Had he not been a competent original strategic thinker, as will be discussed later, it is very difficult to imagine how his accomplishments could have been accepted or influenced the military and political hierarchy of the Alliance.

¹⁵ See McInnes, 1991, p.45.

¹⁶ Interview, Bagnall on 5 May 1993.

The effect he had on US operational thinking presents a good example of this. In fact, his ideas were enthusiastically received in the US and General Glen Otis, who was then Commander CENTAG, tried to adopt Bagnall's concept, especially in relation to the reserve operations in its army group defence, although there was no urgent need due to the deployment of strong US and German corps. 17 This shows that Bagnall was able not only to fend off the American line of thought in formulating his concept, but also to influence the US Army into considering *his* ideas for application in CENTAG instead of its own AirLand Battle Doctrine. Given the US's strong influence on the Alliance's strategic and military affairs, his was a unique and rare achievement, which revitalised the British Army's prominence in the Alliance.

Among many factors which enabled the reforms, his originality, and specifically, the way he commanded loyalty and trust from his subordinates, were quite important. This is well-reflected in Farndale's remark that, 'We got together on [the reforms]. And I said to him, "I assure you, I will simply develop the concept. *Because I believed in it.*" 18 Thus, although the time was right for changes in the British Army and NORTHAG, I am forced to conclude that without him and his strong personality, they would not have occurred. The course and speed of the implementation of the reforms, and the methods which were utilised in the process, well reflect this point. In this sense, Bagnall must certainly be viewed as one of the few original British strategic thinkers of modern times.

¹⁷ Interview, Bagnall on 6 November 1993.

¹⁸ Interview, Farndale on 21 June 1993.

5.3. DEBATES IN BRITAIN

5.3.1. THE ROLE OF THE TACTICAL DOCTRINE COMMITTEE

Bagnall established the Tactical Doctrine Committee (TDC) when he became commander of 1 (BR) Corps in Germany as an informal discussion group, which was founded to educate, as well as discuss and debate the issues concerning the reforms throughout the departments and services. It was instrumental in introducing and implementing his reforms. As he himself said in an interview, without the TDC he could not have achieved half of what he wanted. ¹⁹ Furthermore, it was not only a discussion group, but also a powerful tool in aiding the countering and neutralising of opposition within the military. For this reason, the TDC had more impact than Bagnall himself wanted to admit; he had intended it to be an educational establishment, rather than a gathering with real power to make changes. ²⁰

The TDC was initially made up of twelve members of different arms and services of the military, who understood what Bagnall wanted to do and had some understanding of his concept. Particularly, it included those from training, logistics, and engineering who would discuss all the possible aspects of military operations, especially under the combined arms environment. The number of members grew as the TDC was expanded to NORTHAG level--and eventually to the MoD when Bagnall became the CGS. Today, a typical meeting would consist of 20 to 30 people from various ranks, branches and services of the

¹⁹ Interview, Bagnall on 5 May 1993.

²⁰ Interview, Bagnall on 4 May 1994.

British military establishment. There is no regular interval for the meetings, but they take place as a major conference at least twice a year.

He described in an interview the atmosphere of a typical TDC meeting; it usually involved heated debates and representations of differing views from different arms. Each subject was discussed in detail; not only the conceptual aspect of a possible operation, but other elements (such as the feasibility of implementation and training) received equal attention. While Bagnall himself would be chairing each meeting, the selection of topics was usually carried out by Inge, as he was in charge of formulating the preliminary proceedings as well as organising the agenda. Attention was always paid primarily to current issues, including discussions about SOP, as well as others which were recognised by the organisers as worthy of discussion. Notably, careful consideration was given to allowing the questioning and contribution of thoughts by junior officers, and the agenda was organised to provide an opportunity to update everyone's thinking. After each meeting, a progress report was made to be circulated and read by people in the Army and thus disseminate the ideas discussed in the previous gathering. 22

Eventually, people with different or opposing views were invited to the meetings and allowed to ask questions in depth, after which they left with a better understanding. This process continued even after he became Commander NORTHAG and CGS. In fact, some became converted to Bagnall's ideas following the meetings and became very supportive afterwards.²³ Also, people from other national armies were invited to join in when Bagnall became

²¹ Interview, Bagnall on 6 November 1993.

²² Interviews, Bagnall on 6 November 1993 and 4 May 1994 and Inge.

²³ Interviews, Bagnall on 6 November 1993, Inge and Kenny.

COMNORTHAG, despite the TDC being designed strictly for the purpose of educating the British military. This remained so until the TDC was moved to Britain, and Bagnall's NORTHAG international staff became either permanent members, or at least frequently attended meetings. In fact, the Operational and Planning Groups were established to discuss Bagnall's concept later. Those people were to become a major asset for Bagnall when he set out to explain his ideas and persuade other corps commanders; it was his international staff, who joined the above two groups, that enthusiastically and effectively convinced their national contingents about the validity and necessity of what Bagnall was doing.²⁴

As stated earlier, former members of the TDC, such as Kenny and Inge, came to hold high positions in the military. Some people who joined the TDC as middle-ranking officers became senior officers. These included Lt. General Sir Peter Duffell, who joined it as a Colonel and became the Inspector General Doctrine and Training, and General Sir John Walters, who later became Deputy SACEUR. The former had direct and successful dealings with the Germans, while the latter introduced first-hand combat experience as he joined the TDC right after returning from the Falklands. Also, General Sir Charles Guthrie, who was a Colonel at 2 Armoured Division at the time (1983), was a regular member. He is now the CGS.²⁵

Above all, the direct result of the TDC was the writing of the first ever British operational doctrine, <u>Design for Military Operations</u>, in 1989 and the foundation of the HCSC in 1987. In fact, the idea for establishing the HCSC

²⁴ Interview, Bagnall on 6 November 1993.

²⁵ Interviews, Bagnall on 6 November 1993 and 4 May 1994. For example, Guthrie was responsible for drafting a counter stroke battle note for 2 Division. See TDRC 6265.

came when Bagnall was corps commander, and the first thing he did when he became CGS was to implement his vision. ²⁶ Another TDC member, then Colonel M. McAffee, started the preliminary work on the HCSC while he was the first Colonel HCSC; Bagnall wanted him to find a 'different way of training' in this capacity. ²⁷ Other key members of the TDC, Inge and Duffell, also made a significant contribution in establishing the course. ²⁸ Incidentally, Lt. General Sir Jeremy Mackenzie, who is now Commander Allied Rapid Reaction Corps (ARRC), was Deputy Commandant Staff College, and he was the person who prepared and made out the detailed programme of the course before the start of the HCSC. ²⁹ And Major General Sir Rupert Smith, who commanded 1 (BR) Armoured Division during the Gulf War, also received the new training in the early days. ³⁰ Meanwhile, the BMD was ordered to be written in the Staff College soon after the first class of HCSC.

The TDC was not without its critics, especially those who saw its unorthodox approach as threatening to the chain of command. This was a legitimate concern since the TDC had many junior-ranking officers down to Major while many senior officers were not asked to join in.³¹ Most of all, the image of elitism it unwittingly projected constituted sufficient reason for making many middle-ranking officers discontented as they felt they were being excluded.

²⁶ Interviews, Bagnall on 6 November 1993, Inge and Kenny. See 7.5 on HCSC.

²⁷ Interview, Bagnall on 6 November 1993.

²⁸ Interviews, Bagnall on 6 November 1993 and 4 May 1994.

²⁹ Interviews, Bagnall on 6 November 1993 and 4 May 1994.

³⁰ Interview, Smith.

³¹ Interviews, Bagnall on 6 November 1993 and Kenny.

It could also have been seen by senior officers as creating a faction within the army.³² In fact, some scepticism was expressed by people like Field Marshal Carver and General Sir John Akehurst, who was then Deputy SACEUR.³³ However, Bagnall explained the origin of their views in an interview as probably stemming from not having held a senior field position in NORTHAG. In fact, Carver's last major appointment in Germany was as commander of a Brigade. Most importantly, however, Bagnall, through the intervention of then Colonel Duffell who was a friend of Inge's in the MoD, was able to convince Field Marshal Sir Edwin Bramall, the CGS, of its necessity.³⁴

5.3.2. DEBATES IN THE BRITISH ARMY AND RAF

• Outline of the Opposition within the Army

Just as with those who disapproved of the TDC, the main reason for the opposition to Bagnall's reforms within the British Army was ignorance. From the beginning, there was some opposition, mainly from those who again did not hold major field appointments in Germany.³⁵ The argument revolved around three major factors. Firstly, some considered the new concept as unsuited to the British Army. Secondly, the new concept required major changes to be introduced to the system, and in effect turned it upside down. Finally, the British mind was very settled in the existing GDP, which was in fact a set of rules on

³² Interviews, Bagnall on 6 November 1993 and Kenny.

³³ Interviews, Farndale on 21 June 1993, Carver and Kenny.

³⁴ Interview, Bagnall on 6 November 1993.

³⁵ Interviews, Bagnall on 6 November 1993, Inge and Kenny.

how Germany was to be defended. Some felt that the reforms were breaking the rules. 36

Nonetheless, there was no organised opposition, and whatever adverse opinion existed, it was quickly pacified and suppressed. This was particularly the case when Bagnall became CGS; with his personality, and the continuous campaign by his subordinates, he did not face any trouble concerning the implementation of his ideas, especially since Farndale and Inge were the real door-to-door salesmen.³⁷ Here, the TDC proved to be a useful tool as well. Above all, once a change in the mindset of the British Army had been achieved, there was no opposition whatsoever, and those previously averse to the ideas eventually conformed to them.

• Outline of the Opposition from the RAF

As discussed, the Army and RAF maintained a rather amicable relationship throughout the reforms. If there were any problems with the RAF, they involved two areas: firstly, some RAF officers did not like the idea of being subordinated to the Army command in adopting the joint C2 and HQ to implement Land/Air Battle. But opposition ceased once this was understood not to be the case.³⁸

Secondly, a major problem existed over the control of helicopters. The question was whether the Army should have its own assets to implement Land/Air Battle as it saw fit, or whether the RAF should retain them. There was particular trouble over the ownership of utility and transport helicopters, as well

³⁶ Interviews, Bagnall on 6 November 1993, Farndale on 21 June 1993, Inge and Kenny.

³⁷ Interviews, Farndale on 21 June 1993, Inge and Kenny.

³⁸ Interviews, Flaherty and Jackson.

as the acquisition of AH. Eventually, a compromise was reached as both agreed that they should retain some elements separately--AHs and light utility helicopters were to be held by the Army, whereas large transport and support helicopters (CH-47, etc.) were to remain under RAF control.³⁹ This was followed by a Chief of Staff meeting in 1987; an agreement was ultimately reached, in which it was stated that even the transport assets would come under COMNORTHAG's command in the case of a war.40

5.3.3. THE VIEWS OF THE CIVIL SERVICE AND GOVERNMENT

• Views of the Ministry of Defence

According to Paul Flaherty, who was involved in the implementation of the reforms as a civil servant in the MoD, they were cautiously accepted as a good and timely idea. Among MoD concerns were the following: 1) they could upset Allied solidarity if they went wrong; 2) they might upset CINCENT, Chalupa, which could have diplomatic ramifications; 3) they might have insufficient resources; and 4) Bagnall's 'uncontrollable force' (in other words, his relentless and imperious pursuit of the changes) could be detrimental.

However, those worries were soon dismissed as the general consensus indicated that the actions offered a better alternative to static defence under which the efficient use of resources was difficult. In fact, the reforms were

³⁹ Interviews, Flaherty, Jackson and Bagnall on 5 May 1993. More in chapter 7.4.

⁴⁰ Interview, Bagnall on 5 May 1993.

⁴¹ Interview, Flaherty.

⁴² Interviews, Day, Dewar and Flaherty.

eventually viewed as offering a better chance of defence and better use of resources. It was also felt that if the Army and MoD could put forth a rational argument supporting such benefits, it was assumed there should be no political difficulties, as the government did not have to commit more resources—which could prove to be an additional financial burden they did not need.⁴³ Most of all, once Chalupa left his post, the major source of concern disappeared.

Furthermore, the MoD's preoccupation with the implementation of FOFA eased the process of the dissemination of the reforms. Not only did it present financial problems, but it also involved political difficulties because of its apparent emphasis on the attack beyond the IGB. Thus FOFA was seen by some as an aggressive doctrine. ⁴⁴ Although Bagnall's idea *did* involve an attack over the IGB, which could have been more damaging since it involved an actual counter offensive by a land force, this element was skilfully omitted when the idea was presented. In fact, it was sold as a purely defensive concept to be employed inside the IGB, which could be utilised to enhance the army group's flexibility in defence. If it had been presented as what it was actually designed to do, it would have had great difficulty being accepted by the MoD. As Bagnall and Von Sandrart admitted in interviews, there was no need to upset people by explicitly stating what might not happen after all. ⁴⁵

Once the reforms were accepted by the MoD, they were quickly disseminated both in Britain and the Alliance. The process of dissemination in the military involved: 1) finalising the initial concept and plan in concert with NORTHAG's international staff; 2) formalising an agreement with other corps'

⁴³ Interviews, Bagnall on 6 November 1993, Day, Dewar and Flaherty.

⁴⁴ Interview, Flaherty.

⁴⁵ Interviews, Bagnall on 6 November 1993 and Von Sandrart.

commanders and their national and international staffs; and 3) discussions with air and other components' commanders. 46 At NATO level, it involved: 1) NORTHAG selling the idea to SHAPE's international staff and getting SACEUR's approval; and 2) presenting it to be discussed in DPC (Defence Planning Committee) and its international staff in NATO. 47 At the MoD, it resulted in arbitrating the final details between the services and departments before it was reported to the Secretary of Defence. All these processes went remarkably smoothly, and by the time the Berlin Wall came down it had become a workable concept in the Alliance. 48

The attraction for the MoD was three-fold: firstly, the reforms were viewed as allowing efficient use of resources and manpower, both of which were government aims at the time of a budget squeeze due to the introduction of a lot of new equipment and a manpower shortage. Secondly, many aspects of the reforms were considered to be about better C2 since battles were becoming extremely complex and confusing; they thus recognised the need to find an imaginative way of using the new equipment which was beginning to be available at the time. Finally, it was seen as a measure which would revitalise the US presence, a positive result which the reforms *did* bring about. Also, they were seen as reinforcing Britain's leading role in NATO as a member capable of formulating and implementing an original idea throughout the Alliance, a fact which also achieved a 'rare harmony' in NORTHAG.⁴⁹

⁴⁶ Interviews, Bagnall on 6 November 1993 and Inge.

⁴⁷ Interviews, Bagnall on 6 November 1993 and Flaherty. See 6.3. for more details.

⁴⁸ Interviews, Bagnall on 6 November 1993, Inge and Flaherty.

⁴⁹ Beach, op. cit., in Kaiser and Roper, op. cit., p.135. Also see Rees, op. cit., in Byrd, 1991, p.99.

• Views of the Government

As discussed, the major role the government played was in the creation of a permissive environment within which the reforms could occur, and it essentially let the military do whatever it chose with something it considered to be a primarily military concern. Nevertheless, this reaction had a lot to do with the way Bagnall approached the political leadership and secured support. Bagnall and Farndale acknowledged during interviews that they always enjoyed good relations with the Thatcher government. 50 Bagnall briefed Michael Heseltine, Secretary of Defence at the time, on his ideas before carrying out the reforms in the Army.⁵¹ In the end, as mentioned, civilian officials came to support the reforms as genuinely better than the previous stance, and as something which needed to be done, thus concluding that there would be no particular political difficulties in the Alliance. When this was discussed, there was strong support from Prime Minister Thatcher and Heseltine, who were prepared to support Bagnall's reforms in the Alliance.⁵² Also, once approval was given, Bagnall was able to use civil servants to extend his cause in the Alliance (for example, he secured strong support from the then British Ambassador to Bonn) which proved to be very beneficial.⁵³

In return, the reforms were beneficial for the government as they fitted its image of strong defence and willingness to take a leadership role in the Alliance. 54 The positive support of the government gave it a chance to play a

⁵⁰ Interviews, Bagnall on 6 November 1993 and Farndale on 21 June 1993.

⁵¹ Interview, Bagnall on 6 November 1993.

⁵² Interviews, Bagnall on 5 May 1993 and Day.

⁵³ Interviews, Bagnall on 6 November 1993, Inge, Kenny and Day.

⁵⁴ See McInnes, 1991, p.45.

wider role in the affairs of the Alliance than previously, and this stopped the decline of Britain as the leader in European NATO, especially at a time when Germany was growing more assertive. Above all, the reforms reinforced the British government's image of having a coherent plan to reinforce the progressive strengthening of NATO's defence, and as actually being capable of delivering its promise. Furthermore, as mentioned previously, as long as the government was relieved of the task of having to come up with more financial support, it had nothing to lose from the reforms. As a result, the reforms served the government's, and particularly Thatcher's, aspiration well in the sense that they offered strong evidence of her effort in the Alliance, thus helping the government in 'keeping up appearances.'55

5.3.4. SUMMARY

In short, there were no worthwhile debates concerning the reforms in Britain, and any small remnants of the initial opposition evaporated rapidly once the key figures in the British military establishment were convinced of the need for their introduction. In the military, the ground on which some opponents stood was a subjective and parochial one; hence, once converted to the ethos and benefits of the reforms, there was no more debate on, and opposition to, this necessity.

David Greenwood, "Expenditure and Management," in Byrd, 1991, p.64. Also see House of Commons, Third Report from the Defence Committee Session 1984-85: Defence Commitments and Resources and Defence Estimates 1985-86, Vol., I., (1985, London, HMSO), para. 68, for the acknowledgement by the Parliament for the favourable reception by the Alliance of the government's efforts to increase its military contribution.

5.4. THE DISPUTES AND DEBATES WITH THE GERMANS

5.4.1. AN OVERVIEW OF THE DISPUTES

For Bagnall, forward defence itself was not the problem; an over-literal interpretation of it was. In fact, as discussed in the previous chapter, he was more willing than others in the British Army to uphold the principle of forward defence, not for political reasons but for operational ones. This consideration was well-reflected in the following statement: 'forward defence is absolutely essential; if we are going to fight mobile offensive operations, we want to do it in and around the IGB and not deep into Western German territory, and that is a purely military argument and not a political one.'56 What he wanted was changes in the NORTHAG posture and operational concept to be able to counter and accommodate the political and strategic developments at the time. What he told the Allies, especially the Germans, was that a moderate increase in conventional capability and a rearrangement of NATO's defence posture would eventually be more acceptable than the total destruction of Germany and the possible nuclear devastation of the others.

However, his vision and concept of operation, which would inevitably involve a reinterpretation of forward defence, became a cause of major disputes and debates among the Germans. In fact, although the two were able to make a compromise, the disagreement with the Germans was never really fully resolved, and it was only after Von Sandrart replaced Chalupa as CINCENT in 1987 that the reforms were comprehensively implemented by the army group.

⁵⁶ Bagnall, op. cit., in Boyd-Carpenter, op. cit., p.154.

5.4.2. HIGHLIGHTS OF THE GERMAN OPPOSITION

The German position concerning the status of forward defence had been made very clear. In a speech at RUSI in 1984, Chalupa relentlessly insisted that, 'the principle of Forward Defence must.... not be allowed to become a matter of interpretation.' This was preceded by yet another strong and bitter reaffirmation by the then COS of the Bundeswehr, General Wolfgang Altenburg, that forward defence remained a 'pre-requisite for German membership of NATO' and that 'every kilometre yielded up means additional dangers for the population of Western Europe.' All the above actions constituted an attempt to halt the discord that was slowly surfacing at the time among different NATO commanders and politicians on the essence of the objective of the strategy, and were very much targeted against Bagnall's views.

The origin of the problem was the different depth of understanding among senior officers in NATO. The Germans were obviously irritated because they understood the British emphasis on the reinterpretation of forward defence as giving up the principles of the strategy altogether. This was viewed as insensitive and in blatant disregard of the needs of the German population and their survival as a country. Some Germans felt that no other countries were seriously concerned with their needs because the others (especially the British) were not going to fight a major war on their own soil.⁵⁸

In order to implement Bagnall's idea, the strength of forward deployed forces--and particularly the size of covering forces--needed to be cut to create reserves. This was contested by Chalupa since he felt it would cause severe

⁵⁷ See quotes in Farindon, op. cit., p.329.

⁵⁸ Interviews, Farndale on 21 June 1993, Von Sandrart and Chalupa.

problems concerning the evacuation of refugees, and he said in an interview he would have had difficulty explaining to his fellow citizens why NATO, and mostly German, forces were withdrawing without giving them sufficient time to seek safety. Also, given Germany's experience of territorial loss after World War Two, there was some suspicion of the possibility that NATO might compromise German territorial integrity to avoid, or stop, a war with the WP.⁵⁹ In short, the initial German opposition to the reforms stemmed from their misconception in regarding the new concept as a strategy requiring trading space for time.

Other grounds for German opposition were principally the difference of opinion concerning the prospect of a WP surprise attack. Chalupa said that since the Germans did not believe in a surprise attack because of modern surveillance systems, it was felt that a war in Europe would be bound to involve substantial mobilisation before the outbreak of hostilities; thus no need existed to plan for the worst. Therefore, under the circumstances, it was felt that the implementation of Bagnall's concept was a redundant, and even dangerous, idea. Particularly, the lowering of the number of the covering and MDA forces, which Bagnall called for, would not only significantly hamper the initial defence, but also actually favour a WP surprise option as it could aid the generation of a higher tempo attack since the changes would leave some areas in the forward sector open. They firmly believed a strong covering force would be needed to provide the necessary preparation time for the army group, not the contrary.

⁵⁹ Interviews, Farndale on 21 June 1993 and Von Sandrart.

⁶⁰ Interview, Chalupa.

⁶¹ Interviews, Chalupa, Von Sandrart and Kunzendorf. Also supported by Carver in an interview. Also see McInnes, 1988, p.384 and p.389, for possible operational repercussions which could be created by having a weak covering force.

Therefore, there was no middle ground for the debate since, in order to satisfy both parties' desires, the army group would be stretched too thinly to provide for a strong covering force and also to retain an army group reserve--which would prevent the concentration of sufficient forces for a decisive counter attack or counter penetration--without seriously depleting the force in MDA.⁶² As a result, this could compel some forces to end up being double-tasked with initial defensive and reserve roles.⁶³ In short, the Germans were not satisfied with the trade-off between the covering and MDA forces and reserves.

This perception was further fuelled by the German misconception that Bagnall's idea was to involve allowing enemy penetration down to Hanover, or even to the Rhine. They were appalled by the fact that this was not only against their beliefs, but also a move which would make the recovery of territory almost impossible once willingly given up.⁶⁴ In fact, the Germans perceived the new operational concept to be a plan for a counter offensive inside the IGB because they felt that NORTHAG did not have the capability for more. They worried that the failure of this could have dire consequences for Germany.⁶⁵

The next area of opposition concerned the feasibility. Firstly, the Germans felt that the British themselves lacked the necessary capabilities, especially the equipment in use, to implement such a concept. ⁶⁶ The weapons in the British Army's inventory at the time was comprised of such systems as the Chieftain MBT (main battle tank), the towed-Rapier SAM and FV432 APCs

⁶² See McInnes, 1990, p.147; and 1988, p. 389.

⁶³ Interview, Von Sandrart.

⁶⁴ Interviews, Farndale on 21 June 1993 and Inge.

⁶⁵ Interview, Chalupa.

⁶⁶ Interviews, Chalupa, Fischer and Kunzendorf.

(armoured personnel carrier). While it was considered that the Chieftain MBT had excellent protection, firepower and *tactical* mobility, the tank generally lacked the degree of battlefield mobility which was required for the counter stroke force. So did its other systems, which, in addition, lacked the necessary protection to undertake such an operation. ⁶⁷All these factors would have limited the flexibility and capability that NORTHAG was looking for. Secondly, the air situation might not be favourable and the operation could be disastrous without air superiority. ⁶⁸ This problem would be particularly severe, especially in the early days of war, in that the movement of the reserves would be detected and interdicted without air superiority having been achieved first. Thus, securing surprise under the situation would be almost impossible. Thirdly, since the operation involved the movement of large forces, this would put extreme pressure on logistics. Also, this problem would be aggravated by the sustainability and interoperability problems from which NORTHAG was suffering. ⁶⁹

In sum, the highlight of the German opposition was that there would be no need to take such a dangerous option since the threat of surprise attack was not as imminent as the British thought. Therefore, due to many operational and implementation problems, the new concept was an elusive one, and thus, the defence of Germany would be better served using the traditional method of defence. Also, such a view stemmed from the German misconception that the

⁶⁷ Interviews, Farndale on 21 June 1993, Chalupa and Dewar. See Gander, op. cit., p.154 and p.157, for problems with Chieftain's reliability.

⁶⁸ Interviews, Fischer and Chalupa.

⁶⁹ Interviews, Chalupa, Fischer and Kunzendorf. A point raised by Carver in an interview.

reforms were a callous interpretation of the political imperative, which they subsequently considered a willingness to compromise German territory.

5.4.3. SHORTCOMINGS OF THE GERMAN VIEWS

The limitations of the German views were as follows: firstly, the majority of the above rationale were political considerations disregarding many operationally critical factors (such as the need for an offensive operation to restore the original status quo) which would actually be more vital for the defence of Germany; secondly, they were strongly based on the war-avoiding strategy afforded by nuclear deterrence, which did not properly consider an eventuality such as a surprise attack, and would not be effective once a war got under way; thirdly, there was no guarantee that the necessary mobilisation could be achieved in time, and, as noted in 3.4., the WP's force superiority would reach its pinnacle on a short-term mobilisation scenario under which NATO would be at a distinct disadvantage.

Most of all, because of the terrain in the Hanover Plain and the limits of NORTHAG's fighting power, the enemy attack would develop in depth anyway. Since NORTHAG was made up of a collection of four different national corps with varying degrees of capability, there had to be a coherent plan to turn their limitations into strengths and thus be able to counter any contingency that might develop. It was not an attempt to draw up a contingency plan, but a way of having several options within the political guideline including mobile defence and army group counter offensive under a single operational plan which would, above all, allow for a simultaneous achievement of economy and concentration of forces to enhance forward defence according to the army group's capability.

Regarding criticisms put forth by the Germans, Bagnall offered specific alternatives and remedies to address those problems before, and during, his proposals. Firstly, he had a clear idea of what the size and the role of the covering and MDA forces should be. Again, it should be remembered that his operational design was to counter the enemy's single echelon attack under the standing start scenario. Therefore, as mentioned, the WP would not be able to concentrate against more than one or two sectors. This was why the strong covering force would not be needed, its role being limited to the identification of the enemy's main efforts, because it would be operationally dislocated as it would have to be deployed thinly along the front. Also, the preparation time would be so short that, rather than wasting troops in covering force duty, they could be better used as reserves. Meanwhile, there was no overriding requirement for the strong in-place MDA force because the tactical level reserve operation was in fact a part of the MDA operation. Particularly, Bagnall's aim was to strengthen the MDA defence through an imaginative use of both defence of strong points (i.e. AKA) and committal of the corps counter stroke.

Above all, this was necessary because of the lack of resources. In fact, when Bagnall and others allocated more resources through the reforms, they hurriedly reinforced the covering force and MDA rather than the counter force by reallocating those forces which were earmarked as reserves. 70 This move was a confirmation that Bagnall's endeavour was not a way to compromise forward defence but a way of reinforcing it with the limited resources available. Therefore, this trade-off was a justified one within the specific operational contingency (surprise attack) against which he was preparing his defence, and

⁷⁰ Interviews, Bagnall on 5 May 1993, Farndale on 21 June 1993, Inge and Kenny. See more in chapter 6.

although the size of forces was small, the covering and MDA forces were balanced in the sense that they were sufficient to create an environment within which his counter offensive concept could be implemented.

The problem of the British ability to implement the new concept was somewhat remedied when Challenger MBT and Warrior MICV (Mechanised Infantry Combat Vehicle) were introduced in 1982 and 1985 respectively, while Bagnall and other COMNORTHAGs after him paid particular attention to improving the interoperability, sustainability, logistics capability and training of the army group. 71 Also, as mentioned, the adoption of the Land/Air Battle concept with the ATAF was to specifically address the problems of achieving air superiority and providing tailored support for other important army group operations. In particular, both Bagnall and Farndale's recognition that there would be an interoperability problem in an army group made up of different national contingents led to their preference of 3 and 7 Panzer divisions as a major counter offensive force while maintaining 3 (BR) Division in a supporting role, until 3 (US) Corps and other resources were allocated to NORTHAG. 72

Meanwhile, Bagnall thought the corps counter stroke should be launched fairly early in the conflict to disrupt the enemy's advance at the operational level (also as a way of complementing the weak covering and MDA forces), while the army group counter offensive should be put off until the result of the corps

⁷¹ Interviews, Bagnall on 5 May 1993, Dewar, Farndale on 21 June 1993 and Inge. See more in chapter 7.

However, as noted previously, Bagnall's initial perception was that, in the worst case scenario, he might not be able to use 3 (Pz) because it would have to cover for the deployment of 1 (NL) Corps when surprised. In this case, 7 (Pz) and 3 (BR) divisions would have to be used together in a double envelopment counter stroke launched from each corps area to avoid the interoperability problems which could surface in the case of mounting a joint single stroke counter offensive.

operation was known. Above all, a successful corps counter stroke, and an army group counter offensive following immediately after the corps defensive operation, would prevent the enemy from making a major penetration of the NORTHAG area. The 1983 CPX proved that this could be done by meeting the WP attack as early and as far forward as possible.

In fact, this was an occasion which proved that achieving surprise was possible once the basic requirements (at least temporary air superiority, quick identification of the enemy main efforts, and disruption of the enemy plan) were met before the launching of the operation. Also, since the whole idea was developed based on the assumption that the WP would launch a surprise attack, without an immediate follow-on echelon, the success of this operation would leave a gap between the leading and reinforcing echelons, which would definitely hold up the progress of a war.

In short, the tension between the Germans and British in the early days stemmed from the fact that they had different political priorities (nuclear deterrence and forward defence) and strategic perceptions (surprise attack), as well as different ideas on how the limited resources should be utilised in the defence of Germany, which could be interpreted differently from person to person and from country to country.

5.4.4. THE IMPACT OF PERSONALITY ON THE DEBATES

The most important aspect in understanding the full extent of the debate between the British and Germans is the impact and role of the personalities of the major actors since the strong personal element involved in the debate was in fact as important as the obvious difference in views over the strategic and operational considerations. On the political and strategic side, the debate was ignited by the German commander, Chalupa, who was also the theatre commander (CINCENT), treated the defence of Germany in terms of deterrence and thought a war would come only after a substantial mobilisation, whereas Bagnall, who was the top British field commander in the theatre viewed this in terms of defence after the collapse of deterrence, and the major challenge came from WP surprise attack. It was thus a debate between a German who wanted to reinforce deterrence through traditional logic, which stressed not fighting a war at all (and relying on nuclear first- and early-use), versus a Briton who thought this an outdated concept which must be reinforced by the actual capability for successful defence as the WP capability improved.

Yet this debate was equally, if not more, affected by differing personal feelings between Bagnall and Chalupa. As the two, and others who had observed the dispute, admitted, the debate was intense and emotional. It sometimes resulted in bitter personal disputes involving not only discrediting each other's ideas, but also sometimes a 'name-calling' match. 73 Although this did not cause a political problem in the Alliance in the end, as the feud was confined to the personal level and no official objection to the reforms was filed, it was a reflection of a certain amount of turf fights among NATO's senior officers, as well as a clash between diverse kinds of national pride, and this was a major factor which could have changed the course of the reforms. In fact, this element sometimes exceeded the realms of debate and made some people forget the original aims of formulating the reforms as they developed personal antagonism towards each other (perhaps more so in the case of Bagnall than Chalupa).

⁷³ Interviews, Bagnall on 5 May and 6 November 1993, Dewar, Farndale on 14 April and 21 June 1993, Von Sandrart, Kenny, Inge, and Chalupa.

Although this was not necessarily about placing one's feelings before national interests, since the debate originated from the fact that they were both genuinely concerned about maintaining deterrence, it became just that as the disputes continued.

For instance, Chalupa told me in an interview that, although he was glad that Bagnall was able to devise an ambitious reform plan, and did recognise that Bagnall's ideas would be beneficial in improving the operational efficacy of NORTHAG, he felt Bagnall's counter offensive concept to be dangerous and boasting a capability which the British did not have. 74 It was true that since the reforms were initiated and advocated by the British, Bagnall and other British officers undoubtedly became more assertive and sometimes unintentionally offended some Germans. In fact, Chalupa was annoyed at being preached to about principles which the Germans themselves had pioneered--operational and manoeuvre war--by the British, whom they tacitly viewed as novices. Thus Chalupa was surprised that a small army, such as the British one, could even contemplate something which a larger army with an excellent tradition in operational and manoeuvre war, such as the German one, defending its own country considered to be too ambitious. Most of all, he was offended because he thought the Germans, not the British, had the prerogative to decide how the defence of Germany should be planned and implemented, and thus he resented actions he considered challenging to his perception of how the defence of his country should be conducted. It was a reflection of Chalupa's philosophy that, 'we Germans understand our situation better than anyone, unlike you British who

⁷⁴ Interview, Chalupa. Also, interviews, Fischer, Kunzendorf and Von Sandrart.

do not have to fight a war on your soil.'⁷⁵ Indeed for him, the British reforms were merely cosmetic and aimed simply at gaining more control within the Alliance.⁷⁶ This was also, in a way, a reflection of growing German assertiveness and confidence in the defence of their country.⁷⁷

Equally, Bagnall regarded Chalupa as incompetent, skewed, and not fully understanding the new concept--and his career as too politically-oriented--to have developed broader and rational views concerning the defence of his own country. Also, he thought that Chalupa's thinking epitomised a traditional German dilemma between deterrence and defence--the politically desirable options and the operational reality which sometimes did not go hand-in-hand with the political imperatives. 78 For example, how could Chalupa even think of gaining the territory in the east without a counter offensive capability? How could he conceive of sparing its population from a nuclear holocaust if he were forced to use nuclear weapons before offering a strong conventional resistance, and most of all, without even thinking that the conventional defence of Germany was possible?

As mentioned, the debate had never really been satisfactorily resolved while Chalupa remained as CINCENT, and Bagnall and Chalupa never had an opportunity to reconcile their personal differences since Bagnall left Germany in 1986 as he was appointed CGS. Nonetheless, despite the fact that Chalupa did not officially endorse the new concept, he allowed an 'understanding' to be

⁷⁵ Interviews, Bagnall on 5 May and 6 November 1993, Dewar, Farndale on 14 April and 21 June 1993, Von Sandrart, Kenny, Inge and Chalupa.

⁷⁶ Interviews, Chalupa, Fischer, Kunzendorf and Von Sandrart.

⁷⁷ Interview, Day.

⁷⁸ Interviews, Bagnall on 5 May and 6 November 1993.

reached with the British that Germany might provide an additional division to COMNORTHAG. Nonetheless, Chalupa was prepared to overrule Bagnall by exercising his seniority if the dispute became compromising to the German (his) understanding of forward defence.⁷⁹

There were many reasons for Chalupa's action, despite his personal resentment towards Bagnall and his reforms. For instance, Chalupa was concerned about a possible political backdraft by filing an official protest to SACEUR and seeking permission to overrule COMNORTHAG. Many believed that this was politically difficult in practice. Also they commented that, because Chalupa was a political person, and, in his own way, had a genuine concern for the solidarity of the Alliance, he chose to 'overlook' and exercise discretion by intervening only in matters which he considered to be too audacious (such as agreeing on thinning out forward defence to hold back 3 Panzer division in the rear) rather than objecting to the changes outright since he had the power to overrule this informal arrangement depending on the progress of war. ⁸⁰ Thus, it was not too difficult for him to unofficially concede to this preliminary agreement.

Above all, the main reason that a major conflict was avoided was Von Sandrart's conciliatory measures. In fact, he acted as a buffer between Bagnall and Chalupa, and without his intervention and careful arbitration, the introduction of the reforms could have faced serious barriers. In this sense, Von Sandrart was an atypical person, ready to set aside both national pride and political concerns in order to secure what was important and required to bolster

⁷⁹ Interview, Chalupa.

⁸⁰ Interviews, Bagnall on 5 May 1993 and Farndale 21 June 1993, Inge and Von Sandrart.

strategic and operational imperatives; this was not only critical for the defence of the country but also for the possibility of some territorial gains, or ultimately, reunification, in the event of Germany's being forced to pay a heavy price through WP provocation. He believed in 'taking a token' to punish the WP. Also he understood Bagnall's concept fully and appreciated that the new idea was not necessarily compromising to forward defence since it did not involve trading space for time and would be launched early to stop the enemy progress before it built up significant momentum. 81

This retaliatory aspect of the new concept was something Chalupa also recognised to have many political and strategic advantages, although he remained sceptical of Bagnall's concept. His logic coincided with Von Sandrart's that if they were forced into a war with the WP, they would 'take a token', or at least seek some territorial gains. 82 If there was one element which completely agreed with Chalupa, it was that Bagnall's concept offered him a plausible means and operational framework through which to achieve the secret German aspiration to regain territory in the case of war, provided the progress of a war became favourable to NATO. 83 If it did not, he always had the power not to divert the reserve to reinforce forward defence by overruling Bagnall.

In short, Chalupa was being as opportunistic, shrewd, and flexible as Bagnall had been in pursuing his own ideas; rather than objecting to the reforms, which could have many political ramifications, he opted to maintain control over the situation as he had the ultimate power of decision at the end of the day.

⁸¹ Interview, Von Sandrart.

⁸² Interviews, Bagnall on 5 May 1993, Chalupa and Farndale 21 June 1993 and Von Sandrart.

⁸³ Interviews, Chalupa and Von Sandrart.

Equally, he remained indecisive and political because his main motivation for not rejecting the whole idea was his lack of conviction that Bagnall was wrong. Had he possessed the courage of his convictions, he would have rejected the changes from the outset since he had the prerogative as CINCENT.

In the end, nothing happened. As soon as Chalupa retired, the debate ceased. This was mainly due to the fact that Von Sandrart became his successor and was in favour of the new concept. Although Bagnall could not fully implement the reforms under a hostile CINCENT, he had laid the foundation upon which his successor, Farndale, was able to finalise what was already agreed upon in essence. Farndale's job was to solidify the ground and officialise the earlier understandings.

5.5. CONCLUSION

In this chapter, I have argued that success has to be attributed most of all to Bagnall's personality and ability to convince a variety of people throughout the hierarchy of the military and government. The effective use of the TDC and his subordinates was exemplary, since it did yield major successes. This was a reflection of Bagnall's personality, his tendency to work out all details before submitting them to be scrutinised by the others, which, in the end, left no loose ends to be criticised. Meanwhile, the main reason why the British government, civil service, and military came to embrace Bagnall's reforms was that their successful implementation would largely be favourable to strengthening Britain's leadership among the Allies in Europe.

The early German opposition stemmed from the idea that the reforms would weaken NATO's deterrence. This notion was wrong for four reasons. Firstly, the WP's de facto conventional superiority significantly strengthened its chance of launching a surprise attack, which discredited the belief that a war could only come after a period of mobilisation. Secondly, although the Germans saw the British concept to be exclusively about mobile operations which they were not capable of implementing, it was in reality about taking a calculated risk (because of the lack of resources) which utilised both positional and mobile elements in the army group defence. Thirdly, although it was true that Bagnall's original concept could only be achieved by weakening the covering and MDA forces to create an operational reserve, the reinterpretation of forward defence did not mean the abandonment of the strategy, but was actually a way of strengthening it with the fostering of a counter offensive capability with which to restore the original status quo. Finally, it was a move which actually reinforced

deterrence by providing strong means of both denial (with conventional forces) and punishment (with nuclear and, to an extent, conventional forces as well).

In addition to these strategic and operational debates, I have identified that the element of personality was quite significant. It was true that the British previously lacked the necessary aptitude and ideas to undertake the kind of mission imagined, but an equally important factor at the root of the German opposition was its desire to resist others' intervention and leadership in matters which concerned its national security. Indeed, this was an unfortunate episode in the saga of the debates over the reforms. This was a good lesson on how decisively personality might have affected so crucial a matter, since any failure to reach a consensus could have caused major repercussions and a political split in the Alliance.

Nonetheless, it was fortunate that Von Sandrart, who had more favourable views on Bagnall's reforms, was able to arbitrate the differences between Bagnall and Chalupa prevent the outbreak of a public dispute, and dissuade Chalupa from objecting to the reforms officially. In this sense, Bagnall's ideas could not be fully implemented under a hostile CINCENT, but his effort laid the foundation on which his successor, Farndale, could pursue the changes under the new CINCENT, Von Sandrart.

CHAPTER 6 THE EXPANSION OF THE REFORMS

6.1. INTRODUCTION

This chapter's aim is to discuss the expansion of the reforms by Farndale, and the process of adopting them by the Alliance. I argue that the expansion of the reforms was a logical and natural evolutionary process aimed at utilising the newly available resources to further strengthen the reforms started by Bagnall. This was a deliberate policy with added incidental effects. It was deliberate in the sense that, because of the new resources and burgeoning optimism and confidence, Farndale wanted to explore other options in order to make the reforms more effective. Meanwhile, it had incidental consequences in that his expansion reached a state in which its counter offensive concept began to radiate an aspect of conventional deterrence and retaliation.

In this sense, it was a watershed for NORTHAG as the operational concept and the ideas of deterrence moved away from a nuclear to a conventional basis, from denial (although Bagnall's concept had a strong element of punishment in terms of aiming to destroy the enemy force) to the stage when both denial and punishment (by the way of a counter offensive over the IGB) were planned. This was a subtle and previously unpremeditated progress, but an aspect of conventional retaliation came, although unwittingly, to win the heart of some Germans as well because it supported their secret aspiration to regain territories in the east, which they had always considered to be their own, if they were forced to fight a war.

Finally, I argue that the remarkably smooth process of disseminating the reforms in the Alliance, after the initial debates were settled, was indebted to the overall changes of mood in the Alliance, which was becoming more confident of its capabilities, and the change in views which rendered a more offensive-oriented concept acceptable.

6.2. MARTIN FARNDALE'S EXPANSION OF THE REFORMS

6.2.1. HIGHLIGHTS OF FARNDALE'S THINKING

Farndale's expansion was encouraged by five developments preceding, as well as during, his tenure as COMNORTHAG. Firstly, since most of the difficult and sensitive military and political obstacles within the Army and NATO were more or less overcome and settled by Bagnall earlier on, Farndale was less burdened by political in-fighting, and was able to get on with the actual implementation of the reforms. Secondly, when Von Sandrart became the new CINCENT, he also became Farndale's most important ally since he supported the implementation of the original concept as well as Farndale's expansion of it. 1 Thirdly, NATO became more confident both politically and militarily as the earlier effort to modernise its defence was slowly reaching fruition. Fourthly, Farndale thought that, with the growing capabilities of NORTHAG, the WP would not be able to launch a standing start attack, especially after Gorbachev came to power. Finally and most importantly, the POMCUS (Pre-positioning of Material Configured in Unit Sets) site for 3 (US) Corps was completed and officially designated as NORTHAG's exclusive operational reserve. By the time Farndale left his post, he was sure that at least two out of three POMCUS divisions would be deployed and ready for battle within four days of the initiation of the hostilities.²

Unlike Bagnall's intention, which was to stop or destroy the WP first operational echelon (or a single echelon attack) mainly with the in-theatre army

¹ Interviews, Farndale on 21 June 1993 and Von Sandrart.

² Interviews, Farndale on 21 June 1993 and 19 May 1994. Also interviews, Von Sandrart and Kenny.

group reserves and some of the external operational reserves to buy some time before a nuclear decision by the Alliance, or to seek a negotiated settlement, Farndale's idea went well beyond this original concept, both in scale and intensity.³ First of all, he was willing to fight an extended conventional-only battle with the substantially increased number of operational reserves against at least three or possibly four WP operational echelons, each consisting of between six to eight divisions as a part of the first operational battle (which was a conventional phase). Secondly, as he thought that the danger of a surprise attack was diminishing, he felt he should be able to prepare to fight under various scenarios, including both a standing start and a stop-go, or post-mobilisation war.⁴ Thirdly, he was firmly committed to expanding the scope of warfare not only within the NATO sectors, but also to WP territory.

The underlying essence of Farndale's expansion was, therefore, to execute Bagnall's counter offensive concept on a larger scale with the allocation of more reserves and resources. This was a logical and deliberate progression from the original idea because Farndale believed that the availability of more resources, as he projected them to be more than previously calculated in time of crisis, would enable the army group to undertake more ambitious missions than earlier. Furthermore, it would give him the capability to prolong the conventional (first)-phase of war, not only by creating a pause, but also by actually winning the first phase of the war thoroughly with conventional means only under various scenarios of attack.

The defence for the first phase of war would have to consist of three stages: the first battle, the second battle and the subsequent operation, as agreed

³ Interviews, Farndale on 21 June 1993, Von Sandrart and Kenny.

⁴ Interviews, Farndale on 21 June 1993 and 19 May 1994.

with the CINCENT.⁵ Prior to the initiation of the conflict, the requisite pre-war preparation would be carried out; NORTHAG would concentrate on building up its reserves while the corps would be left alone to do their own job of preparing the defences and allocating corps reserves. The first battle would mainly be comprised of corps-defensive battles against the WP first operational echelon designed to absorb the impetus of the WP initial onslaught and break its tempo by conventional means. Meanwhile, the army group would try to identify where the enemy main effort was by picking up the OMG forming. The initial aim would be to hold the WP advance for as long as possible and to make its life very difficult. The principle of defending ground which was favourable for defence was accepted and all agreed that the size of the covering force would be small. In the defence of the MDA, the Germans and British would be holding the far end of each shoulder to shape the WP penetration. It was envisaged that one major penetration would occur between the German and British sectors. The shaping of the penetration would be possible because they were ready to accept it under the new concept, while the Dutch and Belgians would be able to hold their defences as WP concentration was not expected there.⁶

The first operational counter stroke using the in-theatre army group reserves would be launched against the enemy penetration which, by then, would have penetrated about 30 kms (the major aim here was actually closer to the counter attack concept during which the army group could repel the enemy and make conditions for the follow-on reserve operation easier by holding a secure starting-line). According to the size of the enemy force, at least one armoured

⁵ The following description is based on interviews with Bagnall on 5 May 1993, Farndale on 21 June 1993, Von Sandrart and Kenny. Also see Von Sandrart's speech as CINCENT in 1989.

⁶ Interview, Farndale on 21 June 1993.

division (e.g. 7 Panzer) would be used to launch a stroke across the corps boundaries to attack the enemy flank. When it succeeded, the fighting power of the enemy first operational echelon was expected to more or less evaporate. The fighting along the IGB would continue and a few blisters of the enemy would remain, but the initial penetration would be closed up.

The second battle was a counter battle using either the unused in-theatre reserves or the external reserves (3 (US) Corps) against the enemy second operational echelon. By then, the OMG would either be forming part of the second echelon, and would thus be dealt with as a part of the second battle, or would already have been dealt with by the first army group counter attack. It was *hoped* that the use of 3 (US) Corps would be delayed until the third echelon approached by using the in-theatre reserves (e.g. consisting 3 Panzer and 3 (BR) Armoured Division). 8 In the case of its use, it would be attacking across the IGB towards Magdeburg, and the corps would be deployed as a whole. 9

In the subsequent phase, which was the third phase, Farndale would expect the arrival of the WP third echelon. By this time, the army group would have exhausted many of its resources, unless it received support from the 1 French Army. By putting together additional reserves from the remainder of the forces used in earlier counter strokes, if possible, it could buy a little more time by having 'one more go.' Otherwise, it would be time to commit to going nuclear--hence the start of the next phase of the operational battle.

⁷ Interview, Farndale on 21 June 1993.

⁸ Interviews, Farndale on 21 June 1993. Also see, Von Sandrart's speech as CINCENT in 1989.

⁹ Interviews, Farndale on 21 June 1993 and Von Sandrart.

¹⁰ Interview, Farndale on 21 June 1993.

In essence, Farndale's concept was to destroy the first echelon with the in-theatre corps defence and the army group reserve, hold and destroy the second echelon with 3 (US) Corps, and together hold the advance of the third echelon, or counter it if 1 French Army or some element from the French FAR (Force d'Action Rapide) became available, before becoming committed to using nuclear weapons. 11 The most crucial element of his ideas was the availability of 3 (US) Corps, as it was a very strong formation which could deliver the kind of counter stroke which Farndale envisaged, and if it could arrive in theatre in time, the army group would be under less pressure to build up reserves at the expense of the front-line force. 3 (US) Corps was a vital component of the army group planning as its timely arrival would prevent NORTHAG from going nuclear at an early stage of the conflict. 12

6.2.2. REFORGER 87 AND THE TEST OF THE EXPANDED NORTHAG CONCEPT OF OPERATION

The preparation for the 1987 REFORGER, which was the nineteenth of a series of exercises to be held in October 1987, began in 1984 when the C-in-C US Army in Europe (CINCUSAREUR) invited COMNORTHAG to plan, prepare, and conduct the FTX phase (code-named 'Certain Strike') of REFORGER 87. It was the first time a corps-level exercise was commanded by a British officer.

The first phase of the exercise comprised the return of the US forces to Germany (thus the name REFORGER) by air and sea to be linked up with pre-

¹¹ See, Von Sandrart's speech as CINCENT in 1989 for the possibility of allocating 1 French Army and the element of FAR to NORTHAG.

¹² Interviews, Farndale on 21 June 1993, Von Sandrart and Kenny.

stocked equipment in POMCUS sites located in the Netherlands, Belgium, and the FRG. They were then moved by road and rail to their concentration area while the commanders were engaged in CPX against the WP leading echelons. ¹³ Meanwhile, forces of NORTHAG four national contingents, 3 (US) corps (3 divisions), a company from 1 French Army, all of 2ATAF, and the German Territorial Command were preparing for involvement in 'Certain Strike.' ¹⁴

The underlying concepts of the FTX phase were as follows: first, holding parts of the front where it was 'essential to achieve cohesion and provide the framework from which counter moves can be launched'; second, achieving as much depth as possible within the strategy of forward defence 'in order to buy time and space in which to move onto the offensive'; and third, 'hold[ing] effective reserves at all levels'. The orange force was assembled from Belgian, Dutch, and British brigades, and was led by the Dutch commander, to simulate penetration north of Hanover. Meanwhile, the objective of 3 (US) Corps acting as the NORTHAG reserve was to make a 100-km transit through a passage of lines of 1 German Corps to attack the flank of the orange penetration. The Infact, this was a simulated operational counter stroke by NORTHAG, which involved the corps fighting through, at the end, a distance of 150 kms (average 35 km advance per day) across the IGB towards Magdeburg, which was the hypothetical target.

¹³ See Farndale, 1988--B, pp.7-8 and p.11.

¹⁴ Farndale, 1988--B, p.8

¹⁵ Farndale, 1988--B, p.9

¹⁶ See Farndale, 1988--B, pp.12-13 and pp.16-7.

¹⁷ Interview, Farndale on 21 June 1993. See the details of troops movement during the FTX phase of the REFORGER 87, in C.L. Donnelly, "Warsaw Pact Perceptions of the Correlation of Forces," in Keith Dunn and Stephen Flanagan,

The most spectacular battle took place as 3 (US) Corps broke out after an assault river crossing which involved the extensive use of AHs and airmobile operations to seize a bridgehead. Soon after, a series of tank battles ensued involving over 400 tanks, 500 guns and 200 helicopters and lasting almost 24 hours. 3 (US) Corps attacks over a two-day period were made over a depth of 50-60 kms; the Corps engaged in a series of encounter battles, feints, attacks, counter attacks, and counter counter attacks. Counter attack and counter stroke operations were practised throughout the exercise, which lasted for two weeks. 18

The successful conduct of the REFORGER 87 exercise was crucial and reassuring for everyone in NORTHAG in a number of ways. Firstly, it was the first real test of the viability of the new NORTHAG concept, which was officially adopted by all NORTHAG nations in June 1986, in actual FTX format involving all in-place corps and the whole of 3 (US) Corps. Especially during the FTX phase, it tested the interoperability between national forces and the importance of the army group level battle procedures and SOPs. ¹⁹ Secondly, it involved the full-scale deployment of 3 (US) Corps in Europe, the success of which was vital for the credibility of the new concept. Thirdly, along with the valuable experience gained through the exercise, it delivered a clear message to the WP that NORTHAG's defence was indeed formidable, and that it would not win a war against NATO easily. Therefore, the exercise itself, as well as the demonstration of NORTHAG's commitment and ability to resist a possible WP

ed., NATO in the 5th Decade, (Washington, D.C.: National Defense University Press, 1990), p.58.

¹⁸ See Farndale, 1988--B, pp.16-7.

¹⁹ See Farndale, 1988--B, p.8 and p.12.

attack, was considered an important factor in reinforcing deterrence in the eyes of both the WP and NATO.²⁰ In fact, the ultimate exercise was dubbed 'THE LAST BATTLE OF THE COLD WAR.' Finally, this was the occasion which provided the necessary credibility and desirability for Farndale's expansion, because it demonstrated NORTHAG's ability to undertake highly intensive mobile defence operations without the use of nuclear weapons, as well as to launch a major conventional counter offensive to restore the original status quo and pose a counter threat against further WP attack by sitting astride the area between the IGB and Magdeburg. Most of all, it demonstrated its ability to coordinate its multinational forces with 3 (US) force.²¹ And this exercise showed that, while the original Bagnall concept envisaged a decisive blow against the first echelon, if Farndale's operation succeeded, it could ensure the destruction of at least two enemy operational echelons while delaying the introduction of a third one to the battle.

6.2.3. THE POLITICAL RESTRICTIONS, OPERATIONAL REALITIES AND THE CROSS BORDER COUNTER OFFENSIVE

One of the most critical elements of REFORGER 87 was the simulated counter offensive across the IGB. Such a leap in the Allies' operational thinking, and particularly the fact that such planning actually became a viable option for NORTHAG's defence plan, was a momentous development which signalled the fundamental changes in the Alliance's views on the defence of Central Europe. In fact, soon after the conclusion of REFORGER 87, and with Farndale's new

²⁰ Interview, Farndale on 21 June 1993.

²¹ See Karber, op. cit., in Pfaltzgraff and Shultz, op. cit., pp.178-80.

concept, this changing view became more acceptable to others in the Alliance, despite the fact that his ideas were not tested in their entirety.

Yet, the political guidelines concerning the possible cross-IGB offensive remained clear--there must be no peacetime planning of such an operation, nor must it be acknowledged that such a plan existed. This prohibition stemmed from a quite obvious reason: NATO was a defensive Alliance which did not plan any offensive or preemptive operations. Besides, article 26 of the basic law of the FRG Constitution specifically banned preparation for a war of aggression. Also, the clear indication of such an intent would be damaging both to the maintenance of good relations with the WP and to the preservation of the cohesion of NATO. Above all, it would be politically disastrous, especially in Germany.²² Thus, as Von Sandrart complained, it was easier for the politicians not to 'differentiate between offensive operations within the context of a strategic defence and a strategy of aggression.²³

Indeed, the possibility of such an operation remained taboo for NATO until it received shock treatment by Bagnall during the 1983 CPX 'Winter Sale,' when he launched a cross-border counter offensive as he detected and attacked a gap in the WP advance over the IGB. After that, such a possibility began to be cautiously, but actively, discussed. 24 At the same time, it was also gaining some support (from a small section of the public) due to a few strategic and operational advantages it could bring in the case of war. That is to say, it was absurd for NATO to allow the fighting to be confined to FRG territory; so,

²² See Stanley Sloan, NATO's Future, (Washington, D.C.: National Defence University Press, 1985), p.146.

²³ Von Sandrart, speech as CINCENT in 1989.

²⁴ Interviews, Bagnall on 5 May 1993, Farndale on 21 June 1993, Inge, Kenny and Von Sandrart.

although NATO did not have to adopt an offensive strategy, if it were able to gain some territory over the IGB, it would be politically useful in negotiations for terminating the war. ²⁵ Secondly, due to the lack of depth and time to allow the full mobilisation of NATO, it was crucial to stop the enemy momentum as close to the IGB as possible. ²⁶ Above all, as Niklas-Carter wrote, '[It] would certainly act as a powerful kind of conventional deterrence, which would significantly bolster, though not replace, the existing nuclear deterrent. ²⁷ Its main appeal was, as Betts has described, that it would 'throw a wrench into carefully plotted Soviet plans,' which could be an effective counter surprise against any Soviet strategic and tactical surprises. ²⁸

Similarly, the fundamental rationale behind such thinking was that once the enemy violated the national border, his territory could no longer be a sanctuary. In fact, the cross-IGB operation gave a few clear strategic and operational advantages which paralleled the above argument. For example, an early cross-border counter offensive toward Magdeburg (as during CPX-83) was a solid plan because the counter force's left shoulder would be protected by the Elbe, while it was attacking the flank of the main WP thrust against the front of NORTHAG. Furthermore, opening an extra front, in a similar vein to Huntington's ideas, could actually relieve pressure on the army group, especially

²⁵ See Rennagel, op. cit., in Gabriel, op. cit., p.123; and Sloan, op.cit., pp.146-7, in addition to Dinter and Griffith, op. cit.; and Huntington op. cit., passim.

²⁶ See Norman Dodd, "Armoured Operations in the Future," <u>AQ&DJ</u>, (January 1980), p.10; and Rennagel, op. cit., in Gabriel, op. cit., p.123.

²⁷ Niklas-Carter, op. cit., in Harris and Toase, op. cit., p.211. Also see Simpkin, 1985, pp.276-8; and Mearsheimer, 1983, p.51, for the supporting ideas.

²⁸ Betts, 1982, p.213.

since the WP would not have sufficient forces to counter this.²⁹ Most of all, there was a limit to fighting a battle of withdrawal due to the lack of depth in Germany. Besides, it was much easier to destroy the enemy's momentum before he had developed a major penetration rather than after, provided his centre of gravity could be identified early.³⁰ Therefore, in the case of a war, the choice would have been clear. It meant either that the defence would be carried out in NATO's own areas, or that the attack would be launched over the IGB so as to gain depth and time. Both the Germans and British unequivocally agreed that depth would be gained forward, not backward. Furthermore, everyone believed that it would be done relatively quickly.³¹

As Bagnall and Farndale stressed, exercises such as CPX-83 and REFORGER 87 achieved a transition of thought among people in NATO. As a result, the changes in perception permitted them to actually consider that sort of contingency, and thus what had previously been objectionable became an acceptable option.³² In addition to this, more and more people were bound to acknowledge what was actually militarily sensible, and they knew in their hearts that, if the battle developed, action across the IGB would be inevitable. Once war broke out, rather than giving up German soil, the reverse would be better for NATO, as well as for the quick termination of war. What it had not known clearly until 'Certain Strike' was that it actually had the ability to exploit such an option in reality, and it was a military imperative which could not really be

²⁹ See Huntington, op. cit., pp.40-6; and Simpkin, 1985, p.307.

³⁰ Interviews, Bagnall on 5 May 1993, Farndale on 21 June 1993 and Von Sandrart.

³¹ Interviews, Von Sandrart, Bagnall and Farndale.

³² Interview, Farndale on 21 June 1993.

controlled by a solely political need.³³ Indeed, by the time REFORGER 87 was executed, there was no clear discontent over the objective of the exercise and its selection of the hypothetical target.³⁴ This was due to the changes in perception in both the civilian and military sectors towards the view that there was nothing wrong with such thinking as long as it was not an exercise in preparing NATO to undertake an offensive or preemptive attack. Therefore, one of the main contributions of Bagnall's new operational concept was that it made it easier for the military to think about taking the militarily desirable option, rather than abiding by the political restrictions, and Farndale's expanded idea actually provided an option to achieve that objective.

For their part, the Germans wanted East Germany to be *their* territory and if a war broke out, they would try everything in their power to regain the long-lost ground.³⁵ By quickly reclaiming the territories in the East, they could also secure some territorial gains if the war could be resolved through a negotiated settlement with the WP. Also, there was a notion that their taking the war to the east meant they could limit damage to the west. Such desires were clearly expressed during interviews with German officers and in observations by British officers.³⁶

Knowing such a secret, the only factor of which the military was wary was a possible leak of what it was thinking. In fact, the political guideline was so

³³ Interview, Farndale on 21 June 1993.

³⁴ Interviews, Bagnall on 5 May 1993, Farndale on 21 June 1993, Von Sandrart and Kenny.

³⁵ Interviews, Chalupa, Von Sandrart and Fischer. Also see Hackett, op. cit., pp.282-3, for the German dilemmas and desires concerning this issue.

³⁶ Interviews, Bagnall on 6 November 1993, Farndale on 21 June 1993, Von Sandrart, Chalupa and Fischer.

strict that even a map exercise or CPX, which contemplated a cross-border operation, was prohibited.³⁷ Nevertheless, the military continuously practised such an operation behind closed doors. Besides, it was absolutely essential to train officers to be able to undertake a larger-scale operation according to the operational imperative, not the political one. Furthermore, without some kind of training or forward thinking, NATO forces would not be able to undertake such an operation once the restriction was lifted. Therefore, the military had to be very careful that such exercises would not come to be known to those outside, particularly in the political and public domains. It was their belief that the exercises were necessary, but that peacetime exercises might be mistaken by the political leadership as a plan for preemptive attack, and this would have created a major controversy. Also, the military placed its hopes in the fact that the political and popular barriers would come down in the case of war.³⁸

Eventually, this kind of audacious forward thinking offered the Germans logical grounds with which to transcend the confines of forward defence as it offered them a rational alternative to, and neutralised their traditional excuse for, abiding by the strategy. Once the physical and mental barriers--which confined the military's capability to a level sufficient for planning defence inside the IGB only--were overcome, there was no reason why other militarily viable plans should not be considered. In this sense, although the new concept challenged and made largely invalid the German understanding of forward defence, in effect it made the strategy more relevant within the confines of operational planning because forward deployment (of strong area defence elements utilising both

³⁷ Interviews, Bagnall on 6 November 1993 and Von Sandrart.

³⁸ Interviews, Bagnall on 6 November 1993, Farndale on 21 June 1993 and Von Sandrart.

positional and mobile tactics) became more crucial than before to give NORTHAG a secure start-line to launch counter offensives as envisaged.

Therefore, it became difficult for the Germans to argue against Bagnall's logic, and eventually Farndale's ideas, and indeed this was one of the main reasons for Von Sandrart's enthusiastic support of the reforms. In fact, he believed that Bagnall was right for three reasons. Firstly, Bagnall's idea was not about having a contingency plan or altering the German and Alliance understanding of their strategic priority, but about increasing the options for defence by accepting the operational level concept which could make better use of limited resources. Secondly, he knew that due to the lack of forces, the mobility factor became extremely important to compensate for the weakness.³⁹ Thirdly, it was a prudent plan which gave NATO a chance to win the first battle by stopping the enemy's impetus with operational craft.⁴⁰

In sum, along with the fact that Farndale's expansion offered more options than those already planned, since it provided more leverage and choices for reacting to unforeseen contingencies, and his ideas were welcomed in terms of timing and good intentions. As Farndale stressed, his idea was based on the logic that having an extra option in addition to the existing plan could further enhance the promotion and exploration of new ideas which could transcend the confines of Central Europe. 41

³⁹ See Hans Henning Von Sandrart, "Forward Defence--Mobility and the Use of Barriers," NSN, (Special 1, 1985), p.40.

⁴⁰ See Hans Henning Von Sandrart, "Land Battle and the Army's Needs," in Boyd-Carpenter, op. cit., pp.145-7, for details.

⁴¹ Interview, Farndale on 21 June 1993.

6.2.4. THE LIMITS OF THE EXPANDED CONCEPT

Despite the number of benefits, Farndale's concept was in some ways too ambitious. First of all, it was based on resources which might not be available in time. In fact, his calculation of the possible allocation of reserves seemed too positive, and it thus endangered his plan, which could be seriously damaged if those resources on which he counted did not become available. He was very strongly dependent on the timely arrival of 3 (US) Corps, and he himself said in an interview that if it did not arrive, he would have gone nuclear quickly. 42 Furthermore, he mentioned various formations other than the previously agreed-on reserves, some of which were in fact CENTAG or NATO's strategic reserves, and which might not become available at all.

For example, other than 3 and 7 Panzer and 3 (BR) Armoured Division, Farndale also included 11 Panzergrenadier, while retaining the option of adding 1 (NL) Division, which was to be mobilised and brought from home as his rear reserve if the necessity arose. He also mentioned 1 French Army (which was the size of a corps), as well as some elements of FAR. As described earlier, all these formations were to be used in multi-axes, a multiple counter operation during the various phases of battles, but this would not have been possible in reality. Firstly, 3 (BR) Division was eventually reallocated back to the British corps as its own reserve after it was recognised that it would have difficulty in undertaking an effective joint operation with Panzer divisions because of the lack of interoperability. Also, 11 Panzergrenadier could not be earmarked as a reserve because of its duty to cover the deployment of 1 (NL) Corps in addition to tasks in its own corps area. As a result, the in-theatre army group reserve in

⁴² Interview, Farndale on 21 June 1993.

fact consisted of two divisions, 3 and 7 Panzer. 43 Secondly, retaining the option to use the 1 (NL) Division (which was a reinforcement for 1 (NL) Corps) as a reserve would have been very difficult, because it would probably have to be used to bolster its own corps defence due to the lack of the corps' readiness. Thirdly, although there were indeed many positive indicators which directed one towards the view that 3 (US) Corps would be available in time and quickly deployed to the battle position, the decision for dispatching the corps was an entirely political one which might not have materialised. In fact, there was no guarantee of its availability. Also, regardless of how well-trained they were, arriving from the US and marching up to the assembly area, and then waiting to be committed to a major counter offensive, was not feasible, since they would have been a prime target for WP air and other attacks. In short, the total number of reserve divisions Farndale would be able to have, even under a favourable estimate, were four divisions (two Panzer divisions plus about two US armoured divisions from 3 (US) Corps), not eight (3 division of 3 (US) Corps, three German, one British and one Dutch divisions). Furthermore, NORTHAG could not be sure about the definite availability of the French reinforcements.

The next concern was logistics and the other penalties NORTHAG had to pay if Farndale's idea was to be implemented. It is very difficult to imagine that NORTHAG could manage the traffic problems involved in moving those formations, especially if they became intermingled with refugees. Also, since NATO was still experiencing sustainability problems, which a best estimate still put as sufficient for less than 10 to 15 days of intensive fighting (despite some

⁴³ Interviews, Bagnall on 6 November 1993, Farndale on 21 June 1993, Kenny and Von Sandrart.

improvement), supporting such a grand-scale counter offensive would have been close to impossible.⁴⁴

Also, the operation itself was too complicated to be executed as planned, despite both the time invested in improving NORTHAG's C3I and the repeated training. Particularly, expecting to maintain a steady flow of information and hoping to keep up the control of several different operational battles across great distances by various national elements would have been daunting and would have quickly outrun the command staff's physical and psychological ability to cope with the demand. It was true that interoperability was somewhat improved in terms of C2, etc., but the possible chaos created from such complex operations would, in essence, have limited the army group's ability to cope. 45

Meanwhile, Farndale did not consider the fact that Bagnall's plan was most viable under a standing start scenario, since the movement of a large counter offensive force would have been only plausible in a battlefield with low force density. If mobilisation was carried out both sides, even if it were not a full mobilisation, the force density in the front would have been significantly higher than in standing start, and this would have prevented the manoeuvre of a large mobile force. Indeed, Farndale was less concerned with the prospect of a surprise attack than Bagnall, thus planning to fight a different kind of war. In short, utilising the manoeuvre and operational spirit remained as crucial as ever, but applying Bagnall's original operational plan, even with modifications, would have been unwise.

⁴⁴ Interviews, Bagnall on 6 November 1993 and Brown. See more on sustainability in chapter 7.6.

⁴⁵ See more on interoperability in chapter 7.6.

Most of all, the additional resources which Farndale had hoped to receive could be used instead to bolster the covering and main defensive battles, which could prevent the enemy's penetration in the first place, instead of risking them in a counter offensive. This was especially true if there was enough warning, thus enabling NATO to have sufficient time to mobilise. Both Bagnall and Farndale agreed that a major counter offensive was a dangerous option, and it was to be used only as a last resort. 46 In fact, as Bagnall pointed out, if the war came after some mobilisation and gradual political breakdown, there would be no need for this kind of planning. As Bagnall said in an interview: 'What's the point, if there were enough warning? [The Russians] would have tried it only if they thought they could catch us unprepared.'47 Given the sheer strength of the WP, it was prudent to bolster forward defence rather than undertake a risky option. Thus, his cross-border counter offensive was a measure to counter the enemy surprise attack to buy time for NATO's mobilisation, as well as to cater for other aforementioned reasons, since his in-theatre reserve would not be sufficient to win the war but might be enough to keep it going without hasty nuclear use. In other words, his aim was to force a pause. Therefore, if NORTHAG's ability to bolster forward defence had been substantially reinforced with the new resources to enforce a pause, there was no need to launch such a dangerous operation, the failure of which could cause severe ramifications to NATO's morale as it would expedite the defeat of its defence. The retention of such an ability, in addition to full mobilisation, could allow NATO to concentrate on stopping a war from starting by dissuasion, as the chance for a full-scale war with the WP would have significantly subsided. This was the original objective of the reforms.

⁴⁶ Interviews, Bagnall on 6 November 1993 and Farndale on 21 June 1993.

⁴⁷ Interview, Bagnall on 6 November 1993.

In Farndale's case, his argument was based on the fact that, with the allocation of more resources, it became possible to think about actually *winning* the war. ⁴⁸ Thus, he felt there was nothing wrong with exploring such an option if it could bring victory while securing some territorial gains. Moreover, neither idea posed a threat to the political objectives of the Alliance, because they provided the political leadership with a stronger hand to play against the WP. Meanwhile, they were militarily desirable options to consider as a part of an overall defence plan because the military had to have a means of maximising its capability to counter the WP operation. ⁴⁹

Although the counter offensive option, including a cross-border one, offered many benefits, a question has to be raised on why a last-resort operation should be planned ahead if one already had the ability to launch it without preplanning, the capability for which the new operational doctrine was designed to foster. In fact, Farndale pre-planned the cross-border operation to be an action which would have to be taken, rather than considering it as a possible option which could be launched if the operational situation dictated and favoured such an offensive action. Although he insisted, in an interview, that his idea was one of the options, there seems to have been a definite counter offensive plan according to interviews with other senior NORTHAG officers. ⁵⁰ As mentioned, it was the capability to launch such an attack that was most important, not the plan. There was no doubt that Farndale's expansion significantly enhanced the army group's capability and confidence; nonetheless, he should have paid more

⁴⁸ Interviews, Farndale on 21 June 1993 and Von Sandrart.

⁴⁹ Interviews, Bagnall on 5 May 1993, Farndale on 21 June 1993 and Von Sandrart.

⁵⁰ Interview, Farndale on 19 May 1994. Also interviews, Bagnall on 5 May 1993, Inge, Kenny and Von Sandrart.

attention to bolstering the existing defences. It was, in a way, becoming a deviation from this earlier aim. Winning the war was an irresistible motivation, but was this really as beneficial as it sounded?⁵¹

In short, Farndale's concept was over-enthusiastic compared to Bagnall's in three major ways. One, its success depended on resources which were not dependable, and this was in a sense in direct opposition to Bagnall's idea which was to make the best use of what was already available in-theatre. Two, Farndale was preparing under the best possible circumstances, whereas Bagnall was planning for the worst, the evidence of which indicated Farndale's lack of comprehensive understanding of the origin and essence of Bagnall's concept. Three, Farndale underestimated the political repercussions of planning an overtly offensive operation, despite the fact that it was within the defensive framework, and so did not consider a possible political breakdown in the Alliance.

Overall, it seems logical to conclude that Bagnall's idea was more realistic--he did not expect 3 (US) Corps to arrive in time, although he hoped to be able to use them (whenever they succeeded in arriving) in a decisive defensive battle if the army group counter offensive failed. In fact, he put his faith in the intheatre reserve operation. According to Bagnall, if such an operation failed, he would rather use 3 (US) Corps to consolidate his defences than expose it to an uncertain and dangerous mission, especially since he doubted whether circumstances, rather than plans, would enable it to be used as a complete corps. 52 In that sense, Bagnall was truer to his own concept in that forward defence was an operational necessity, not just rhetoric. In short, he believed that conventional improvement was needed to reinforce nuclear deterrence, not to

⁵¹ See the next section for more.

⁵² Interview, Bagnall on 6 November 1993.

embrace conventional deterrence. In fact, Land/Air Battle, and associated improvements, signalled that NORTHAG's defence was beginning to take on the character of conventional deterrence (see next section).

Both Bagnall and Farndale approached an extremely difficult situation with the utmost enthusiasm and tried to find an alternative with a pragmatic managerial response based on intellectual rationalisation. Although Bagnall was critical of Farndale's views, he nevertheless stressed that he was glad that Farndale thought he could do what he wanted to do, and if everything happened as Farndale hoped, he might have achieved it.⁵³ Nonetheless, the essence of the expanded concept remained the same as before. Also, it showed a certain confidence and euphoria which had not existed previously and which had grown sufficiently in NORTHAG as a result of the reforms. Most of all, both Bagnall's and Farndale's ideas succeeded in reinforcing the operational logic of forward defence in one way or another. As will be discussed at the end of this chapter, after another digestion period and a review of Farndale's expanded concept by his successor, Kenny, in late 1987, the army group concept was redrafted and returned somewhat closer to Bagnall's original idea.

6.2.5. THE REFORMS AND CONVENTIONAL DETERRENCE

As much as Bagnall's personality was the factor initiating the reforms, the expansion of the concept reflected Farndale's personality. Based on interviews, one could sum-up Farndale as a pragmatic and amiable person who showed immense mental and physical capacity for detailed planning and implementation of the affairs of the army group, including the reforms. Also he was described as

⁵³ Interview, Bagnall on 6 November 1993.

a person with the qualities of a good businessman--a professional soldier rather than a charismatic leader.⁵⁴ In fact, although he lacked Bagnall's flair, he certainly had the resilience, patience, and brilliance to implement the original reforms and expand them according to the changing situation in Europe. It was true that his expansion was easier at his time, but without his versatility and intellectual capacity, the expansion of the reforms, which in fact became a watershed in transforming the British and NORTHAG armies' concept of deterrence into a conventional one, would not have been possible.

However, Farndale's stress on the conventional aspects of defence and deterrence was not entirely desirable, though it became a major catalyst in enhancing confidence in the Alliance. Also, since the new idea was presented and packaged as a plausible and attainable goal, as well as suiting the secret German ambition, there was no tangible opposition to his underlying ideas, despite Von Sandrart's warning to him that his calculations were untenable. As a result, although Farndale was a faithful follower of Bagnall's reforms, his expanded concept unintentionally became a deviation from Bagnall's original ideas because it went too far. As mentioned, there was a certain lack of continuity in Farndale's ideas as he planned to fight under an ideal situation, not under the worst-case scenario upon which the original reforms were based. Indeed, some criticised his actions as having stemmed from his not fully comprehending Bagnall's ideas and thus letting them go too far. Their criticism could be justified, especially concerning Farndale's shortcomings in comprehensive strategic thinking, if one

⁵⁴ Interviews, Bagnall on 5 May 1993, Dewar, Draper, Inge, Kenny and Von Sandrart.

⁵⁵ Interview, Von Sandrart.

⁵⁶ Interviews, Bagnall on 6 November 1993, Inge, Kenny and Von Sandrart.

could accept the argument that this originated from his background as a Gunner (artillery). Also, they noted that Farndale's absence at any of the TDC meetings was conspicuous.⁵⁷

Nonetheless, this observation is too dismissive. Since an integral part of the new concept involved better utilisation of fire support, it is not too difficult to see that his contribution and experience as an artillery officer was invaluable and critical. Also, not only was his more approachable personality vital in convincing many people in Britain and the Alliance, but he also had legitimate reasons for exploring new options due to the changes in NORTHAG's capacity.

The major difference between Bagnall's and Farndale's ideas, as mentioned, revolved around the different views concerning the definition of the term 'winning.' Bagnall (rightly so in his time) perceived the most dangerous threat to be a surprise attack, which required NORTHAG to force a pause in the advance of the WP, while Farndale considered retaining additional options to counter various contingencies. With the improvement of capabilities, he was actually planning to thoroughly defeat the WP during the first phase of war, and hoped that this victory could convince the WP not to enter the second phase--a nuclear confrontation. Therefore, Farndale's logic, which persuaded him to look for more convincing options, was suitable for this time.

One major, and obvious, benefit of conventional deterrence is its capacity to further put aside the possible use of nuclear weapons to maintain deterrence. According to Mearsheimer, it was best enforced when the attacker wanted to avoid a long-drawn out war, while the defender was capable of inflicting severe casualties on the attacker. ⁵⁸ This is conventional deterrence based on denial. As

⁵⁷ Interviews, Bagnall on 5 May 1993, Inge, Kenny and Von Sandrart.

⁵⁸ See Mearsheimer, 1983, p.203, pp.206-7 and p.210.

shown, no one in NORTHAG wanted this to happen, especially since it entailed a long conventional war; nor did they want to depend on nuclear early-use. So the new idea was more in line with Huntington's conventional retaliation idea, which was in fact conventional deterrence based on both denial and punishment. For NATO, punishment was traditionally to be carried out by nuclear forces, but if they were sure of achieving the same result with conventional forces alone in the early stage of a war, it is simple to postulate that they would have preferred this option. In fact, this seemed to have been the main rationale for exploring this new idea. In particular, it might have been a desirable option for the Germans as they could potentially reclaim at least some of their lost territories in the east. As a result, Farndale did want to acquire the capability of conventional deterrence implicitly with the improvement NORTHAG's conventional fighting power, and his thinking was somewhat similar to the mixture of Mearsheimer's and Huntington's ideas--secure capacity to deny the enemy while having the ability to destroy the enemy fighting power to retaliate and prevent it from being any further threat, during which punishment would be inflicted.

However, even if the political barrier concerning NATO's offensive operation was somewhat lowered, Farndale's idea was too offensive to be acceptable to the Alliance, and it in fact put aside nuclear deterrence by stressing conventional defence too strongly, thus confirming the concerns of earlier critiques--having such a plan de facto was politically impossible to accept and capable of causing a possible split among Allies. Above all, it would have compromised the whole essence of NATO's nuclear deterrence. ⁵⁹ It is doubtful whether the Germans would have supported the replacement of nuclear with

⁵⁹ Refer to the discussions in chapters 2, 3 and 5 for critiques. Also interviews, Bagnall on 6 November 1993, Carver, Chalupa, Inge, Kenny and Von Sandrart.

conventional deterrence. It was true that although the expansion of the ideas did not entail a full substitution, it nevertheless reflected the desirability of conventional deterrence in place of the nuclear one, making it the ultimate last resort. Yet this question could no longer be answered properly because of the end of the Cold War and the changing nature of the conflict in the post Cold War-era. In fact, no one I interviewed seemed to be able to answer the question of whether the Germans and the Alliance might have approved of conventional over nuclear deterrence; this is primarily due to the fact that the Berlin Wall came down before there could be any in-depth discussion of the idea. Nonetheless, the general opinion concerning this question was that while no one disapproved of highlighting the capability to enforce conventional deterrence, they believed nuclear deterrence must remain the underlying element of the Alliance because the conventional capability could never replace the ultimate deterrent power of nuclear weapons. 60 Conventional forces alone could never have the same deterrent effect.

Conventional deterrence based on conventional retaliation was not ultimately feasible. For the WP, the stakes were too high to let NATO both achieve a conventional victory and take the territories in the east. It would have been a major stimulus in pushing the WP to retaliate with nuclear weapons. The WP might have been able to accept defeat in battle, but not in war. For NATO, this would be a gamble which it could not afford to lose since the destruction of its counter retaliation force would mean an inevitable escalation to strategic nuclear exchange in the case of continued hostilities, as well as a loss of viable force to defend its territory under the circumstances. This prospect would

⁶⁰ Interviews, Bagnall on 6 November 1993, Farndale on 21 June 1993 and Von Sandrart.

outweigh any German desire for reunification, and the Alliance's hope to contain the next war with the WP conventionally would have precluded taking such a gamble in the first place. Therefore, the new concept was more viable in the sense that it offered a means to defend the original status quo and pose a counter threat against any further WP attack, but if the situation required an operation over the IGB, as Bagnall and Von Sandrart said, it would have been taken out of operational need, and could not have been used to liberate cities in the east.⁶¹

In conclusion, Bagnall's thought, which pursued the bolstering of the existing defences with a more active defensive posture, would be a better and safer option because it would be a display of NATO's willingness to defend its own territory, not to threaten the other's. Such a misunderstanding could prove fatal, especially during a time of tension. Most of all, Bagnall's counter offensive idea would be both operationally and psychologically advantageous. It would not only be beneficial if depth could be extended forward--over the IGB, but also, unlike a premeditated conventional retaliation pursuing a seizure of WP territory, which could trigger an escalation, a limited (both in temporal and spatial scope) cross-border operation against the enemy force followed by a withdrawal would not provoke a WP nuclear retaliation against this force. As Bagnall repeatedly stressed, he believed a war would not come if both sides were able to reach full mobilisation out of fear that a war could result in the end of both. Therefore, it was more important to guard against a surprise attack which could upset this delicate balance of prudence. In other words, his aim was to reinforce the traditional form of deterrence, which depended on both nuclear deterrence (as a means of punishment) and strong conventional defence (as a means of denial and punishment by destruction of the enemy).

⁶¹ Interviews, Bagnall on 6 November 1993 and Von Sandrart.

6.3. THE DISSEMINATION OF THE REFORMS IN THE ALLIANCE

6.3.1. THE VIEWS OF THE NETHERLANDS AND BELGIUM

• The Netherlands

Since the Dutch corps was located in the northern edge of NORTHAG, it was the least affected by the changes. The Dutch still felt that, because of their close geographic proximity to 1 German Corps, it was more important for them to emphasise cooperation with the latter. Thus, they were lukewarm towards the reforms in the early days because this change did not affect the way in which they approached the defence of their area. Also, they were not comfortable with the strong British confidence and assertiveness on the matter of the reforms.⁶² In effect, they were largely indifferent to the reforms because the only major consequence of accepting the changes was a remote possibility of having to provide 1 (NL) Division as NORTHAG reserve, which in fact they did not believe would happen.⁶³ Also, they were sceptical of the feasibility of the operational concept even if it was implemented.⁶⁴ Meanwhile, support provided by the British, such as communications assets, proved to be more beneficial.

As Bagnall emphasised, they were more than content with the plan since they were expected to hold their own area and, as confirmed through various interviews, they were largely spectators of the reforms. Their participation in the debates was negligible, and their efforts to represent their opinion in the

⁶² Interview, Stoetermeer.

⁶³ Interview, Stoetermeer.

⁶⁴ Interviews, Bagnall 5 on May 1993, Farndale on 21 June 1993, Kenny and Stoetermeer.

formulation of the reforms was minimal.⁶⁵ This was also the case when the reforms were expanded by Farndale.

Yet, by the late 1980s, they came to strongly embrace the reforms as they became convinced of their necessity and the benefits of the new concept. 66 In the end, when the army group SOP was redrafted, they did not display any hesitation in endorsing it in their corps. Since then, they have shown an active interest in participating in the joint planning of the army group affairs, and have been sending their officers to be trained with the British in the HCSC.

• Belgium

After accepting the new concept, the Belgians envisaged a more fluid battlefield. For that purpose, they reassigned the more capable Reconnaissance Brigade Group as the corps reserve for the counter attack instead of the less experienced forces which were supposed to be deployed after mobilisation. It was decided that they should be used as reinforcements for the MDA rather than as a counter attack force.⁶⁷ The latter would be ordered not to withdraw under any circumstances. The major counter offensive in the Belgian corps area, if there were to be one, was expected to be carried out by the army group.⁶⁸

The Belgians did admit that they used to have readiness problems and would need more reserves.⁶⁹ As a result, they wholeheartedly accepted the new

⁶⁵ Interviews, Bagnall on 5 May 1993, Farndale on 21 June 1993, Kenny and Stoetermeer.

⁶⁶ Interview, Bagnall on 5 May 1993.

⁶⁷ Interview, Briot.

⁶⁸ Interviews, Briot, Bagnall on 5 May 1993 and Farndale on 21 June 1993.

⁶⁹ Interview, Briot.

concept since they viewed it as actually making their job of defending the area easier and as a measure to correct some of the problems identified. After accepting the change, they became more confident at the prospect of the successful defence of their area. 70

However, such a resistance-free embracing of the reforms had more to do with the Belgian corps' small size rather than its appreciation of the changes. Therefore, as indicated in interviews, it was neither in a position to influence the direction of the reforms, nor did it consider itself to have a sufficiently strong voice in the army group to force its own ideas. Most of all, due to lack of resources, the attempt to improve the corps' capacity remained only cosmetic. Hence, like the Dutch corps--but for a different reason--it remained a spectator and beneficiary of the changes and new resources created by the reforms. 71

Yet, the Belgians showed their support by actively participating in various meetings and planning sessions in NORTHAG. I was told that support for the reforms and the new operational concept was particularly strong among middle-ranking officers who became strong followers of Bagnall's ideas.⁷²

6.3.2. THE APPROVAL OF THE REFORMS BY THE ALLIANCE

The reforms could not have continued without SHAPE approval even if they were endorsed by AFCENT. This remarkably smooth process within the alliance may be attributed to two factors. Firstly, General Rogers, who was SACEUR at

⁷⁰ Interviews, Briot, Bagnall on 5 May 1993, Farndale on 21 June 1993 and Kenny.

⁷¹ Interviews, Briot, Bagnall on 5 May 1993, Farndale on 21 June 1993 and Kenny.

⁷² Interviews, Briot, Bagnall on 5 May 1993 and Inge.

the time, was so consumed with the FOFA affair that he did not have time to give the reforms his lengthy personal consideration. Also, he was not terribly concerned with NORTHAG matters, and he in fact supported the army group in having a unified operational concept. Furthermore, NORTHAG's international staff successfully convinced SACEUR's staff to accept the changes. 73

Secondly, the way in which Bagnall presented his reforms as a *fait* accompli left few loose ends to furnish the DPC, NATO's highest military decision-making body, with grounds for a dispute, and resulted in a quick review and approval by the DPC and its international staff. Also, it was accompanied by an intensive campaign by Bagnall's team. This involved numerous presentations and discussions of the ideas in various meetings, including the TDC with NORTHAG's international staff, as well as visits to every MoD and Staff College of the countries concerned.⁷⁴

6.3.3 THE NEW GENERAL DEFENCE PLAN AND ATP-35 (A): THE ALLIED LAND FORCE TACTICAL DOCTRINE

The new GDP, which was adopted by the Bundeswehr and the Alliance in 1987, was written by Von Sandrart when he was the COS of the Bundeswehr. This was the document which fully supported Bagnall's ideas and also reflected Von Sandrart's effort to commit them to German and Alliance-wide application. Consequently, the 1987 GDP was based on a renewed emphasis on the manoeuvre approach at the operational level of war, and was essentially similar

⁷³ Interviews, Bagnall on 5 May 1993, Farndale on 21 June 1993 and Inge.

⁷⁴ Interviews, Bagnall on 5 May 1993, Farndale on 21 June 1993, Inge and Kenny.

to Bagnall's idea.⁷⁵ He said in an interview that the process was smoother afterwards, as Germany and other allies (Belgian and Dutch) accepted the fact that some changes were indeed necessary. As a result, the 1987 version of the GDP was to act as an umbrella document for the introduction of the operational level to the Bundeswehr and the others.⁷⁶

The change in the Bundeswehr's view toward the operational level was well-illustrated in the Preface to the GDP, in which Von Sandrart wrote:

An attack launched on a broad front and supported by a comprehensive operational idea cannot be countered in a predominately static manner and in national, comparatively narrow sectors.... The integrated command and control of land forces begins at the operational level of command; this is also where the interfaces between forces under national command and control are found. A successful integrated defense thus requires thinking and acting in accordance with uniform principles at the operational levels of command.... With this guideline operational principles have been laid down again in the German Army after a long time 77

The GDP recognised the combined nature of AFCENT and the army groups' defence under the joint land/air environment. It also recognised that winning the first operational battle was so important that risks would be taken in the areas which were not immediately threatened. The last wrote: 'If the WP launches an attack, its territory will not be a sanctuary.' This was an implicit recognition of the fact that the NATO's response to the preemptive WP attack could include a counter offensive onto the territory of the WP by NATO ground forces.

⁷⁵ See Dannatt, op. cit., pp.13-4. Also interviews, Fischer and Von Sandrart.

⁷⁶ See the GDP, p.16., p.20 and p.31, for the identification of the operational priorities of the Bundeswehr, AAFCE and army group under the new GDP.

^{77 &}lt;u>The GDP</u>, pp.2-3.

⁷⁸ The GDP, p.11 and p.12.

⁷⁹ The GDP, p.9.

The issuing of the 1987 GDP signified that any previous debate and dispute between the Germans and British, which included issues over the creation of the operational reserve, was finally resolved; in it, the following was recognised: 'The creation of an operational reserve may restrict the freedom of action of subordinate levels of command. This is justified, if in this way an operational objective, such as the destruction of the first operational echelon in the area of the forward division, can be achieved.'80 It also meant a joint SOP for the army group could be drawn up based on the GDP.

The adoption of the GDP was preceded by the adoption of the new Allied Land Force Tactical Doctrine ATP-35 (A) in 1986. It originally appeared in 1976, and the revised version ATP-35(A) was published in 1984 (with another revised version in 1986). The 1984 version should be regarded as a completely new document. In particular, the 1986 version, which gradually placed more emphasis on the operational level so that the fundamentals of operational level war were outlined for the first time, was in response to the changes in NORTHAG and in the Alliance in general. Thus, the latter's aim was to ensure a 'common understanding and approach' in combined arms operations at the brigade level and, above all, to promote the capability of the joint operation in a multi-national environment so as to achieve what it regarded as key tenets in all NATO operations--manoeuvre and the maintenance of initiative. Also, both the coordination of the fire plan in defence by all elements of NATO forces-including the air force--in both defensive and offensive actions, and the use of mobility in such operations, were emphasised as a result. 81

⁸⁰ The GDP, p.17.

⁸¹ See Bellamy, 1987, pp.125-8.

Its primary concern, therefore, was the higher tactical level with an extension to an operational level so that all NATO forces 'apply the same doctrine in tactical operations,' so as to minimise the confusion which could be created by using a different language and operational terminology. R2 Also, emphasis was placed on the interoperability and standardisation of NATO forces for the joint-combined operation. A3 As a result, it provided the necessary operational language and procedures on which the subsequent SOP, agreed by the NORTHAG corps and the GDP, were based. Also, the BMD was written using the terminology provided by ATP-35. Meanwhile, the Hdv series of the Bundeswehr tactical pamphlets were revised as well using the same approach. In the case of the 1987 version of Hdv 100/100, it became more operationally-oriented. However, it was still considered a tactical document which was optimised for the division and lower operational level--the corps. 85

Above all, the new GDP was an attempt to combine all the changes in concept in one coherent document which could be understood throughout the Alliance. It nevertheless stressed that the defence of Germany was the highest priority and that defence should therefore begin as far east as possible. 86 In reality, however, it officially acknowledged that the army group would use whatever approach was necessary to support its operations to secure the victory in the first battle, which in fact catered for the operation over the IGB.

⁸² See ATP-35 (A), Foreword, p.xxiii, for quotes in this paragraph.

⁸³ See Bellamy, 1987, p.127.

⁸⁴ Interview, Smith.

⁸⁵ Interviews, Von Sandrart and Fischer.

⁸⁶ McInnes, 1990, p.140.

6.3.4. THE FINAL SETTLEMENT

The adoption of the new GDP and the army group SOP marked the end of the long drawn-out debates. Also, Farndale's concept was eventually scaled down to something close to Bagnall's original idea (an option for one, or at most, two counter offensives) because of the aforementioned operational difficulties, as well as changes in the situation, particularly the greater chance of the rapid introduction of the external reserves to the battle. As a result, his successors opted to reconsolidate the army group's defensive posture by re-tasking a large portion of forces, which were designated as the in-theatre reserve, to bolster their corps defences. In fact, by the time Kenny became COMNORTHAG, intheatre army group reserves were to be made up only of 3 and 7 Panzer, and other possible candidates had reverted to respective corps to bolster their defences. Even those two divisions were not to be risked prematurely in a major counter offensive unless it was absolutely essential.⁸⁷

This development was not an effort either to return to Bagnall's original concept or to discredit Farndale's vision. Once the situation had improved, there was no real need to choose a risky option. This was particularly the case after changes in Soviet operational thinking, which shifted more towards the defensive after the advent of Gorbachev. Although influenced by changes in the political scene, changes in the western military, which reoriented itself toward more offensive concepts, convinced the Soviets that they would not achieve a quick victory against NATO.⁸⁸ Hence, there was no longer a pressing need to plan a

⁸⁷ Interviews, Bagnall on 5 May 1993, Kenny and Inge.

⁸⁸ See McInnes, 1990, p.108; and Flanagan, 1988, pp.121-4. Also see Niklas-Carter, op. cit., in Harris and Toase, op. cit., pp.206-7, for the possible motives behind its planned unilateral force reduction; and see John Lewis Gaddis,

series of major counter offensives as strong forward defence was more feasible; thus, the remaining need to counter a surprise attack also diminished somewhat. 89 This was based on the assumption that the availability of new assets and the ability to fight more effectively meant that the chances of maintaining the original status quo were significantly enlarged.

Ultimately, counter offensive was to be the primary responsibility of 3 (US) Corps and other forces which could be allocated by CINCENT or SACEUR; this remained unchanged when Inge replaced Kenny in 1989 and until the fall of the Berlin Wall. 90 In this sense, the reforms ultimately succeeded in bolstering forward defence, as it had been insisted upon by the Germans.

Under the final version, all the operational imperatives, Land/Air Battle, FOFA, and counter offensive, came under one operational plan to be managed by COMNORTHAG. His highest priorities were then: 1) to attack the enemy force and his main supporting bases; 2) to make the attacker feel the burden of aggression on his own territory with a counter offensive (although the mission for the restoration of the territory was to be ended at the IGB); and 3) as soon as possible, to return to the negotiating table to establish the 'status quo ante.'91 Most of all, the possibility of an operation over the IGB was formally acknowledged as a distinct one once the political barrier came down after the WP initial attack.92

[&]quot;International Relations Theory and the End of the Cold War," <u>IS</u>, (Winter 1992-3), passim, for a discussion of the causes of the fall of the WP and Soviet Union.

⁸⁹ Interviews, Bagnall on 6 November 1993, Inge and Kenny.

⁹⁰ Interviews, Inge and Kenny.

⁹¹ Von Sandrart's speech as CINCENT in 1989.

⁹² Von Sandrart's speech as CINCENT in 1989.

6.4. CONCLUSION

This chapter's most significant finding involves the development of the reforms and concept of operation into distinctively offensive ones, which in fact helped achieve a capability for conventional deterrence by making the threat of nuclear retaliation the ultimate last resort. Delaying nuclear use was welcomed; however, substituting for it could have created major strategic repercussions which could even prompt the WP's own nuclear use either to compensate for its lack of conventional success or out of fear that it could lose a war. Above all, regardless of NATO's conventional might, it could never really replace the deterrent effect of nuclear weapons. Having done so would also entail raising a question over the origins of NATO's foundation as a defensive alliance. Retaining sufficient capability, even an offensive one, was a desirable option if NATO were to display its ability to maintain the status quo, but having an outright offensive capability which could enable it to achieve a territorial gain could have been a destablising factor. There was nothing wrong with military planning on defensive measures to maximise its operational efficacy without abiding by political restrictions, but it was not wise to dictate or influence the changes in the political aims. There had to be a careful balance among the general desirability, political and strategic reality, and operational feasibility.

Yet Farndale's expansion, and the ensuing search to obtain a conventional capability with which to make nuclear retaliation the ultimate last option, reflected the fact that NORTAHG came close to achieving the kind of capability which the reforms were seeking to introduce. Also, Farndale could not be blamed for his boldness since exploration of new options to reinforce NATO's deterrence in a different environment was only natural; this was the founding spirit of Bagnall's earlier efforts since the state of NORTHAG's defence in the

beginning of the reforms required extreme measures to change it. And Farndale's action should be seen in the same vein, in that the consideration of such an extreme action option made 'a sleeping bear listen' and succeeded in fostering more active debates on how to strengthen deterrence. In fact, both CPX-83 and REFORGER 87 should be considered as occasions which changed the Alliance's perception of the benefits of executing the militarily desirable option without conforming to the political restrictions once war got underway. Otherwise, the exercises, and particularly REFORGER 87, could not have taken place. In fact, it was an acknowledgement that as long as territorial gain was not contemplated, more offence-oriented defensive planning could be acceptable for the Alliance.

Above all, it must be noted that the ultimate objective of the reforms was not to foster the capability to launch offensive operations, and nor was counter offensive a panacea--the aim was to reinforce the defensive capability of the army group. Evidence showed that, whenever an opportunity arose, COMNORTHAG endeavoured to fortify forward defence rather than strengthen his counter offensive capability because it would reinforce the ability of NATO to maintain deterrence. Bagnall certainly tried to do so; this was especially the case with Kenny and Inge.

In short, regardless of the rhetoric and the attainment of the necessary capability, it was eventually agreed, by the time Farndale left his post, that it would not have been wise to delay the use, or the threat of use, of nuclear weapons too long if NATO wanted to maintain deterrence and secure a quick cessation of the conflict in the case of war. This was the basis for NORTHAG returning to embrace a more traditional form of defence, but with more flair and confidence.

CHAPTER 7 IMPLEMENTATION OF THE REFORMS

7.1. INTRODUCTION

The purpose of this chapter is to examine the process of implementing the reforms, which includes a comprehensive discussion on the overall aspects, from C3I, weapon systems, training, and education to resource management.

Firstly, I argue that the British Army's and RAF's efforts to implement the reforms were largely successful, and achieved an overall improvement of their ability to conduct the kind of operation envisaged. In fact, the application of the operational thinking in the implementation of the reforms was manifested in the securing of an array of combat multipliers for the theatre-wide operation.

My second main argument is that, while there were numerous successes, the shortfalls in financial support from the government, especially after abandoning the LTDP commitment in 1985, prevented the military from fully implementing the reforms as they had hoped to. Despite the number of changes made in acquiring new weapon systems and creating new formations, the British Army and RAF continuously suffered from shortages in sustainability, and in fact, the stockpile of spares, etc., was critically threatened by the government squeeze in financial support.

Finally, I argue that because of the shortcomings of resources and the reduction of financial support from the government since 1986, if the army group was forced into a war with the WP at the time, it would have exhausted its conventional combat power rather earlier than expected, not because of any concept or posture faults, but due to the lack of sustainability.

Although this chapter attempts to discuss the changes of NORTHAG as a whole, it is more concerned with the changes in the British corps, as the conditions of other corps in NORTHAG were briefly discussed in chapter 2 and 6 and it was in the British corps that the reforms created the most changes.

7.2. COMMAND AND CONTROL

7.2.1. C3I (COMMAND, CONTROL, COMMUNICATION AND INTELLIGENCE)

The success of the kind of operation envisaged would have critically depended on the reliability and responsiveness of the C3I network in NORTHAG. It was recognised that the system should be fully automated and distributed and electronic warfare (EW) resistant. Furthermore, it had to ensure flexible command and movement and, above all, provide secure communication links, which was the most important factor in the achievement of the above requirements.

Previously, there were three areas of weakness in C3I which part of the reforms was aimed at improving. Firstly, while the C3I interface and network were good at the corps level, C3I in the army group and interface with corps was not effective enough to conduct the army group battle. Also, a problem remained in the interface with the ATAF. The major factor underlying this was that each corps maintained separate C3I assets without integration at the army group level. Thus, the focus was on the provision of a joint C3I system which integrated target acquisition, surveillance, and C2 systems at the army group level in particular as a shared facility rather than each corps maintaining different systems for their own use. Also, the army group C3I facilities would be manned by the international staff to facilitate regular liaisons between the army group and corps. Above all, this was designed to avoid duplication of systems and effort

¹ See Bagnall, op. cit., in Boyd-Carpenter, op. cit., p.156. Interviews, Bagnall on 5 May 1993 and Farndale on 21 June 1993.

and enable the effective distribution of information at the army group level for the conduct of an operational battle.

The problem with the ATAF was due to the fact that the air force HQ was bound to be tied up with the airfields while the army HQ was maintained forward in mobile facilities. Bagnall and Farndale stressed in interviews that this problem was solved by maintaining an improved communication system, and maintenance and exchange of staff (which always accompanied each commander for liaison and immediate battle planning) between the two. Also, as mentioned, the interoperability problem was solved after the British supplied other corps with an interface package.

Secondly, the survivability of the corps and army group C3I remained precarious. Both Bagnall and Farndale recognised that the C2 of the army group battle had to be conducted near the battle area in mobile HQs in order for it to be effective and to maintain the necessary responsiveness to conduct mobile battle. Farndale stressed that he was able to move around quickly without detection in either a land-based mobile HQ which consisted of four to five vehicles (Land Rovers or APC), or a specialised Lynx-based command helicopter flying NOE (Nap-of-Earth) under ten feet from the ground. This allowed the commander to continuously monitor the battle from both land and air, and thus, he was never out of touch with the progress of the battle.

² Bagnall, 1984, p.60.

³ Interviews, Bagnall on 5 May 1993 and Farndale on 21 June 1993.

⁴ Interviews, Bagnall on 5 May 1993 and Farndale on 21 June 1993. Also see McInnes, 1988, pp.388-9.

⁵ Interview, Farndale on 21 June 1993. Also see Farndale, 1988--B, p.18.

⁶ Interview, Dewar.

Thirdly, the vulnerability of C3I systems to both WP electronic countermeasures (ECM) and break-down (both from problems in the systems and human errors) was a major concern, despite the fact that most of the modern technological enhancements were focused on improving them. The main problem was the over-burdening of C3I staff and the choking of the system with an overflow of information. It was hoped the new C3I system would reduce manpower by providing a technological solution--unfortunately, high technology systems required skilled manpower for their effective operation and this could, in turn, increase the size of HQ. 9

The main focus of the C3I system improvement was on the deployment of an integrated and automated C3I system throughout the corps with the interface, and especially target-acquisition and intelligence-gathering systems, optimised at the army group level. The centre of the communication network was the Ptarmigan trunk communication system, which was a second generation voice and data battlefield communication system designed 'to meet the needs of mobile warfare.' This provided both voice traffic and associated data links to the Wavell ADP (Automatic Data Processing) system, teleprinter, facsimile, and even pulse video signals. ¹⁰ The system was similar to a civilian cellular phone system and provided communication links to all the communication assets

⁷ See Bellamy, 1987, pp.239-40.

⁸ See Bagnall, op. cit., in Boyd-Carpenter, op. cit., p.155.

⁹ See Rice and Sammes, op. cit., p.241.

^{10 &}lt;u>Jane's Military Communications</u>, (Surrey: Jane's Publishing Co., 1988), p.737. Also see Gander, op. cit., p.57.

deployed in the corps and army group down to the unit level. 11 It was commented that Ptarmigan was very effective in real-time as it allowed greater flexibility and faster movement of troops throughout the chain of command down to unit level. 12

Also, enhancing the responsiveness of C3I, which was to be complemented by the deployment of the ADP system to ease the commander's decision-making process, was high on the agenda. ¹³ The highlight of the system was Wavell. The system fielded in NORTHAG was the Stage II system, which was deployed in 1985, using the Ptarmigan network to provide the ADP system to assist commanders and their staffs with the conduct of general operations and intelligence work throughout the army group, corps, and down to brigade level. ¹⁴ It was designed to optimise situation assessment and resource allocation based on a better visual picture of the overall situation. ¹⁵ It could also act as a data sorting and storage bank that could be consulted at will, 'providing the information that commanders need, when they need it, and in a manner that all levels can assimilate and understand. ¹⁶

Intelligence and target acquisition were the responsibility of both the army group and AFCENT. At the AFCENT level, J-STARS was the main target

¹¹ See David Miller and Christopher F. Foss, <u>Modern Land Combat</u>, (New York: Portland House, 1987), p.65.

¹² Interviews, Dewar and Mills.

¹³ Interview, Farndale on 21 June 1993.

^{14 &}lt;u>Jane's Military Communications</u>, 1989-90, (Surrey: Jane's Publishing Co., 1989), pp.741-2.

¹⁵ See Rice and Sammes, op. cit., p.242.

¹⁶ Gander, op. cit., p.61.

acquisition system which could provide target and engagement information to the army group and corps through data down-link. Also, because the US had substantial intelligence assets, NORTHAG would be able to depend on its provision of intelligence as well. 17 NORTHAG maintained its own intelligence and target acquisition assets in the form of CASTOR (Corps Airborne Stand-Off Radar) either independently, or in a working relationship with J-STARS. It was based on Islander aircraft with MTI (Moving Target Indicator) radar housed in the nose. 18 It was planned that CASTOR, which was operated by 2ATAF, would be used in short hop-on-and-off mode in order to increase survivability by reducing the exposure time in the air, and that it could distribute target information quickly without being dependent on the AFCENT. Also, 2ATAF would provide photo surveillance with its RF-4C, Jaguar and Tornado aircraft with photo reconnaissance equipment and other electronic and signal intelligence with EF-111 (although its primary role was escorting bombers by jamming the enemy AD). 19

On the ground, intelligence gathering still depended on traditional methods such as Long-Range Reconnaissance Patrol (LRRP) and Human Intelligence (HUMINT), but they were to be supplemented by Phoenix RPV (Remotely Piloted Vehicle) for round-the-clock surveillance and target acquisition.²⁰ It was equipped with a navigation package and thermal imager which was designed for the enhancement of artillery target acquisition, and thus

¹⁷ Interviews, Bagnall on 5 May 1993 and Farndale on 21 June 1993.

¹⁸ See <u>JDW</u>, (27 April 1991), p.701.

¹⁹ See Price, op. cit., chapters 10 and 12 for more.

²⁰ Interviews, Fischer and Mills.

would be vital for the accuracy of the army group's MLRS attack.²¹ Phoenix also had a data link with other C2 and ADP systems for information to be instantaneously available for timely use.

For example, the information gathered by Phoenix would be delivered to the army group and corps ADP (Wavell) system through Ptarmigan so that it could become available to the commanders and help them make a decision for attack. Attack information would be delivered directly to the BATES system for immediate artillery fire. BATES was in turn linked with all levels, from forward observers and individual fire units up to divisional and corps artillery HQs, providing information including tactical and technical fire control (both conventional and nuclear), ammunition and fire-unit status, fire planning, artillery target intelligence, calculation, and distribution of meteorological data, target records, reports and returns.²²

7.2.2. DIRECTIVE CONTROL (AUFTRAGSTAKTIK)

With these technological gadgets and advances enhancing the C2 of its operation, the most important changes in the NORTHAG C3I involved the human factor. As mentioned, the rigidity of command and its set-piece methodical mentality were the most well-known and often-criticised element in the British Army's tradition.²³ This required a change in culture for it to execute the kind of mobile operation it envisaged. Thus, the Army had to re-educate its

²¹ See Mark Hewish, "British Army Equipment Programs," <u>IDR</u>, (June 1984), p.751.

²² See Hewish, 1984, (June 1984), p.745.

²³ Interviews, Chalupa, Von Sandrart, Fischer, Kunzendorf, Gilchrist and Carver.

officers in Auftragstaktik (directive control), and introduce it at the army group level. Above all, this was essential if NORTHAG was to conduct a mobile operation, because it could provide the necessary flexibility of command and responsiveness in a fast moving battlefield.²⁴

Specifically, this was crucial in the modern battlefield where the C2 would be severely jammed and chaotic.²⁵ It was essential to turn such a treacherous battle to advantage by allowing instantaneous response to the developing situation within the local commander's authority and within the operational level objectives.²⁶ This required adopting an SOP which could be understood at all levels.²⁷

What NORTHAG sought were information processes of superior speed which would 'permit breaking into the opponent's command and control process, interfering with his decision cycle, seizing the initiative and forcing the enemy to react.'²⁸ The fundamentals of NORTHAG's Auftragstaktik were explained by Colonel Van Vels of the Dutch Army as follows

The concept is Mission- and Commander-oriented... This also provides a 'linking-pin' structure: any Commander knows the mission of his superior commander, his own mission, and the missions he has given himself to his subordinate commanders; when any Commander acts completely.... subordinated to the mission given to him and understands its contribution

²⁴ See more in Simpkin, 1985, pp.230-2; Martin Van Creveld, <u>Command in War</u>, (Cambridge: Harvard University Press, 1985), passim; and Frank Kitson, <u>Directing Operations</u>, (London: Faber and Faber, 1989), pp.38-40.

²⁵ J.M.F.C. Hall, "The Role and Position of the Commander in Today's Battlefield," in Mackenzie and Holden Reid, 1989, pp.48-9.

²⁶ See Van Creveld, op. cit., p. 198.

²⁷ See Simpkin, 1985, p.206. Interviews, Bagnall on 5 May 1993 and Von Sandrart.

²⁸ Von Sandrart, op. cit., in Boyd-Carpenter, op. cit., p.148.

to the superior's mission, he will be able to make decisions on his own whenever he thinks the need arises in the developing situation. This concept could provide responsiveness and flexibility; but only, when the whole generation of commanders understands it.²⁹

Also, it would demand less information processing, central planning and intervention, which would quicken each phase of the operation.³⁰ NORTHAG's Auftragstaktik was to resemble what the Germans practised during World War Two as it was the type of operation that was aimed at what the Germans had achieved before.³¹

However, re-educating British officers and soldiers throughout the ranks in Auftragstaktik was a slow process due to the influence of tradition. The adoption of the BMD and establishment of HCSC were in fact aimed at promoting, as well as re-educating the British and other national armies' officers in, such a command style.³² Nevertheless, British officers in particular are still criticised for being rigid--especially at the lower level.

²⁹ R. Van Vels, <u>The Modern Operational Level Commander and His HQ</u>, (HCSC 6, TDRC 10481, 1993), p.12.

³⁰ See Van Creveld, op. cit., pp.249-51.

³¹ Interviews, Bagnall on 5 May 1993 and Von Sandrart. Also see Simpkin, 1985, p.229.

³² See chapter 7.5.

7.3. FIRE SUPPORT

The NORTHAG fire support concept under the army group operation was based on the same operational principles of economy and concentration of forces, under which its artillery assets could become a manoeuvre multiplier under the combined arms operation. This was a paramount aim due to NORTHAG's limited firepower and artillery assets. Although having a doctrine (including a firepower doctrine) was viewed as suspicious in the British Army, it nevertheless veered towards adopting one.³³ Its purpose was to achieve flexibility in fire support, and it was to be used with imagination and responsiveness so as to break the enemy's momentum of attack while disrupting his coordinated introduction to the battle both in the defensive and counter offensive. Furthermore, it was to be used aggressively, very close to the attacking force, despite the inevitability of friendly casualties.³⁴

The principles of fire support in the British Army were as follows: 1) flexibility and concentration of force; 2) surprise; 3) offensive action; 4) cooperation; 5) economy of effort; and, 6) logistics.³⁵ The application of the operational concept and manoeuvre principle in fire support would depend on concentrating 'fires and forces at decisive points to destroy enemy elements when the opportunity presents itself and when it fits our larger purposes.'³⁶

³³ See Shelford Bidwell, "Indirect Fire Artillery as a Battle-Winner/Loser," in Barnett, Bidwell, Bond, Harding and Terraine, op. cit., p.138.

³⁴ Interview, Farndale on 21 June 1993.

³⁵ M.J. Tomlinson, "Handling Artillery within the Corps," <u>BAR</u>, (December 1983), p.7.

³⁶ J.M. Lance, "Artillery and Maneuver Warfare Can Mix," <u>Proceedings</u>, (November 1990), p.78.

Artillery would have to be ready at all times to provide simultaneous and successive fire support, and the increased range of modern artillery and automated C2 would make it possible to switch extremely heavy concentrations of fire from target to target in-depth. Thus, it would be essential to begin the artillery battle at long range, attacking the first echelon forces with 'maximum impact as they close on our main defensive areas, yet at the same time attacking his follow-on forces and his concentration of artillery' to create a window of opportunity for a counter offensive.³⁷ Such a simultaneous application of firepower would facilitate early attrition, and doing so by rapidly shifting the concentration of firepower to address various targets in depth would further increase the rate of attrition and secure more surprise.³⁸ Under this situation, fire support required: 1) speed of response; 2) accuracy; 3) increased weight of fire; and 4) target acquisition in every phase of the artillery battle.³⁹

NORTHAG's fire support missions therefore consisted of: 1) close-range battle; 2) long range battle against enemy artillery, follow-on echelons and other targets; 3) air defence; and 4) the nuclear phase. 40 For the first two, the focus was put on two areas: firstly, on the deployment of new C2 systems which consisted of BATES and Phoenix RPV with associated C3I equipment, and secondly, on the replacement of older weapons with new ones, as well as on the full-scale deployment of MLRS.

³⁷ See Martin Farndale, "Field Artillery for the British Army in the Next Two Decades," <u>AQ&DJ</u>, (July 1989), p.272.(1989--A). Also see Peter Williams, "Artillery against Massed Attack," <u>NSN</u>, (November-December 1984), p.74.

³⁸ Interview, Smith. Also see, Smith, TDRC 10269. pp.6-7.

³⁹ Williams, op. cit., pp.71-2.

⁴⁰ Tomlinson, op. cit., p.7.

It was crucial for the British Army to be able to deliver more weight of firepower to a longer range with more speed without an increase in manpower, if it wanted to support simultaneous close-in and deep battle (counter offensive and FOFA), especially as the number of artillery systems available in the British corps was small compared to that of the German and US corps. It was planned that all the older artillery systems (Abbot 105 mm SP (Self-Propelled), and 105 mm towed artillery pieces) would be replaced with modern SP weapons (AS 90) by the early 1990s to complement older 155 mm M109s. It was projected that this alone would increase 'the throw weight' by 60 per cent. Also, it was planned that the British Army alone would acquire 72 MLRS launchers with ATACMS by the same time. 41

However, even these measures lacked firepower compared to those of the US Army and Bundeswehr. This was why it became imperative for the British Army to exploit operational principles because only they could compensate for such a weakness with greater organisational and managerial flexibility. 42 One of the biggest problems, as Bagnall and Farndale admitted, was the small number of artillery assets despite the provisions mentioned in the above paragraph. 43 However, the deployment of new C3I and ADP systems significantly improved the army group fire support capability.

Nonetheless, the lack of assets made it difficult to maintain control under the army group. For example, because of such a lack of overall assets, Bagnall insisted that both FOFA and fire support for the counter offensive should be

⁴¹ Farndale, 1989--A, pp.271-2.

⁴² See Bailey, op. cit., p.311.

⁴³ Interviews, Bagnall on 5 May 1993 and Farndale on 21 June 1993.

performed at the army group level.⁴⁴ Meanwhile, it was equally strongly suggested that ground-based FOFA should be carried out by corps, while COMNORTHAG would conduct his FOFA with ATAF.⁴⁵ As discussed, the latter was ultimately agreed upon, while the support for the counter offensive was to be done by a combination of integral assets within the force, corps MLRS, and long-range and ATAF support under the army group direction.

Because of the requirements necessary to support the counter offensive, there remained a number of problems. Firstly, most of the aforementioned new systems were not available at the time, and counter offensive would thus suffer from low mobility of artillery support. Secondly, there were limits to the application of the operational principles to enhance fire support, which was lacking in numbers. Thirdly, because of this lack in numbers, as well as the burst weight of fire the artillery could deliver, it would be difficult to provide the necessary support during the whole phase of the counter offensive, which consisted of 1) area clearance; 2) area protection; 3) flank protection; 4) suppressive fire operations; and 5) long-range fire protection to prevent the follow-on forces from joining in. Furthermore, air defence, which was vital for protecting the counter force, remained insufficient. Although the decision to purchase Tracked Rapier in 1983 helped to relieve some of the pressure, the British Army did not have AAA systems to complement the missile systems. 46

⁴⁴ Interviews, Bagnall on 5 May 1993, Kenny and Von Sandrart

⁴⁵ Interviews, Farndale on 21 June 1993, Kenny and Von Sandrart.

⁴⁶ See Hewish, 1984, p.746.

7.4. AIRMOBILITY AND ATTACK HELICOPTERS

The formation of the airmobile force and airmobility operation (with the AH operation as one of its components) was one of the most eagerly anticipated parts of the reforms. It was even said that: 'The helicopter is probably the most versatile addition to the battlefield since the advent of the internal combustion engine.'⁴⁷ Above all, it was believed that airmobility would be the most important asset within the army group which could substantially enhance the successful application of its concept of operation, both in defence and offence.

The earlier British airmobility concept was similar to certain elements of the US AirLand Battle and the Bundeswehr's AH operation concepts, a fact which was demonstrated during the 1983 'Wehrhadfte Löwen' exercise. 48 Clearly, the British idea was heavily influenced by the US concept as the Army was repeatedly impressed by the US Army's ability to integrate airmobile and AH operations with the land operation. 49 However, due to the lack of resources, the British Army has not been able to develop its own airmobile force to the level the US Army has achieved—the acquisition of dedicated AHs, which has been the core of the British programme, has still not been completed as of 1994.

The appeal of airmobility was multi-faceted. The greatest advantage was flexibility. For example, its mobility and responsiveness would allow a rapid transit of troops and equipment over a long-distance regardless of the ground

⁴⁷ M.A. Willcocks, "Airmobility and the Armoured Experience," in Mackenzie and Holden Reid, 1989, p.123.

⁴⁸ See Bellamy, 1985, pp.249-256.

⁴⁹ Interview, Farndale on 21 June 1993.

and terrain conditions.⁵⁰ This meant airmobility could fulfil a number of roles ranging from general transportation (ferrying) of troops to rapid reinforcement of the threatened areas, as well as other defensive and offensive applications.⁵¹

The attractions of AHs included the facts that they: 1) were cheaper than fixed-wing aircraft, and they could thus enable the Army to maintain its own assets; 2) meant greater survivability, since they could utilise NOE or other stealthy measures, which would allow for closer support for the land operation near the battle area; and 3) were readily available if placed under the command of ground forces, and would thus become quicker than fixed-wing CAS--which was under the command of the Air Force--in responding to a situation.⁵²

Specifically, three defensive uses of airmobility were envisaged. Firstly, it was viewed as the most valuable asset for counter penetration.⁵³ Particularly, NORTHAG's airmobile brigade (24 Brigade) was considered as a manoeuvre arm which was capable even of countering the OMG or other sudden enemy penetrations.⁵⁴ It was to be deployed under stealth only in terrain suitable for an effective defensive operation, such as built-up areas and ground dominated by wooded features.⁵⁵ The force was to be equipped with extensive anti-armour

⁵⁰ Bagnall, 1988, p.76.

⁵¹ See Oerding, op. cit., pp.32-3.

⁵² Feesey, op. cit., in Mackenzie and Holden Reid, 1990, pp.167-9.

⁵³ Interviews, Bagnall on 5 May 1993, Farndale on 21 June 1993 and Jackson. Also see W.B. Stevens, "Can We Make Better Use of Attack Helicopters?" Mackenzie and Holden Reid, 1990, p.205; Mackenzie, op. cit., in Holden Reid and Dewar, op. cit., p.168.

⁵⁴ Interviews, Bagnall on 5 May 1993 and Dewar.

⁵⁵ Interview, Farndale on 21 June 1993. Also see, Mackenzie, op. cit., in Holden Reid and Dewar, op. cit., p.168.

weapons and dedicated firepower support from NORTHAG.⁵⁶ It would also be used for the rapid reinforcement of areas under pressure, since its ultimate purpose was to harass the enemy's progress so as to break the momentum of his advance to cover for the deployment of the counter offensive force.⁵⁷ In other words, the airmobile force provided ideal assistance in the disruption and delaying of the enemy forces.⁵⁸

Secondly, it--especially the AHs--was considered to be an excellent addition to shallow FOFA.⁵⁹ It was envisaged that it could free the ATAF to conduct long-range FOFA. If the operation was conducted in conjunction with the corps MLRS, it gave the Army a major role in implementing NATO's FOFA operations by independently conducting an operation to isolate the enemy leading echelon.⁶⁰

Finally, it was thought to be an invaluable counter-desanty asset.⁶¹ Other land-bound assets such as an armoured force would not have either the necessary mobility or responsiveness to counter the enemy airborne or airmobile operation deep inside NATO's territory. Also, such an operation would mean diverting important land assets which could limit the army group's ability to concentrate.

⁵⁶ Interviews, Bagnall on 5 May 1993 and Farndale on 21 June 1993.

⁵⁷ R.D. Grist, "Airmobile Forces in Central Europe," <u>RUSIJ</u>, (Spring 1988), p.44.

⁵⁸ Interview, Farndale on 21 June 1993. Price, op. cit., pp.115-7, for details on operations.

⁵⁹ Inge, op. cit., p.13.

⁶⁰ Stevens, op. cit., in Mackenzie and Holden Reid, 1990, p.216.

⁶¹ See Bagnall, 1988, p.76; Blackbird, "The Value of Their Mobility," BAR, (April 1980), p.11.

It was also recognised that airmobility could have significant offensive applications. Firstly, protecting the counter offensive force's operation was essential. In particular, it could provide the flank protection of the force, which would require round-the-clock anti-tank protection. Thus, it could free the armour assets for more concentration. Secondly, it could be used as the army group's own desanty or deep-penetration which could be pre-deployed in order to be linked up with the counter offensive force, or create another front and force the enemy to divert his assets to counter it. Thirdly, it could expedite the offensive operation by providing forward scout and breakthrough capability, or create a bridgehead for the army group by concentrating its firepower to enable the counter offensive force's quick insertion in the punctured enemy line. 64

Nonetheless, there were a few visible limitations. Firstly, once landed, the force would no longer have the capability to conduct a mobile operation; it was therefore inevitable that it could only assume a positional role. Secondly, it required round-the-clock, or at least temporary, air superiority during deployment for survival. Especially, the AH operation would not be possible without air superiority. Thirdly, it required concentrated use as there would be the temptation to scatter the force for multiple missions, various contingencies of

⁶² See Bagnall, 1988, p.76; and Mackenzie, op. cit., in Holden Reid and Dewar, op. cit., p.168.

⁶³ J.F. Rickett, "Employment of Non-Mechanised Infantry in 1 (BR) Corps," RUSIJ, Vol.131, No.2, (June 1986), p.30.

⁶⁴ Interview, Farndale on 21 June 1993. Also see Bagnall, 1988, p.77; B.W. Barry and a Camberley Team, "Future Airmobile Forces," <u>RUSIJ</u>. (Autumn 1988), pp.34-38, for various offensive applications, including combined offensive armour/airmobile operations.

⁶⁵ See Grist, op. cit., note 5 on p.48, for support of survivability of concentrated airmobile operations.

which were bound to arise during the battle.⁶⁶ Finally, the casualty rate in the force could prove intolerable, especially after landing, as it would become primarily a light-infantry force engaging the enemy major armoured formation.

Due to such problems, the debate surrounded the question of whether the airmobile, and especially the AH, force should be a corps or an army group asset. There was no disagreement on the operational significance of the force. As Bagnall stressed, their effective use would only be possible at the operational level because all the necessary support (e.g. pooling the transport assets, firepower, etc.) would only be effective at that level. Also, the enemy breakthrough, which could occur anywhere in the army group territory, required control at the operational level, while the high casualty rate could be justified in securing operational objectives.⁶⁷ Meanwhile, the support for the corps handling of AHs stemmed from the fact that the joint AH-MLRS operation for shallow FOFA was primarily the corps' responsibility, as it had control of MLRS.68 It seemed to be more aligned with the US concept which gave more power to the corps operation, but like the previous debate (between those who thought FOFA as primarily a corps operation and Bagnall, who saw it to be an army group one), the difference here lay in the fact that the weakness of NORTHAG corps entailed an operation under the army group, whereas some saw that the corps should instead be able to maintain some control of each group of national assets.

⁶⁶ See Gander, op. cit., p.50.

⁶⁷ See Bagnall, 1988, pp.77-8; and Grist, op. cit., p.45.

⁶⁸ See Stevens, op. cit., in Mackenzie and Holden Reid, 1990, p.216. See more on the history of the development in Blackbird, op. cit., passim; Martin Farndale, "The Use of Helicopters on the European Battlefield," <u>AQ&DJ</u>, (April 1989), passim.

Also, as mentioned, there was an initial problem of rivalry with the RAF about the control and role of airmobility. Besides which, there was a certain sense of uneasiness in the Army, especially among those who considered that armour should continuously receive the bulk of the Army's funds rather than splitting them, as such a practice could squeeze the number of available systems for the land operation. ⁶⁹ Nonetheless, the co-location and C2 problems with the RAF were initially resolved as mentioned, while some feeling of discontent still remained among high-ranking officers over the control of transport helicopters. ⁷⁰ It seems that this problem at least continues to be a source of dispute between the Army and RAF even today, especially in terms of resource allocation between the two services; however, it is also true that neither party would take any action which would threaten the other's status quo in this matter, but would instead attempt to solve it through a pragmatic approach.

Nevertheless, airmobility was to become one of the major elements of the reforms, and was eventually recognised as one of their most important results. In particular, the extensive use of airmobile forces supported by AHs in the counter penetration was receiving more attention. Above all, it was one of the most important operational assets directly under COMNORTHAG, which had true mobility and a quick reaction time to counter an operational penetration and other emergencies. A substantial amount of studies and attention were focused on the subject during the late 1980s, and even today, as well as receiving

⁶⁹ See Willcocks, op. cit., in Mackenzie and Holden Reid, 1989, p.121; Blackbird, op. cit., pp.5-6, on the difference in views between the Army and RAF.

⁷⁰ Interviews, Bagnall on 5 May 1993, Farndale on 21 June 1993 and Dewar.

widespread support in both the government and Parliament.⁷¹ With the successful test of its Airmobile Division, which consisted of elements from all four national corps, in 1991, it ultimately became the major operational asset which assumed NORTHAG's reserve role.⁷²

The shortcomings of its operational concept, as well as other problems, were generally resolved with the amalgamation of the Airmobile Division. It was recognised that the force should not be used either extensively or in a dispersed manner. To ensure survivability during deployment, it would disperse before concentrating for landing or attack. Also, NOE and other stealthy measures would be taken to ensure survival. Concerning the high casualty rate expected during the battle, it was decided that whatever kind of consequences there were, they would be absorbed and massive casualties among soldiers would be anticipated. To justify this, the force would be used more offensively than in a purely counter penetration role. Furthermore, the use of AHs would be justified and rather beneficial in bringing significant results in their concentrated use; as an exercise in the late 1980s showed, a regiment of AH (48 TOW armed Lynx) was able to stop an enemy armoured division. As long as such a result could be gained, it was felt that the amount of the expected casualties was warranted.

⁷¹ See bibliography for the list. Also see Hansard, <u>Debate on Army</u>, 1984, comment of Mr. Wiggins; and Willcocks, op. cit., in Mackenzie and Holden Reid, 1989, p.118.

⁷² See "Airmobile Success," <u>JDW</u>, (May 25, 1991), p.862, for details. Also see, Grist, op. cit., passim; Barry, op. cit., passim, for details of the structure.

⁷³ See the GDP, p.19.

⁷⁴ Mackenzie, op. cit., in Holden Reid and Dewar, op. cit., p.169.

⁷⁵ Feesey, op. cit., in Mackenzie and Holden Reid, 1990, p.167.

⁷⁶ Interviews, Bagnall on 5 May 1993, Farndale on 21 June 1993 and Dewar.

7.5. EDUCATION AND TRAINING

7.5.1. HIGHER COMMAND AND STAFF COURSE (HCSC)

The main purpose of HCSC is to provide higher staff education and training for high-ranking officers (Colonels and Brigadiers) in the British Army and Allied Armies and Air Forces (including US officers), to promote interoperability among NATO forces by training them on an operational level using a common doctrinal basis, as well as training them in Auftragstaktik to provide a comprehensive education and training for the conduct of operational and theatre level war. It was intended from the outset of the course that education of officers from other Allied nations was crucial in order to enhance understanding of each others' thinking, share and introduce ideas of other armies and services, and secure better cooperation among the Allies in the future.⁷⁷

Each course consists of about twenty participants from various arms and services of the military so as to enable the dissemination of operational level philosophy throughout the armed forces and enhance mutual understanding among officers in the course on activities of other branches and services. ⁷⁸ The aim is to provide a comprehensive implementation of the operational ideas in the military as a whole and streamline the requirements of preparing a war at the operational level by sharing expertise among them. ⁷⁹ It mirrors Bagnall's effort

⁷⁷ See Williams, op. cit., in Mackenzie and Holden Reid, 1990, pp.24-5. Also interviews, Smith and Bagnall on 6 November 1993.

⁷⁸ See HCSC--Programme for Course No.5 and TDRC 10361.

⁷⁹ Interviews, Bagnall on 6 November 1993, Inge, Kenny and Dewar.

to include representatives of different arms and services of the military and MoD in the TDC sessions.

This essence is reflected in the composition of the course. A typical course is divided into nine segments which cover most areas related to the planning and conduct of the operational level of war: 1) Foundation Studies to provide operational level lessons by way of historical examination; 2) Operational Art to provide the theoretical background to studies of the operational level planning and conduct of war, which also includes broader studies of the security policies of the Alliance to promote understanding of the strategic and political framework within which operations may be conducted; 3) Air Power to enable understanding of the characteristics, capabilities and C3 of air power at the operational level; 4) Planning and Conduct of Campaign and Operations to give insights into those areas, especially C2 and leadership; 5) Technology and War to enhance knowledge into the role of technology in the various aspects of the conduct of operations; 6) Corps Operations to understand and apply the operational ideas, which include C3 of air power, etc., at the operational level; 7) Army Group Operations to provide the same understanding as Corps Operations at a higher operational level; 8) Staff Ride to promote better understanding of the operational level through studies of military history accompanied by visits to the places where major battles had been fought; and 9) Theatre War Game to give students a chance to make operational level decisions as the ultimate test of the lessons they have acquired throughout the course.80

During the course, students are exposed to studies of specific subjects and other areas which have relevance to such an education. These include lessons on using ADP and C3I systems; coordinating joint HQs; maritime

⁸⁰ See HCSC--Programme for Course No.5, Passim.

operations; Low Intensity Conflict (LIC); peacekeeping; and media--even TV interview techniques. The course is frequently supplemented by visits to force installations, talks with academics, specialists and higher commanders, and speeches by the former and present high level national and Alliance commanders. At the end of the course, each participant is to produce an extended essay concerning his special interest fields.⁸¹

HCSC is, in a way, a course of elite education which is intended to train those with the potential to become very senior officers and those who could readily be appointed as major field commanders. Thus, it does tend to concentrate on people who were previously favoured with major staff duties (particularly former G3 staff officers who were in charge of Operations) and the command of major arms. Thus, despite the fact that the course provides excellent training for people with the right background and career selection, it does not provide others with the proper chance of education which could lead them to major flagship appointments in the military. In fact, these selection criteria have been rigidly applied since the beginning of the first course, which usually relies on hand-picking candidates. As Bagnall stressed, it has not always been possible to find the best qualified people to send to the course due to the fact that many of them hold field and other commissions. 82

In terms of efficiency, however, which stresses the thinking that only those with the right mindset and aptitude will be given a chance, the course does satisfy its objective very well. In fact, this somewhat resembles the traditional Wehrmacht selection of higher level commanders and, to a certain degree, it fits the somewhat radical ideas of Simpkin, whose suggestions specifically focused

⁸¹ See HCSC--Programme for Course No.5, Passim.

⁸² Interview, Bagnall on 4 May 1994.

on getting the best out of a small pool of people with the right mentality and qualifications. 83

Nonetheless, HCSC epitomises Bagnall's wish to 'make a leap in thinking' and reflects that rare approach to the education of officers which he used frequently during TDC sessions. As mentioned, Bagnall created a sort of cult following among many different national participants of the TDC and the tradition is said to have continued in HCSC, both of which have been used for 'Bagnallising' young officers. 84 Also, the works which have been completed by the officers who participated in the courses are being made into major sources of study of British modern military thinking as they, as indicated in the through non-military publishers.85 being published introduction, are Furthermore, the lessons and ethos of the HCSC has been adopted by other educational establishments and, for example, Army Staff College is now placing greater emphasis on teaching officers in operational level thinking.86

Meanwhile, Bagnall, Inge, and Von Sandrart have repeatedly stressed that it is up to the educational establishments, such as the HCSC, to provide people with the correct ideas of what operational thinking is all about--this must not allow people to interpret the operational level as giving *carte blanche* to act as freely as possible in battle, as if utilising operational art is about being 'gungho.'87 Most of all, the educational establishment should beware of carrying this spirit too far, as it entails recklessness rather than the prudence and freedom of

⁸³ See Simpkin, 1985, Part 4, passim.

⁸⁴ Interviews, Dewar and Inge.

⁸⁵ See bibliography for details.

⁸⁶ Interview, Bagnall on 4 May 1994.

⁸⁷ Interviews, Bagnall on 6 November 1993, Inge and Von Sandrart.

thought which the operational level thinking set out to sanction. Therefore, the HCSC was designed to be at the forefront of disseminating the right ideas of the spirit of the reforms and the operational level.

7.5.2. TRAINING IN THE MODERN BATTLEFIELD

The training for the new operational concept was based on three factors: 1) optimisation of the combined arms operation; 2) realism; and 3) maintenance of high morale through continuous drills and contests of skill.⁸⁸ This spirit was applied quite early on in NORTHAG, when it began the 48-hour warning practice in 1983. As a result, the British Army and NORTHAG's ability and readiness to react quickly to a WP surprise attack have been substantially enhanced since then. Farndale said in an interview that he frequently prepared for the 48-hour warning scenario through exercises such as 'Quick Training' and 'Active Edge,' which were held at least three to four times every year. During the exercises, the in-place force was expected to get ready at eight hours warning, the first four hours of which would be spent getting everyone ready in their barracks. Other preparations, from the deployment to the actual battle area and the outloading of ammunition which was stored in peacetime, to the laying of mines in the battle area and the demolition of bridges etc., were frequently practised.⁸⁹

Previously, all-arms training was rarely done, mainly because of the lack of sufficient space--both in Britain and Germany--for the large-scale live-ammunition firing which is associated with such training. A lot of practice, which

⁸⁸ Interview, Farndale on 21 June 1993.

⁸⁹ Interview, Farndale on 21 June 1993.

carried out during the numerous annual exercises planned in the Alliance; however, the problem of the lack of realistic training remained. British small arms and unit training was conducted on Salisbury Plain and Soltau, but those places were too small for a major exercise involving all-arms formations. 90

Thus, the only place where the British Army was able to conduct such training was in BATUS (British Army Training Unit Suffield), which was located in Alberta, Canada. A whole battlegroup (2 armoured and 2 mechanised infantry squadrons; 2 batteries of artillery; logistics; engineering and AHs units, and all other associated elements) is sent there for a six-week-long live ammunition firing exercise. In fact, many of the weapons used during training were damaged and some troops shaken by its realistic nature. Nonetheless, as Farndale stressed, after undergoing tactical all-arms training in Canada, the annual autumn exercise in Germany and a six-month tour in Northern Ireland, the troops were largely confident and well-trained.

⁹⁰ R.A. Oliver, "Training for the Friction of War," in Mackenzie and Holden Reid, 1989, p.187.

⁹¹ Oliver, op. cit., in Mackenzie and Holden Reid, 1989, p.187.

⁹² Interview, Farndale on 21 June 1993.

7.6. RESOURCE MANAGEMENT

7.6.1. FINANCES

Financing the reforms was one of the main difficulties expressed from the early days, and it remained so throughout their implementation. As mentioned, the 1981 review was a positive catalyst for the reforms because it secured the steady introduction of the new weapon systems. Indeed, the review allowed for extensive re-equipment of the Army, and by the mid-1980s the government's growing financial support had resulted in substantial improvements in the Army's and RAF's capabilities. 93

Nonetheless, the situation was not without problems, particularly after the British abandonment of the LTDP commitment in 1985. Although this did not immediately affect the Army's need for re-equipping and financing the necessary requirements for the reforms themselves, it was a major setback for its aspirations. ⁹⁴ Moreover, this move was accompanied by a gradual dwindling of the government's financial support from the 1986/87 budget year. By the 1987/88 budget, the fall in defence spending, or a 'funding gap' between the requirements and available resources, was becoming more conspicuous. ⁹⁵ This was despite the modest increase of the budget as each year passed--after including the rate of inflation, this trend represented an actual decline in funding

⁹³ See House of Commons, Third Report from the Defence Committee Session 1984-85, Vol., I., para. 68.

⁹⁴ Interviews, Bagnall on 6 November 1993 and Farndale on 19 May1994.

⁹⁵ Greenwood, op. cit., in Byrd, 1991, p.40. See ibid., p.53, fig. 2.1. for the trends in the funding gap. Also see McInnes, 1988, pp.389-90, for the repercussions.

which lasted until the end of the decade. In fact, during the period 1986 to 1989, the military suffered an overall 6 per cent budget reduction in real terms. 96 By the time the Berlin Wall came down in 1989, an event which gave further impetus to the government's effort to realign the defence budget to the changing environment, the budget decline began to affect the military more widely. 97

The amount of money required to deploy many of the systems was indeed enormous. For instance, Dan Smith argued that even the 3 per cent goal outlined by the government in the late 1970s was not sufficient to fund this; he suggested that at least a 6 per cent increase would have to be implemented for the improvement of the conventional capabilities the government was planning. 98 Nonetheless, Bagnall's and Farndale's relentless pursuit of the rational use of resources and efforts to get more capabilities for money enabled the implementation of the reforms with the 3 per cent real increase. As mentioned, the ethos of the reforms was to do more with less, and in fact this motto was reflected in the Army's endeavour to cut overheads by increasing the 'teeth to tail ratio' by abandoning an in-place division in Germany and cutting HQ staffs by rationalising and automating C2 and C3I.

However, the cuts in budget inevitably brought about a hard choice for the Army because it had no resources to finance both the purchase of new weapons and the increase of sustainability, readiness, and training. In fact, those were the areas which the Army was eventually forced to reduce rather than the weapon systems. Particularly, live firing and mobility exercises were beginning to

⁹⁶ See Greenwood, op. cit., in Murry and Vlotti, op. cit., p.284.

⁹⁷ See chapter 8.4. for more on the options-for-change.

⁹⁸ Dan Smith, <u>The Defence of the Realm in the 1980s</u>, (London: Croom Helm, 1980), p.249.

be reduced by late 1987 to early 1988, the effects of the cuts being indicative of a dent in the army's budget because they were two of the most expensive parts of its peacetime expenditure. ⁹⁹ In fact, by this time, the Army had begun to suffer from a shortage of spare parts, stocks of ammunition and fuel. As a result, it was forced to restrict exercises in Germany, fearing they would seriously deplete the supply of the spares. ¹⁰⁰

This situation was quite similar to the problems during the late 1970s as it could not support proper training due to lack of money. ¹⁰¹ Indeed, what happened at the time was exactly the situation which the Parliament defence committee and other academics had foreseen and warned against, expressing their concern that this was something more profound than a passing problem and could last well into the 1990s. ¹⁰² Essentially, they argued that the cuts in funding would lead to cancellation of equipment orders and seriously affect the readiness of the forces. In turn, this would inevitably cause the reconsideration and elimination of some military commitments in the future. ¹⁰³

⁹⁹ Interview, Farndale on 21 June 1993. Also see, Greenwood, op. cit., in Byrd, 1991, p.40; and McInnes, 1988, p.390.

¹⁰⁰ Interview, Farndale on 19 May 1994.

¹⁰¹ See Greenwood, op. cit., in Byrd, 1991, p.42; and McInnes, 1988, p. 390.

¹⁰² See House of Commons, Third Report from the Defence Committee Session 1984-85, Vol., I., para. 36 and 76; and see Vols., II and III., passim, particularly for the numerous comments by Major General L.A.W. New and the general pessimism of the main witnesses concerning the possible impact of the dwindling resources on the military's commitments. Also see McInnes, 1988, p.390; and 1990, p.141.

¹⁰³ See House of Commons, Third Report from the Defence Committee Session 1984-85, Vol., I., para. 76 and 106.

For the Army, the most worrisome factor was that the lack of funding was about to take a major toll on its readiness and ability to execute the kind of operations envisaged, because they required a high degree of training in a real situation. Unless constant training and a high degree of readiness were maintained, the British and other Armies in NORTHAG would not have been able to undertake a complex operation such as counter stroke. In short, it was possible for the reformers to introduce the changes because the 3 per cent real increase in the budget secured the minimum necessary resources for the reforms, while the later cuts prevented them from becoming as extravagant as was envisaged by Farndale. In fact, the financial resources were just sufficient for the initial implementation of the reforms and allowed their extension to the level which Bagnall initially envisaged, but no further.

7.6.2. LOGISTICS AND SUPPORT

The success of the envisaged operation depended critically upon the army group's capability to support the logistics requirement for the battle. Particularly, the amount of ammunition and fuel consumed in such a mobile combined-arms operation was much greater than in positional defence. As Smith estimated, a single division would consume some 4.500 tons of supplies each day in a mobile operation, not to mention the distance the force had to travel which significantly added to the logistics penalty. ¹⁰⁴

The overall logistic network and capability had been improved over the years. The pressure for speedy fuel distribution was significantly eased after the

¹⁰⁴ Rupert Smith, <u>Manoeuvre Warfare--Divisional Operations</u>, A lecture given at the Staff College, Camberley on 10 September 1990.

completion of CEPS (Central European Pipeline System). Field service and repair capability were also enhanced with the streamlining of the repair and support service structures. ¹⁰⁵ Also, an initiative was launched in early 1982, aimed at improving the Army's logistics and supply capabilities. The programme consisted of acquiring some 1.500 trucks, 15.000 flatracks and 40-plus rail transfer equipment (RTE) to support the transfer of DROPS (Demountable Rack Off-loading and Pick-up System) to meet the realistic demand for ammunition and other supplies. ¹⁰⁶ Although these efforts had eased the overall pressure on logistics and provided more resources, the problem of war-time support still existed because of the structural deficiencies of the Army's logistics system.

In the British Army, the basic logistics assets were concentrated in battlegroups under divisional control, under which each unit would hold about five days of supply. 107 Consequently, brigades did not have their own integral logistics support. Furthermore, the system depended on being 'pushed' forward rather than on units 'pulling' the resources. 108 Under the circumstances, the logistics requirement of each unit could not be properly met as the division would allocate resources as it saw fit. This could result in units being dependent on the division rather than being self-sufficient during the expected duration of combat they were expected to fight. As a result, the overall ability to fight a

¹⁰⁵ Interview, Brown. See Warren L. Kempf, "British Army Logistics," <u>AL</u>, (July-August 1986), pp.24-6; and "German Army Logistics," <u>AL</u>, (November-December 1983), p.8. See 1983, <u>AL</u>, for more on the Bundeswehr's logistic systems.

¹⁰⁶ J.C. Larminie, "Replenishment within British Army Battlegroups," <u>IDR</u>, (July 1986), p.946.

¹⁰⁷ See Kempf, p.23; and M.A. Gilbertson, "The Development of Logistics in the British Army," in Mackenzie and Holden Reid, 1989, p.86.

¹⁰⁸ Gilbertson, op. cit., p.85 and p.87.

mobile battle would subsequently be weakened. It was strongly suggested that brigades be provided with a logistics support capability to ease the pressure in the existing structure while increasing the flexibility of the system. Above all, the writing of a logistics doctrine alongside the BMD was suggested as an alternative in order to counter more problems in the future. 109

7.6.3. INTEROPERABILITY

After the reforms got underway, a great deal of attention was paid to the improvement of interoperability among NORTHAG corps. As mentioned, because the British supplied the necessary equipment to enhance interface among corps C3I assets, the interoperability problem in this area was substantially eased. Nonetheless, many problems remained. Artillery ammunition (155 mm) was interchangeable, but tank ammunition was not. 110 Also, although the NORTHAG in-theatre corps C3I network was interoperable, the 3 (US) Corps' system (RITA) was not fully interoperable with NORTHAG's (Ptarmigan). 111 The only completely interoperable material was POL (Petrol, Oil and Lubricant). Thus, there was no hope that NATO could achieve a degree of interoperability similar to that which existed in the WP armies, but achieving at least *some* degree of interoperability was a strong desire. 112 The reforms attempted to address this problem, but they were limited to providing communication

¹⁰⁹ Gilbertson, op. cit., p.92.

¹¹⁰ Interviews, Brown and Fischer.

¹¹¹ I.S. Baxter, "Sustainability," in Holden Reid and Dewar, op. cit., pp.228-9. See Rice and Sammes, op. cit., chapter 9 for the degree of interoperability between existing C2 and C3I systems.

¹¹² See Wright, op. cit., in Mackenzie and Holden Reid, 1989, pp.206-7.

interfaces to other corps in NORTHAG. The actual changes were to require more time and effort due to different national priorities and determinations.

7.6.4. STOCKPILE, SUSTAINABILITY AND OTHER FACTORS

The insufficient stockpile of the necessary war material to sustain the operation envisaged remained a major source of problems. 113 In fact, this was an area which consumed a lot of financial resources, but did not make any immediate visible difference. Consequently, it was the area which was most prone to cuts. In fact, the projected sustainability of NORTHAG even after the reforms was calculated to be no more than fifteen days of intensive fighting, contrary to the minimum thirty-day requirement of the Alliance. 114 As mentioned, only the German Army was barely able to meet this demand. The problem was aggravated by the fact that overseeing this matter was a national, not an army group, responsibility. Moreover, there were neither equipment reserves nor factories in the west which could quickly be converted to mass-produce the material needed. 115 Thus, despite the effort, there was a distinct possibility that, because of the lack of sustainability of the British Army and other corps in NORTHAG, the army group would be forced to resort to nuclear use earlier than it wished. If there was to be a failure of NORTHAG's operation in war, the lack of sustainability would be the primary reason.

There were other negative factors which were created due to the nature of the modern battlefield. Firstly, its complexity and continuous nature would

¹¹³ See criticism in McInnes, 1990, pp.147-8.

¹¹⁴ Interviews, Brown and Fischer.

¹¹⁵ Interview, Brown.

cause extreme fatigue to both commanders and soldiers alike. ¹¹⁶ Secondly, the horrific nature of the modern weapons' destructive power would cause excessive terror and paralysis to many soldiers on the battlefield. ¹¹⁷ Also, fighting a war usually involves boredom, sleep deprivation, and numerous other petty, yet crucial factors, which could only exacerbate the existing problems. The only way to avoid a general breakdown of the forces' morale, especially if they were meant to be exposed to an intensive and violent operation such as counter stroke, was for them to be highly-trained and motivated in peacetime, all the time. ¹¹⁸ Above all, this required a high degree of professionalism on behalf of both officers and soldiers, a perennial problem of armies during peacetime. ¹¹⁹

Although Farndale stressed in an interview that he was able to go on commanding army group operations for more than a month--as he did during Certain Strike in 1987--with very little sleep, it is safe to suppose that the situation could be different in a real war condition because the pressure and stress of a real battle would significantly differ from that of an exercise. ¹²⁰ Also, unlike the WP concept of formation relief, NATO forces relied on continuous operation by a single unit, which would have compounded the problems of

¹¹⁶ M.G. Hunt-Davis, "Continuous Operations," <u>RUSIJ</u>, (September 1980), pp.13-4.

¹¹⁷ See Kitson, 1989, p.34.

¹¹⁸ See Edna J. Hunter, Howard T. Price, "Stress and the Combat Leader," Extract from Conventional Warfare, (U.S. Air Force ACSC), p.273.

¹¹⁹ See David Eshel, Chariots of the Desert, (London: Brassey's, 1989), p.117; and George Belenky, Shabtai Noy, and Zahava Solomon, "Battle Stress: The Israeli Experience," Extract from Conventional Warfare, (U.S. Air Force ACSC), pp.262-3, for a case with a marked difference among soldiers who participated in the 1973 defence of Golan and the 1982 invasion of Lebanon.

¹²⁰ Interview, Farndale on 21 June 1993.

fatigue and made troops more vulnerable to low morale in the longer term, as would the inevitable high rate of casualties. ¹²¹ Moreover, the survivability of the commander, who would become an obvious high priority target, was also in doubt.

Another problem was that the amount of casualties would have been so great that the army group would have to continue the operation regardless of the casualties and lack of a capability to evacuate them, despite Bagnall's claim that there was an extensive plan for casualty evacuation. 122 Particularly, a heavy casualty rate (up to 80 per cent) was expected among the airmobile and counter stroke forces. 123 Overall, Bagnall and Farndale were too dismissive of the rate of casualties expected, as well as of how the army group would cope with such difficulties. It was pointed out that any casualty rate would be absorbed and that the timely evacuation of casualties would sometimes have to be delayed, but this indicates a lack of coherent planning and preparation to deal with the problem. 124 Taking casualties in training could be acceptable because they could receive immediate medical attention, but the lack of guarantees for such care during an actual battle could act as a factor in decreasing the maintenance of high morale among soldiers.

¹²¹ See Richard Simpkin, "Tank Warfare," in Ken Perkins, <u>Weapons and Warfare</u>, (London: Brassey's, 1987), p.174.

¹²² Interview, Bagnall on 5 May 1993.

¹²³ Interviews, Bagnall on 5 May 1993 and Farndale on 21 June 1993.

¹²⁴ Interviews, Bagnall on 5 May 1993 and Farndale on 21 June 1993.

7.7. CONCLUSION

This chapter's main findings are three-fold. Firstly, the British Army's efforts to implement the reforms were largely successful, and achieved an overall improvement of its ability to conduct the kind of operation envisaged. In fact, the application of operational thinking in the implementation of the reforms was manifest in the securing of an array of combat multipliers for the theatre-wide operation. The emphasis on improving C3I and fire support capabilities was intended to allow the selective application of the army group's resources by simultaneously achieving economy and concentration of forces at such a level, while the creation of the airmobile force was to secure the ability and mobility to quickly react to unforeseen and urgent contingencies in the army group's defence. Also, the new educational establishment, the HCSC, was instrumental in nurturing a novel breed of officers to undertake the operational level of war.

Secondly, while there were numerous successes, the shortfalls in financial support from the government, especially after abandoning the LTDP commitment in 1985, prevented the military from implementing the reforms as fully as they had hoped to--at least not to the level Farndale had anticipated. This was despite the number of changes made in acquiring new weapon systems and creating new formations; the British Army continuously suffered from shortages in sustainability, and in fact, the stockpile of spares, etc., was critically threatened by the government squeeze on financial support. Nor were the conditions in other corps any better.

Finally, because of the shortcomings of the resources, the reduction of financial support from the government since 1986, and the persisting interoperability and sustainability problems, if the army group was forced into a war with the WP at the time, it would have exhausted its conventional combat-

power much faster than expected due to the obvious lack of sustainability. As a result, the introduction of, or at least the plan for, nuclear weapons would have to be made quite early into the conflict to compensate for such deficiencies. This assumption is reinforced by the example of 1 (BR) Armoured Division during the Gulf War, which spent 5 months increasing stockpiles and sustainability before being committed to battle. Also, due to the lack of sustainability, the two brigades in the division were made up from the total of eight brigades which were deployed in Germany, drawing up all available Challenger and ammunition stocks to support the operations by two brigades. 125 If one division had so much trouble building up to the necessary strength to fight an out-of-area war, it is not too difficult to imagine how much time and effort would have to be put into preparing the whole army group to reach an actual war footing.

This consequently confirmed Bagnall's logic which suggested that a counter offensive would have to be launched earlier to neutralise the enemy forces, because the lack of sustainability would have prevented prolonged conventional fighting, and having done so would have put less strain on resources. This factor, more than anything else, discredited Farndale's ideas and any suggestion for a more extensive capacity for conventional deterrence.

125 See Greenwood, op. cit., in Byrd, 1991, pp.40-1.

CHAPTER 8 THE VALIDITY OF THE REFORMS

8.1. INTRODUCTION

This chapter examines the validity of the reforms through a historical review. Firstly, I shall discuss the feasibility of executing NORTHAG's concept of operation, especially the counter offensive, through reviews of the past successes and failures of such operations. Secondly, I look back at the British experience and performance during the Gulf War, which was the first and probably the last opportunity to test the viability of the reforms in a major war, to investigate whether the NORTHAG concept would have worked in Central Europe and also what benefits were introduced by the reforms. Also, these reviews will enable me to examine the shortcomings of the new concept.

I shall end this chapter with a brief examination of the new changes introduced to the British Army since the fall of the Berlin Wall and the endorsement of the 'Options for Change' review in 1990. This is not an attempt to either criticise the developments since, which have been largely negative in terms of maintaining the operational efficacy of the British Army, or make suggestions. Nonetheless, I shall offer my views on how these changes will affect the reforms, and raise a few questions on where the Army goes from here.

8.2. HISTORY AND THE VALIDITY OF THE COUNTER OFFENSIVE CONCEPT

There were a number of instances in the past when successful counter offensive operations had brought disproportionate victories to the defender. A review of such experiences provides valuable insights and helps in evaluating the validity of NORTHAG's counter offensive concept, as it allows the identification of the common themes and denominators behind the successes and, sometimes, failures of these counter offensives.

In fact, among past experiences, the Israeli defence of Golan and Sinai during the Yom Kippur War is an ideal example of how an army could turn the tide of war by counter offensive, even after having been surprised. Along with the German counter stroke operations on the Eastern Front and the Arras counter stroke (which have been discussed in chapter 2), the Israeli counter offensive, particularly that following the successful initial defence in Golan, should provide significant insights because the situation the Israelis had faced there would have been precisely the condition NORTHAG would have been subjected to, and the result achieved by the Israelis would have been what NORTHAG would have endeavoured to secure. ¹

The Israeli successes, as well as others achieved by the Germans, display a number of common themes. Firstly, they showed the importance of containing the enemy penetration at an early stage, which was critical to buy time and secure ground through which a counter offensive could be launched. Indeed, this

¹ The Golan region shared many similar characteristics with the mixed terrain of the NORTHAG sector, and the Israelis, facing a surprise attack, lost some ground. See Cordesman and Wagner, 1990--A, pp.43-4, for the terrain in the Golan Heights.

was only possible by successfully slowing down the enemy through strong initial defence.² Even though the Israelis had to commit, sometimes waste, every asset they had at the time, their desperate and bloody initial defence retained a secure start-line from which the ensuing counter offensive could be safely executed. This also had a psychological effect as the Syrian forces were demoralised and exhausted after the failure of their earlier attack.³ As a result, the Israeli counter offensive was able to achieve a considerable momentum of attack.⁴ Secondly, the Israelis, and Germans too, emphasised the importance of offensive action and taking the initiative, as well as the skill, flexibility, and imagination of the individual commanders and soldiers, which enabled the defender's swift counter offensive. Thirdly, the Israeli and German experiences exemplified how a welltrained and determined defender could withstand continuous onslaught by a numerically superior attacker, if he were willing to absorb heavy casualties--the situation which NORTHAG's defenders would have to face.⁵ Finally, the most crucial common denominator among these operations was how even a desperately outnumbered force could achieve spectacular success once surprise (or counter surprise in the case of the Israelis) was secured.⁶ This factor reinforced the fact that surprise was the most important element behind all of the

² See Eshel, op. cit., p.95 and p.97, for the Israeli defence concept of Golan.

³ See Carver, 1978, p.97.

⁴ See Charles Messenger, <u>The Art of Blitzkrieg</u>, (London: Ian Allan, 1976), p.245.

⁵ See Bellamy, 1987, pp.17-19; Macksey, 1972, pp.259-60; Eshel, op. cit., chapter 8; and Carver, 1978, chapter 4., for the lessons of the 1973 War.

⁶ See Eshel, op. cit., chapter 8 section III for a detailed account of the Israeli counter stroke. Also see Macksey, 1972, chapters 20 and 21, and 1991, chapters 4 and 5 for details of the German operations.

successful counter offensive operations in the past, and NORTHAG recognised this as the key requirement if its operation was to secure victory.

The irrelevance of material and manpower as substitutes for these factors in securing successful containment of an enemy onslaught is illustrated by the spectacular collapse of the Polish, French, and Russian defences in the Second World War. These instances vividly demonstrated that failure to meet the above requirements would bring dire consequences to the defenders regardless of their physical strength, especially when surprised by an attacker with superior skill, determination and the initiative of attack.

In fact, the German success was largely attributed to the success of blitzkrieg, which increased the effects of surprise by achieving an awesome speed of attack, and thus enabled a quick penetration deep into the defenders' territory by operationally dislocating the bulk of defending forces deployed in static defence positions, and against which the Polish, French, and Russian defences were impotent. In addition to the fact that their speedy defeat was attributed to the inadequacy of their defence planning, epitomised by Poland's forward defence and France's Maginot Line, their failure to execute credible counter moves against the German surprise attack was the main deficiency. Their haphazardly organised counter attacks were quickly defeated by the sheer speed and offensive power of the German onslaught due to the overall lack of flexibility and speed of their counter forces, which, apart from the Arras counter stroke, failed to achieve surprise. Basically, they were too little and too late to make any significant difference to the German progress. Faced with surprise and

⁷ See Simpkin, 1985, p.30; Macksey, 1991, chapter 4; and 1972, chapters 10 and 11; and Messenger, op. cit., chapter 5.

speed, even the defender's material and manpower superiority (as with the case of France) became irrelevant to the outcome of war.

On the other hand, the Battle of the Bulge in December 1944, during which the Germans launched a daring counter offensive through the Ardennes, was a classic case of failure of a major counter offensive operation, a gamble which failed to achieve its strategic purpose of halting the Allies' advance to Germany. There were many reasons for this. Firstly, many of the troops used during the battle were inexperienced and ill-supplied; in fact, they could have been better used in positional defence. Secondly, the Germans did not have air superiority; thus once the weather cleared, they became prey to the Allies' air power. Thirdly, the poor terrain condition in the Ardennes hampered their speedy operation. Finally, they did not have the necessary sustainability, in terms of both manpower and equipment, to achieve their strategic goal. In other words, their objective far surpassed their capability.

Despite the fact that the most important operational requirement-surprise--was achieved, at least in the early stage, and the initial high-speed attack paralysed the Americans, making their early defence ineffective, because of the above mentioned shortcomings, the counter offensive was an ultimate failure. ¹⁰ In fact, this blunder, which was caused by setting up unrealistic and unattainable strategic aims, expedited Germany's defeat as it had exhausted

⁸ See Macksey, 1972, p.238; and Messenger, op. cit., p.214.

⁹ See Messenger, op. cit., p.214; John Harding, "The German Operation in the Ardennes 1944," in Barnett, Bidwell, Bond, Harding and Terraine, op. cit., pp.105-113.

¹⁰ See Macksey, 1972, pp.238-9; Messenger, op. cit., p.214; and Harding, op. cit., in Barnett, Bidwell, Bond, Harding and Terraine, op. cit., pp.105-113.

valuable reserves which could have been better utilised in defence of Germany. 11

Nonetheless, despite its strategic miscalculation, the Bulge operation did achieve some temporary success as it pushed the Allies back to where they had been six weeks before. 12 If NORTHAG could achieve this much, it would be considered as an exceptional operational victory, and this was in fact what NORTHAG wanted to secure in its counter offensive. There would be a number of fundamental differences between the German and NORTHAG operation. Above all, the NORTHAG operation would be on a much smaller scale, and the conditions under which the NORTHAG counter offensive would be committed would have been significantly different, as it would be launched early in a frantic and confused stage of the battle unlike the German operation which was committed when fighting had stagnated for winter and in a relatively stable front. Nonetheless, NORTHAG planned an operation somewhat similar to what the Germans attempted during the battle: securing surprise by using speed and concentrated striking power to stop the enemy advance. 13 Unlike the objective of the German operation, territorial gains would not be on NORTHAG's agenda since its main objective was to strike against the enemy main force, but NORTHAG's counter offensive was aimed at achieving a result close to that the Germans were able to attain--pausing the enemy advance. In a sense, the German experience fitted exactly what Bagnall wanted to achieve.

¹¹ See Harding, op. cit., in Barnett, Bidwell, Bond, Harding and Terraine, op. cit., pp.105-6.

¹² Messenger, op. cit., p.214.

¹³ See Harding, op. cit., in Barnett, Bidwell, Bond, Harding and Terraine, op. cit., p.85.

In fact, it is not difficult to postulate that this much success would bring two major benefits to NORTHAG. Firstly, it could prevent the loss of ground, since the prospect of recovery would be virtually nonexistent once lost. Secondly, it could halt the progress of war since it would be in everyone's interest to stop a war as soon as possible to avoid an inevitable escalation to a nuclear exchange. Therefore, NATO's initial conventional victory (by pause), backed up by the de facto threat of its nuclear retaliation, could convince the WP to seek a negotiated settlement. The primary logic of Bagnall and Farndale, and of academics such as Dinter and Griffith, was based on this assumption. Ironically, taking such a gamble, which involved risking a bulk of NORTHAG's conventional assets in a single operational battle, was possible and justified because of the existence of nuclear weapons, the critical element which differentiated the situation of NORTHAG and that of the Germans in 1944.

The main difference between the Germans then and NORTHAG in the 1980s was that at least NORTHAG's operation would not be hampered by the shortcomings which the Germans experienced during 1944, as the reforms were designed to improve those areas to which the downfall of the German operation was attributed. Indeed, the areas which the reforms attempted to address coincided with the prerequisites for the successful launch of such an operation.

Firstly, adopting a coherent concept of operation enhanced NORTHAG's capabilities in many different areas. This allowed better training and education for officers and soldiers, the elements which were crucial in fostering the forces to gain necessary flexibility and creativity to undertake the envisaged operation. This in turn would allow swift offensive actions by the forces which was vital to maintain initiative of attack and exploit chances to secure surprise. Secondly, with better material provisions (e.g., better weapon systems and high-tech equipment), and increased sustainability and enhanced interoperability among

corps, the reforms attempted to provide the necessary resources to fight effectively in such a battle. Thirdly, the adoption of Land/Air Battle doctrine assured that the army group would receive necessary air cover and support. As discussed, all these aspects, which the reforms attempted to address and improve, coincided with the common themes which facilitated the successful launch of counter offensives in the past.

In conclusion, these past experiences largely reaffirm the conceptual validity of NORTHAG's counter offensive concept. Specifically, the Israeli operations showed that the defender's ability to create a counter surprise by counter offensive disrupted the enemy's momentum of attack, leaving him confused, and its high-speed committal intercepted the enemy at its weakest moment. Most of all, it showed that even a small counter offensive by forces with superior mobility and skills could secure a disproportionately large victory because of the low force density and inevitable initial confusion, a lesson which is particularly relevant in NORTHAG's defence against a standing start attack. As discussed in chapter 3, if the enemy's capability was as constrained as NORTHAG's due to the lack of resources and the overall low force density of the operational theatre, it would expedite the movement of the NORTHAG reserve, hence increasing its chance of quickly intercepting the WP advance. The most favourable fact supporting the feasibility of NORTHAG succeeding in a counter offensive, even over the IGB, was that the above requirements for battle were met.

Overall, NORTHAG's operational level operation could be similar to a combination of Israel's Sinai and Golan counter offensives in the Hanover Plain, following a Golan-type tactical level defence and covering and main forces battle. This experience confirmed that NORTHAG had correctly identified the operational imperatives needed to commit a successful counter offensive, thus

reaffirming the validity of its operational concept and the focus of the reforms. Also, the German failure in 1944 showed the importance of setting an attainable goal. While the destruction of the enemy first echelon might have been achieved within the capabilities available to NORTHAG--provided other pre-conditions were met--seeking territorial gain was not possible due to the lack of capabilities and many political obstacles.

8.3. THE REFORMS AND THE GULF WAR EXPERIENCE

8.3.1. THE OPERATIONS OF 1 (BR) ARMOURED DIVISION

Operation Granby began in September 1990 following Britain's decision to send combat troops to the Gulf Region. 14 The heart of the British land force was 1 (BR) Armoured Division, commanded by Major General Sir Rupert Smith, which was made up of two, 7 and 4, Armoured Brigades, an artillery group and a reconnaissance regiment. 15 The overall operational aim of 7 (US) Corps, to which 1 Division belonged, was to: 1) separate in-theatre Iraqi forces from their home base; and 2) make a direct thrust to Kuwait city. 16 Meanwhile, the primary objective of 1 Division was to protect the right flank of the Corps by blocking Iraqi theatre reserves and destroying tactical reserves. 17 In this sense, 1 Division was to be an anvil onto which 7 (US) Corps, a hammer, could be swung. 18 From the outset, 1 Division, as agreed between Lt. General Sir Peter de la Billière, who was GOC, and Smith, planned a straight forward armour battle--a fast moving offensive battle in-depth, the attack of which was to be led

¹⁴ See John Pimlott and Stephen Badsey, <u>The Gulf War Assessed</u>, (London: Arms and Armour), p.92.

¹⁵ See Bruce W. Watson, Bruce George, Peter Tsouras and B.L. Cyr, Military Lessons of the Gulf War, (London: Greenhill, 1991), p.104. See Pimlott and Badsey, op. cit., p.93; See House of Commons, Defence Committee session 1990-91: Preliminary Lessons of Operation Granby, (1991. London, HMSO), para.6 and 18.

¹⁶ See Lawrence Freedman and Efraim Karsh, "How Kuwait was Won-Strategy in the Gulf War," IS, (Fall 1991), p.34.

¹⁷ See AC 71512, p.5--13; and Pimlott and Badsey, op. cit., p.160.

¹⁸ See Pimlott and Badsey, op. cit., p.155.

by 7 Brigade committed to a direct break-in attack to ensure speedy exploitation. 19

The British division achieved a spectacular success as soon as Operation Desert Sabre, the code name for the British land operation, got underway. On Day One (24/2/91), 1 Division quickly broke through the Iraqi defence after 1 (US) Infantry Division succeeded in breaching the Iraqi trenches. Despite the initial assumption, 7 Brigade met with heavy resistance, but it achieved a dramatic 25 km advance in the first hour. 20 The effectiveness and bravery of the British force was tested when 7 Brigade was attacking an Iraqi communication complex, during which it conducted a daring dismounted attack at night before quickly moving ahead towards the next objective at first light. Overall, the division's first day performance was highly praiseworthy, taking objectives far sooner than planned--a trend which was to be continued throughout the war.²¹ By the end of the second day (25/2/91), the division managed to destroy one and damage two Iraqi divisions, while neutralising a number of Iraqi counter attacks without affecting the speed of progress.²² On the third day (26/2/91), the attack was temporarily halted, partly due to the unexpected high speed of advance, and the break was used to reorganise logistics which were trailing behind the spearhead.²³ On the final day (27/2/91), the division was ordered to revise its

¹⁹ See Peter de la Billière, <u>Storm Command</u>, (London: Harper Collins, 1992), pp.144-5; R.A. Smith. "The Gulf War: The Land Battle," <u>RUSIJ</u>, (February 1992), p.1.

²⁰ See Watson, et. al., op. cit., p.104.

²¹ See Watson, et. al., op. cit., pp.104-5.

²² See Pimlott and Badsey, op. cit., p.163; and AC 71512, p.5--18.

²³ See de la Billière, op. cit., p.289; and Watson, et. al., op. cit., pp.113-4 and p.117.

objective. It was to swing north to trap a Republican Guard Division and then move east towards the Basra-Kuwait road, which ultimately became its final objective as the cease-fire was announced upon arrival.²⁴ All in all, during 66 hours of combat, the division had advanced 290 km, destroyed almost three Iraqi divisions, taken 7.024 prisoners, and captured over 4.000 items of equipment.²⁵

8.3.2. THE REFORMS AND THE GULF WAR COMMAND PERFORMANCE

The triumph of the British Army's command performance, more than anything, epitomised its success in the Gulf War. This was one of the areas on which the reforms placed the utmost priority, and the war verified the fact that the efforts had paid off, making the most profound and far-reaching impact. Particularly, the influence of the HCSC had been significant. Through it the Gulf commanders learned to exploit fully the benefits of flexibility and creativity of command, and most importantly, the principles of the operational level of war. Above all, the reforms created a different breed of commanders with excellence in both commanding ability and innovative thinking. De la Billière recalled in his memoirs that he immensely appreciated Smith's 'refreshingly unorthodox' ideas, which were both daring and versatile. 26 Indeed, Smith had proved his adaptability and creativity during the build-up of British forces in the region. For instance, he had only about six weeks to prepare for the battle from 10

²⁴ See AC 71512, p.5--20; and Watson, et. al., op. cit., p.117.

²⁵ AC 71512, p.5--20.

²⁶ See de la Billière, op. cit., p.127.

December, when the full elements of the division arrived.²⁷ Yet, during that short amount of time, he not only managed to rectify most of the problems he identified before the run-up to the battle, sometimes creating many new units ad hoc, but also successfully prepared all combat units for the battle.

The command performance was greatly enhanced by close personal links among the commanders of the major arms. Having undergone the HCSC training, they were able to achieve excellent mutual cooperation and, most of all, trust each other. For example, not only was Smith a former participant and the director of HCSC 3, but also the commander of 7 Armoured Brigade, Brigadier Patrick Cordingley, and the commander of the Artillery Group, Brigadier I.G.C. Durie, as well as the UK representative on Schwartzkopf's planning staff, were graduates of the course. Meanwhile, the commander of 4 Armoured Brigade, Brigadier Christopher Hammerbeck, was a friend of Smith's from the days of the Parachute Regiment. This was explicit proof of how important it was for commanders to share a similar line of thought, and thus of the values of HCSC, which provided both an intellectual and empirical basis for such close relations. Overall, it was an opportunity which confirmed that such a close personal link is crucial for fostering effective cooperation among arms, and most of all, for directive control to be exercised.

Most of all, the Gulf War provided an ideal opportunity to test the validity and British aptitude for utilising Auftragstaktik. Each level of command was given a mission order, 'directives,' rather than specific orders; hence, it was almost free from interference by higher command. This eventually lowered the decision making level, and proved to be instrumental in increasing the tempo of

²⁷ See de la Billière, op. cit., pp.143-4.

²⁸ See de la Billière, op. cit., p.263.

operation.²⁹ Smith did say that he experienced some difficulty due to the inadequacy of surveillance and information-gathering capability, but the flexibility of command through the exploitation of the fundamentals of Auftragstaktik compensated for this problem in the theatre, thus facilitating the efficient conduct of high-tempo manoeuvre battle.³⁰

However, the experience was also a reminder that the drafting of a prebattle SOP was crucial to clear up any misunderstanding of plans before the actual battle got underway if Auftragstaktik was to be effectively utilised. For instance, Carver criticised the extensive length of the Gulf SOP (65 pages) as a hindrance to the command problem, since it would lead to inflexibility. In fact, his assumption proved to be presumptuous as Smith was able to rely on orders which were no longer than two paragraphs and the SOP provided a useful basis for preventing confusion when issued with such orders. 32

Also, the HCSC education, and its focus on training at the operational level, achieved doctrinal interoperability with the US Army, which further enhanced the effectiveness of 7 (US) Corps' operations by creating more effective command links. The US Army planned and undertook operations based on the AirLand Battle Doctrine, and since the British Land/Air Battle concept

²⁹ See Smith, 1991, p.4; and Watson, et. al., op. cit., pp.109-110.

³⁰ See Smith, 1991, p.4. Also see P.M. Reid, "Tanks in the Gulf," AQ&DJ, (Gulf War Issue, 1991), p.189, for the problems encountered due to the unexpectedly high speed of operation.

³¹ Interview, Carver.

³² The samples of orders Smith issued during the battle were shown to me during an interview.

shared a common operational language and conceptual background, ³³ there was no confusion in planning operations between the two forces. Furthermore, the experience of cooperating in Europe proved to be invaluable in coordinating every aspect of the battle from war-fighting and C3I to logistics. ³⁴ For example, although the interoperability problem between Ptarmigan and RITA systems were not fully addressed, the British Army was able to use the American system when needed. Also, basic communication through radio, facsimile, etc., did not suffer interoperability problems. ³⁵ Moreover, such close cooperation was further ensured because a British senior officer was posted to Schwartzkopf's planning team, enabling a closer detailed co-planning while ensuring British input. ³⁶ If he had not fully understood the operational doctrines of the two, his contribution could have been limited. Above all, the cooperation between the two armies, as well as the RAF and US Air Force was considered to be excellent; this was only possible because of doctrinal interoperability. ³⁷

The implications of this doctrinal interoperability in the conduct of war in Europe would be enormous. Particularly, the subscription to similar operational principles by the US and British Armies, and the same understanding of the benefits of operational thinking, would be vital if they could avoid

³³ See The U.S. Department of Defense, <u>Conduct of the Persian Gulf Conflict--An Interim Report to Congress</u>, (Washington, D.C.; US GPO, 1991), p.2--7; and AC71512, p.5--2.

³⁴ See The U.S. Department of Defense, <u>Conduct of the Persian Gulf Conflict-Final Report to Congress</u>, Appendices A-S. (Washington, D.C.; US GPO, 1992), p.I--47.

³⁵ See Smith, 1991, p.4; and interview, Smith.

³⁶ See Defence Committee, <u>Preliminary Lessons of Operation Granby</u>, para.17.

³⁷ Interview, Smith; and Defence Committee, <u>Preliminary Lessons of Operation</u> <u>Granby</u>, para 17.

misunderstandings or time-consuming preparation and dialogue between the two forces in C2 and cooperation. Also, the minimisation of effort and effective coordination would be one factor compensating for early resource limitation by achieving a selective concentration of forces and assets according to priorities.

Considering such an achievement, it is possible to extrapolate that there was a strong chance, especially after the adoption of the joint SOP, that 3 (US) Corps could be quickly integrated and put into battle in the case of war in Europe. It was true that NORTHAG's ability to accomplish this task was rather limited, as discussed earlier, but once those shortcomings were redressed, it is safe to assume that NORTHAG would eventually be able to accumulate exactly the kind of counter offensive capability it once hoped to attain--although some time later than Farndale envisaged. Above all, this proved that reinforcing NORTHAG's covering and MDA forces area by reverting the divisions in the army group reserve role, while relying on 3 (US) Corps as the main operational reserve asset, was valid. Alternatively, NORTHAG could actually risk throwing in its every reserve in an early counter offensive, leaving the defensive duty to the freshly arrived, and still rather disorganised, 3 (US) Corps.

8.3.3. THE REFORMS AND THE GULF WAR OPERATIONAL PERFORMANCE

The success of the Army's operation highlighted the validity of the early offensive operation to secure the initiative, and thus, the validity of the operational concept based on manoeuvre principles. Above all, it was achieved by the clear selection of aim--to achieve concentration against *the body of enemy*

force, not the terrain.³⁸ To attain this operational objective, the initial plan was to quickly by-pass the Iraqi prepared-defensive positions after the breaching operation to allow a rapid exploitation and manoeuvre battle.³⁹ After this, all efforts were focused on allowing swift movement of forces, often fighting all-hours. It was confirmed that the surprise, sheer speed, and aggressiveness of the assault prevented any meaningful Iraqi counter attack.⁴⁰ Thus, the division's high-speed offensive mobile operation continued unhindered.

This success largely rectified the earlier critical views of many who formerly thought that the British would be ineffective at mobile warfare due to a general lack of flexibility and firepower.⁴¹ In fact, the successful operation by 7 (US) Corps during the first two days owed much to the British triumph.⁴² Bruce George hailed the British performance as follows:

If deeds can summon the shades of man back to earth, surely 1st Armoured at that moment recalled to this world a retired captain of the Great War, one Basil Liddell Hart. In their dash and skilful maneuver of the next few days, they were to prove his spiritual heirs. Perhaps some of the Allies' high technology instruments might have enabled someone to see the faint ghostly shimmer of the thin, English scholar, waving 1st Armoured on. 43

Also, the reforms' recognition of the importance of air power and the adoption of the Land/Air Battle concept proved to be a valid decision. There

³⁸ Interview, Smith.

³⁹ See Watson, et. al., op. cit., p.102, for more on the planning.

⁴⁰ See Watson, et. al., op. cit., p.109, for an assessment.

⁴¹ See Defence Committee, <u>Preliminary Lessons of Operation Granby</u>, para.6; Frank Chadwick, <u>Gulf War Fact Book</u>, (Bloomington: GDW, 1991), p.61; and Pimlott and Badsey, op. cit., pp.74-5.

⁴² See Watson, et. al., op. cit., p.109.

⁴³ Watson, et. al., op. cit., p.104.

were a number of factors proving Coalition air power to be one of the decisive factors in the quick cessation of war. For example, the desert terrain was well-suited to offensive air operations, and the overall improvements in the Coalition (especially the US) air doctrine and technology were valuable assets, although the absence of the Iraqi air power and its poor AD were also key elements. 44 Nonetheless, it reaffirmed Bagnall's pursuit to prioritise the use of air power. Indeed, the priority use of Coalition air power was in order of: 1) OCA (and air superiority); 2) strategic bombardment; 3) interdiction; and 4) CAS. 45 This ultimately allowed the concentrated use of air power in support of the land battle, while reconfirming the importance of an early achievement of air superiority, if large armoured forces were to be used effectively.

However, the successes both in air and on land would not have been possible without the effectiveness of other crucial areas. Notably, the efficiency of technology and weapon systems played a very important role. In the case of air power, technology increased the precision of weapon delivery systems, as well as securing better survivability of aircraft. Meanwhile, it enhanced the land force's ability to manoeuvre by enhancing mobility, allowing stand-off engagement and precision navigation, and providing the capability to conduct a continuous war by use of better night vision equipment. ⁴⁶ Similarly, technology favoured an increase in the lethality of weapons, especially those of modern artillery. ⁴⁷ With the better C2 systems which allowed its concentration, this

⁴⁴ See James F. Dunnigan and Austin Bay, <u>From Shield to Storm</u>, (New York: William Morrow & Co., 1992), pp.156-9.

⁴⁵ Pimlott and Badsey, pp.113-122, for details.

⁴⁶ See Les Aspin and William Dickinson, <u>Defense for a New Era</u>, (New York: Brassey's, 1992), pp.17-21.

⁴⁷ Smith, 1991, p.4.

proved to be a decisive factor supporting the ground offensive. In fact, C3I was the main beneficiary of improvements in technology as it provided effective links among J-STARS, AWACS (Airborne Warning and Control System), and other C3I assets on land.⁴⁸ For instance, J-STARS was hurriedly introduced to the battle, although it was still in the developmental stage. The system was conceived initially for use in Europe as a force multiplier, yet it proved to be useful, and capable, in directing AI and allied advance in the war.

Although its critical contribution did not receive much attention, the training and education which the reforms stressed so greatly were probably the most important factors contributing to the British achievement. Despite the fact that there was a need for extensive live-firing and manoeuvre training before the commitment to battle, the high standard of training the British forces received in Europe, and particularly in the BATUS training range in Canada, was most beneficial. ⁴⁹ Also, it was instrumental in the quick transition from the traditionally defensive-oriented planning to undertaking a purely offensive form of warfare. ⁵⁰ Most of all, the well-trained troops, and their professionalism and superior skills, once more proved to be a 'priceless asset,' further enhancing flexibility. ⁵¹

⁴⁸ See Pimlott and Badsey, op. cit., p.117; and Dunnigan and Bay, op. cit., p.166.

⁴⁹ See Defence Committee, <u>Preliminary Lessons of Operation Granby</u>, para 26.

⁵⁰ See Defence Committee, <u>Preliminary Lessons of Operation Granby</u>, para.41.

Defence Committee, <u>Preliminary Lessons of Operation Granby</u>, para.7. Also see James Blackwell, Michael J. Mazarr and Don M. Snider, <u>The Gulf War-Military Lessons Learned</u>, (Washington, D.C.: The Center for International and Strategic Studies, 1991), p.27; and William J. Taylor Jr. and James Blackwell, "The Ground War in the Gulf," <u>Survival</u>, Vol. XXIII, No.3, (May/June 1991), p.240.

In relation to the European theatre, this confirmed that the immediate counter offensive on the Hanover Plain, both in and outside of the IGB, could be feasible as long as it could achieve the necessary amount of speed and tactical surprise in attack, both of which would compensate for the lack of size in the force. It would require much better training and readiness of forces, although a lot of effort had been put into this. Also, it showed to what extent a weakness in numbers could be compensated for by technology. Above all, the role of technology, in terms of enhancements in C3I and weapon systems performance, would be absolutely crucial because it would make the synchronisation of forces and assets possible, shifting the concentration of the counter offensive force to the target sector by allowing an exponential, though temporary, increase in superiority of force density and firepower to secure victory. This was the reason for replacing old weapon systems during the reforms, something on which the future effectiveness of British forces depends. 52

8.3.4. THE SHORTCOMINGS

The war also provided an invaluable chance to reassess the weaknesses which the reforms did not adequately address. The foremost problems were logistics and sustainability, the deficiencies of which suggested that NORTHAG's operation in Europe could have been seriously curtailed. Sustainability was singled out as the most serious problem. This was particularly acute with the US forces, for which the five months build-up period provided just sufficient

52 See Defence Committee, <u>Preliminary Lessons of Operation Granby</u>, para 47.

resources for the conduct of war.⁵³ The British experienced the same difficulty. Although it was in better shape than the US forces, it was nevertheless to suffer, especially from a shortage of ammunition.⁵⁴ This was a serious threat to the increased need for the use of artillery support which was identified as a vital element facilitating the operation of the armoured forces.⁵⁵ Moreover, the limited interoperability (in terms of material) between the US and British forces did not ease matters at all.⁵⁶

Consequently, logistics was the most problematic area. While the US logistics capability was judged to be absolutely inadequate, the British were no better off as the army had to face the daunting prospect of building up logistics bases from scratch.⁵⁷ In particular, it had neither the logistics, nor the capability, to support a large-scale out-of-area operation.⁵⁸ For example, the British deployed a total of 2.611 combat vehicles, but it required 12.069 vehicles for logistic support alone.⁵⁹ Also, when faced with the reality of building-up forces in the region, it suffered from a shortage of cargo ships, forcing it to charter

⁵³ See Gene Rochlin and Chris Demchak, "The Gulf War: Technological and Organizational Implications," <u>Survival</u>, Vol. XXXIII, No.3, (May/June 1991), pp.265-6.

⁵⁴ Interview, Smith; and Defence Committee, <u>Preliminary Lessons of Operation</u> Granby, para.46.

⁵⁵ See Watson, et. al., op. cit., p.105.

⁵⁶ See Dunnigan and Bay, op. cit., pp.58-9.

⁵⁷ See Aspin and Dickinson, op. cit., pp.34-6.

⁵⁸ See Defence Committee, <u>Preliminary Lessons of Operation Granby</u>, para.6; and Pimlott and Badsey, op. cit., p.93.

⁵⁹ See Defence Committee, <u>Preliminary Lessons of Operation Granby</u>, para 44; and Hansard, <u>Debate</u>, Session 1991. Written Evidence, para 31 and 46.

commercial vessels for the purpose.⁶⁰ Thus, it was faced with a number of major modifications needed to support the ensuing operation.

Flexibility, creativity, and versatility proved to be major assets for this task. New support units were needed to address this deficiency in addition to making modifications in the logistics system already developed for use in Europe. Overall, while the division was supposed to be in charge of supporting its main formations with its own logistics organisation, an effort was made to render the subordinate units independent. For example, artillery created its own service called the Artillery Group. Meanwhile, the Armoured Delivery Group (ADG) and the Divisional Reconstitution Group (DRG) were strengthened to support each brigade and its battle groups. They were formations which were conceived previously in Germany for the purpose of quickly replenishing, both in terms of material and equipment, and building up the lost combat power of the division to 90% of its original strength after each battle. Nevertheless, despite such extensive preparation, the division stretched logistics to the limit. 4

Meanwhile, although the credibility of the use of air doctrine was largely reaffirmed, some loss of aircraft in the opening stages of the air war challenged the effectiveness of OCA and low-flying bombing missions in the early stage of conflict. Overall, seven Tornados were lost (one in an accident), out of which

⁶⁰ See Pimlott and Badsey, op. cit., p.93.

⁶¹ Smith, 1992, pp.2-3.

⁶² Smith, 1992, p.3.

⁶³ See details in Smith, 1992, p.3.

⁶⁴ See IDR, (September 1991), pp.999-1001.

four GR1 were shot down by AAA in low-level missions.⁶⁵ This not only indicated that AAA was still one of the worst threats to aircraft, but also that expensive aircraft need not be readily exposed to such danger if stand-off capability were utilised.⁶⁶ Although it was not possible to accurately assess the value of OCA based on JP 233 because of the marked difference between the Iraqi and WP air power, the quick shift of the Coalition aircraft from low to medium altitude operation was a self-admission of the dangers of such missions.

One other area in which the British did not play a role, and to which more careful attention should have been be paid, was the impressive US airmobile capability. The Gulf experience also showed the weakness of the British airmobile capability as all RAF (G) support helicopter assets were committed for the support of the British Army.⁶⁷ This was a damning indictment of how far behind the British were in this area, and if they want to attain a viable capability for airmobility, which they clearly do, a great deal of effort will be needed to prevent it from becoming a pipe-dream.

The major lesson for the European contingency based on the British capability in the Gulf was that NORTHAG's potential to prepare for battle under the standing start scenario, given that the Coalition took five months of extensive build-up (despite the fact that it was an out-of-area operation) to properly train its force before battle, was not entirely credible. Under the scenario, although the WP would be equally handicapped in terms of the number of forces it could introduce, there is doubt as to whether NORTHAG could have

⁶⁵ See JDW, (4 May 1991), p.738.

⁶⁶ Hansard, <u>Debate</u>, Minutes of Evidence on 6 March 1991, (Defence Committee session 1990-91: <u>Preliminary Lessons of Operation Granby</u>). A question by Mr. Churchill.

⁶⁷ See Defence Committee, <u>Preliminary Lessons of Operation Granby</u>, para 10.

amassed sufficient forces and fighting-power during the 48-hour preparation period. If there was one overriding factor which could prevent NORTHAG from launching an early counter offensive, this would be it. The effort would be further hampered by early information overload or the lack of information to fight the battle, despite its extensive high-tech C3I. It is wrong to assume that those forces might be better used to reinforce corps defence, because of the reasons mentioned before.⁶⁸ Yet, time and time again, it was proved that even a small counter operation was able to achieve disruption of the enemy by virtue of being on the offensive and by securing surprise and initiative. Even the incompetent Iranian offensive operation in 1982 against the better-trained Iraqis was initially triumphant for the same reasons.⁶⁹ Also, an ill-organised British force managed to do much better in the Arras counter stroke. Nevertheless, without an ability to prepare quickly for such a battle, and most of all, a timely decision to initiate the pre-battle preparation, the effect of a NORTHAG counter offensive would not only be significantly diminished, but even the prospect of its launch would be bleak.

8.3.5. CONCLUSION

The Gulf War was an ideal occasion to test the validity of the reforms. Most of all, its timing, which immediately followed the initial completion of the reforms, provided an excellent opportunity to reassess the effectiveness of the new operational concept and the credibility of the reforms. There are a number of differences which prevent a direct comparison between the situation in the Gulf

⁶⁸ See McInnes, 1990, pp.146-7, for his opinion.

⁶⁹ See Bellamy, 1987, p.26 and p.294.

and that in the Central Region. Among them, two key characteristics which distinguished the two theatres were the differences in terrain and enemy. Also, there was the fact that the Coalition attack was premeditated, which could not happen in Europe. Nonetheless, it was a barometer of the credibility of the implementation, and the experience testified to the value of key areas which the reforms were designed to reinforce. Overall, the British Army's performance during the conduct of war was exemplary, sometimes far exceeding the earlier expectations and operational aims of the Army. This surprised many, both in the British and Coalition Armies.

Also, the war confirmed by and large a number of shortcomings which were discussed throughout the earlier chapters. Judging by the British Army's performance during the Gulf War, there is no doubt it would have been able to operate effectively in defensive operations with considerable success under the new concept. At least, the experience showed that both NORTHAG's operational concept and the steps the army group took to implement it were conceptually and practically feasible.

Conversely, the areas of weakness which were identified during the War make it doubtful whether it could have sustained more than one major counter offensive over the IGB due to logistics and sustainability problems. In this sense, the prospect of NORTHAG successfully launching a large-scale, multiple counter offensive as Farndale intended would not have been possible, and the operation itself would have been more or less a single attempt. The decision to commit a counter offensive, and the necessity for this to be on a sufficiently large scale to be effective, would have been a major dilemma for COMNORTHAG.

Nevertheless, the counter offensive would at least offer a better chance of success, and result in a proportionally greater victory, if the vital requirements of speed and tactical surprise could be secured, as exemplified by the British

success in the Gulf. Most importantly and encouragingly, the British victory was a confirmation of the fact that the transition of the British culture and mentality had been completed. British officers proved themselves to be flexible and creative, as well as proud of their profession. There were a few problems identified as a result of the experience, but the victory of 1 (BR) Armoured Division demonstrated that the reforms in the British Army were largely successful, and, most of all, that the logic behind them was valid.

8.4. THE BRITISH ARMY AFTER THE GULF WAR

8.4.1. 'OPTIONS FOR CHANGE' AND THE FOUNDATION OF THE ALLIED COMMAND EUROPE (ACE) RAPID REACTION CORPS

The government's intention to conduct the 'Options for Change (OFC)' review was first announced by the Secretary of Defence, Tom King, on 6 February 1990 in the House of Commons, before its formal promulgation in July 1990. This, and a series of cuts in British defence spending that it outlined, were the result of the changes in the political scene in Europe since the fall of the Berlin Wall. This move followed major shifts not only in the government's, but also in NATO's, strategic priorities. The threat of the WP evaporating, and later the break-up of the former Soviet Union, meant there was no immediate major external threat to the Alliance and that NATO was suddenly faced with the need to adapt to the new political realities of the region. This resulted in a full scale revision of the government's strategic priorities, and the new goals were officially outlined in the 1992 Statement on the Defence Estimates. It identified three main defence roles: 1) protection of the UK and dependent territories; 2) the defence of the UK and its allies against a major external threat (e.g., defence of continental Europe); and 3) a contribution to promoting wider security interests (such as operations out-of-area and peacekeeping). 70

The assumption behind OFC was that, since there was less chance of a major war breaking out in western Europe, the Alliance could become less

⁷⁰ See Colin McInnes, "The Future of the British Army," <u>DA</u>, Vol. 9, No.2. (1993), pp.125-6.

reliant on a high level of military readiness due to an increase in warning time. 71 Thus, the size of the military, particularly the Army, could be reduced to a level at which it would be adequate to fight a limited war, or conduct crisis management to prevent a major crisis from developing, yet kept sufficiently lean to supply a peace-dividend. 72 Hence, it was thought that a high-tech, smaller, but better-equipped and supported, military would suffice to meet these requirements without a major reduction in combat readiness. 73 In fact, it was considered as a future investment programme through which such a force, utilising enhanced mobility and flexibility to meet the range of defence needs of the next century, could be created. 74

As a result, the main emphasis was placed on the reduction of the number of troops, which consequently affected the Army's strength in Germany most. 75 The plan was to halve BAOR's strength by mid-1995, reducing the number of in-place divisions from three to one. This would leave only 1 (BR) Armoured Division, which was to be reinforced by an extra division from Britain

⁷¹ See House of Commons, Tenth Report from the Defence Committee Session 1989-90: <u>Defence Implications of Recent Events</u>, (1992. London, HMSO), para.36.

⁷² Interview, Julian Miller on 25 March 1993. Also see House of Commons, Tenth Report from the Defence Committee Session 1989-90, para. 108.

⁷³ See Ian Kemp, "UK Unveils for the 1990s," <u>JDW</u>, (August 3, 1991), p.182. Also see House of Commons, Tenth Report from the Defence Committee Session 1989-90, para, 37.

⁷⁴ See David Bolton, "Defence in Transition: Options for Change," <u>RUSIJ</u>, Vol. 136, No.3, (Autumn 1991), p.1.

⁷⁵ See House of Commons, Background Paper No.276. <u>UK Defence Policy:</u> Options for Change, 4 October 1991. (London, HMSO), p.3.

in an emergency, while only the RAF's 2 Group would remain stationed in Germany. 76

Although the need existed for a review of the military, OFC was criticised as being driven by the need to reduce expenditure, rather than by changes in external circumstances, despite King's insistence to the contrary. 77 In fact, it was criticised for excluding a proper representation by the military in the process, since 'the MoD was overtly influenced by Treasury pressure. '78 Also, a House of Commons report argued that the announced cuts went too far, which could result in a significant run-down in the strength of the military, and would in turn bring about a 'chronic overstretch' of the Army. 79

Meanwhile, the foundation of ARRC, and the designation of a British officer to the leadership of the corps, was announced after the Rome Summit in 1990, during which NATO's strategic plans were significantly revised. The aim of the corps is to achieve a rapid deployment of multi-national forces for crisis prevention and control both in NATO and in out-of-area operations.⁸⁰ It was

⁷⁶ House of Commons, <u>UK Defence Policy: Options for Change</u>, pp.3-4.

⁷⁷ House of Commons, <u>UK Defence Policy</u>: Options for Change, p.2.

⁷⁸ McInnes, 1993, p.123.

⁷⁹ House of Commons, Second Report from the Defence Committee Session 1989-90: <u>Britain's Army for the 90s: Commitments and Resources</u>, (1993, London, HMSO), p.vii and para.56.

⁸⁰ See Ian Kemp, "Putting the Front Line First," <u>JDW</u>, (23 April 1994), p.21; and Ministry of Defence, <u>Britain's Army for the 90s</u>, (July 1991, London. HMSO), Cm. 1595, para. 9-15. Also see <u>Army Doctrine Publication (ADP): Operations</u>, Vol. I., (Pre-publication Edition), 1994, part 3, for the possible future roles and operations that could be undertaken by the ARRC. Also see McInnes, 1993, p.133.

felt that more mobile and flexible forces can be adopted for a variety of unforeseen contingencies in the future.

The foundation of ARRC offered a unique challenge to the Army. The main reason why the Army was given the command of ARRC was that it was the only force in Europe with enough experience to lead such a large formation; being a volunteer Army with a high state of readiness and good equipment, the British Army was recognised by many in NATO to be best-suited for the job.⁸¹ Also, the motive behind the government's pursuit of the leadership, overtaking a strong German desire, was the fact that it offered many political advantages towards securing British leadership in the European side of the Alliance.⁸² As a result, the British commitment in ARRC has become the Army's major effort.⁸³ As a Commons report stated, 'our contribution to the ARRC must continue to be on a scale, and of a quality, to justify our continuing leadership of the Corps: a position which has not been readily accepted by all our Allies, but which guarantees the [UK] a powerful voice within the Alliance.'⁸⁴

Consequently, the Army's contribution to ARRC is significant as Britain committed two divisions: 1 (BR) Armoured Division with its three armoured brigades (which possesses more than half the combat power of 1 (BR) Corps), and 3 (BR) Division, with its two mechanised infantry brigade and 5 Airborne

⁸¹ Interviews, Bagnall on 4 May 1994 and Farndale on 19 May 1994. Bagnall also mentioned that the British leadership of the ARRC was strongly supported by SACEUR.

⁸² See McInnes, 1993, p.133.

⁸³ See Kemp, op. cit., August 3, 1991, p.182.

⁸⁴ House of Commons, Third Report from the Defence Committee Session 1991-92: Option for Change: Army, (London: HMSO, 1992), para.23.

Brigade. 85 Also, 24 Airmobile Brigade (three infantry battalions with heavy AT, integral logistics and engineering assets plus it own AH regiment), will form a part of the four-nation multinational Airmobile Division. 86

The virtue of ARRC is felt to be in the mobility of its small but high-tech forces, which can react quickly to various contingencies (including out-of-area and limited operations). This is especially so since its 'reaction force' element is designed to be ready 'at relatively short notice to provide an early military response to an emerging crisis.'87 Meanwhile, the main defence and augmentation forces (strategic reserves), which are two other main elements of the corps, will undertake the more traditional role of defending Europe, although these two forces, particularly the latter, will have to find a way to increase their mobility as their elements will be stationed in home countries.⁸⁸

8.4.2. THE FUTURE OF THE BRITISH MILITARY DOCTRINE

The focus of future education and training, and the BMD, which provides the necessary conceptual and doctrinal framework, must be redesigned to address the aforementioned requirements. The adoption of the 1989 BMD already focused on these areas in some detail, and the planned publication of the <u>Army</u>

⁸⁵ House of Commons, Option for Change: Army, para.23; and Kemp, 23 April 1993, p.21.

⁸⁶ JDW, 17 August 1991, p.266.

⁸⁷ Cm. 1595, para.9.

⁸⁸ Cm. 1595, para.9.

<u>Doctrinal Publication (ADP)</u>: <u>Operations</u> later in this year will cater for changes in the emphases of the Army's future requirements.⁸⁹

The new doctrine provides a link between the BMD, which is a document dealing with the conceptual aspects of the Army's operation and understanding of the nature of the conflict, and AFM (Army Field Manual), which is a tactical document concerning the implementation of doctrine. Nonetheless, it is not about procedure, but essentially constitutes a descriptive reference, not a prescriptive one. 90 Its main purpose is to achieve changes in employing forces to suit the current security environment; therefore, ADP-Operations pays extra attention to joint and combined operations, as well as operations other than a war, an element which is a new addition to the Army's operational thinking. 91 Also, it covers and provides reference to every level, from the military and strategic down to the lower operational level of operations.

The novel feature of the new document is its emphasis on military operations in peacetime, which include peace support (including peace keeping and enforcement) and counter-insurgency operations. 92 Consequently, the doctrine stresses the capability for force projection, joint and combined operations, control of the electro-magnetic spectrum, and endurance and professional expertise, which it recognises to be intrinsic requirements for such

⁸⁹ I was given a pre-publication copy of the <u>ADP-Operations</u>; therefore, I cannot make direct quotations from the text since it might change when the new doctrine is actually published.

^{90 &}lt;u>ADP-Operations</u>, p.3. Also see J.D. Shaw, "Examining the Mechanisms of Change: How Can We Create Manoeuvre Warfare," <u>BAR</u>, (April 1991), p.22; and Spartacus, "Simplicity," <u>BAR</u>, (August 1991), p.50, for the concern that the next BMD should not become another tactical doctrine.

⁹¹ See ADP-Operations, chapter 7.

⁹² See ADP-Operations, 1-4, 7-2 and 7-5 to 6.

operations.⁹³ Most interestingly, it actually attempts to define the successes of those missions, and rebuilding the peace is given the most prominence. Thus, avoiding an unnecessary or inappropriate use of force should be prevented since it is vital to gain a psychological advantage.⁹⁴

Also, conspicuous in this document is the conscious use of the same operational language and terminology as the US AirLand Battle (e.g. the terms 'deep', 'close' and 'rear' operations). 95 As mentioned, the reforms had achieved some doctrinal interoperability with other Allied forces before, but many felt that this should be further enhanced and promoted, since it was thought that a future battle will demand multinational operations by a number of small contingents. This was the case with the Gulf War, and will be more so in the event of possible ARRC operations. 96

Above all, <u>ADP--Operations</u> laid out the spirit of the conduct of a war at the operational level more clearly than the 1989 BMD. Also, it is more specific than the BMD in explaining campaign planning and operations. It eloquently sets out manoeuvre as a component of operational design, not as the primary requirement; the aims of the operational level of war are about the destruction of the enemy and the attack on the enemy's will, and manoeuvre is a part of achieving this operational goal, not a dominant element. 97

It is clear that the <u>ADP--Operations</u> has finally succeeded in fully disclosing the overall aspects of Bagnall's operational thinking by providing a

⁹³ see ADP-Operations, 1-8 to 9.

⁹⁴ See ADP-Operations, 7-7.

⁹⁵ See ADP-Operations, 5-9 to 13.

⁹⁶ See Dannatt, op. cit., pp.1-2.

⁹⁷ See ADP-Operations, 2-2 to 4. Refer to my summary in chapter 4.3.

strong conceptual basis to promote more cultural changes in the Army and ameliorate command flexibility and creativity, while avoiding becoming just another tactical doctrine. Also it provides a useful basis for offering guidance for missions other than the defence of Europe. Since a more clear guideline has been set out by the new document, it is up to the Army educational establishments to transmit it and properly educate its officers to be able to undertake a variety of future obligations as identified by the <u>ADP--Operations</u>.

In this sense, although training in operational level thinking was being introduced by the time the BMD was amalgamated, for example, to the Staff College, the prominence of the HCSC becomes more important in the pursuit of this goal. Thus, there is a need to revise the format and focus of the HCSC course to suit these requirements in order to ensure that the Army does not fall back to the previous level of cultural and conceptual parochialism, due to its diminishing capacity. As Bagnall stressed, the HCSC is the only place which could prevent that, and he is sure the course will guard against it happening. 99

4.4.3. THE IMPACT OF THE CHANGES ON THE REFORMS

The main focus of the 1980s reforms was on reinforcing the British Army's ability to fight a major conventional HIC (High-Intensity Conflict) in Europe against the clearly defined enemy--the WP. Although the Army's strong aspiration to secure such a capability paid off as it secured a considerable capacity to conduct such a war at the end of the 1980s, this posture became ill-suited to counter contingencies of the present, which have been identified by the

⁹⁸ Interview, Bagnall on 4 May 1994.

⁹⁹ Interview, Bagnall on 5 May 1993.

government and the Alliance. Indeed, there are a number of urgent requirements, such as peacekeeping and crisis management duties--as is being vividly demonstrated by the civil war in former Yugoslavia, which have dominated the Alliance's agenda since the end of the Cold War. As a result, NATO is currently striving to secure 'power projection' capability by placing more emphasis on flexibility and mobility of forces, as epitomised by the aims and structure of the ARRC. 100

Currently, the British Army is under pressure to redefine its role and organisation to address the demands created by the changes in threat perception and the security environment in Europe. Also, this process has been expedited by the sweeping budget cuts which are forcing the Army to make many fundamental changes in its infrastructure and organisations without having sufficient time to review the impact of those changes on its overall efficiency. Indeed, the Army still has many roles in addition to those already identified, as it is still tasked with fulfilling a major commitment in NATO as the leader of ARRC, which requires maintenance of sufficient heavy conventional forces, as well as carrying out duties in Northern Ireland and other overseas possessions.

Following OFC, the Army faces a severe overstretching of its resources in meeting these multiple tasks. ¹⁰¹ Because of these factors, the Army is required to conduct a long-term in-depth review of its immediate, intermediate, and long-term goals, through which its future shape and requirements for equipment could be determined. Might this lead to a radical restructuring and redefinition of its traditional roles and modes of conducting warfare? Would the

¹⁰⁰ See Ian Kemp, "Digging in against the Cuts," JDW, (23 April 1994), p.20.

¹⁰¹ See Ian Kemp, "UK 'Could Not Fight Alone', Says Study," <u>JDW</u>, (August 17, 1991), p.261; and Defence Committee, <u>Preliminary Lessons of Operation</u> Granby, para.12.

Army be forced to abandon its capability to fight a major HIC in Europe, which it so relentlessly strove to acquire through the reforms?

It is the argument of both current and former senior officers in the Army that it will be continuously required, and will need, to prepare for an HIC in Europe, if it wants to have the necessary flexibility to counter crises of a different kind, including such a contingency as the Gulf War. Hence, contrary to the belief that it should no longer invest heavily in the capability to conduct an HIC, they feel that the Army still needs to maintain a substantial capacity, though to a lesser degree than it did during the Cold War. Failure to do so would limit its ability to undertake an operation at the operational level, thus creating inflexibility, as well as a further dependency on friendly support to conduct an operation of meaningful size in the future. ¹⁰² Thus, they argue, the hasty rundown of its heavy equipment and formations is dangerous. ¹⁰³

Most of all, those I interviewed felt that concentrating on fighting LIC and peacekeeping would strip the Army of the lessons it has learned so far, and, when faced with changes in the nature of future conflicts that could involve HIC, it would be unable to cope effectively. This would, therefore, result in the loss of the necessary flexibility, mobility, and creativity, which are all critical components for envisaged future conflicts regardless of their extent and intensity. 104 Thus, equipping and preparing for HIC is, in fact, to provide both a mental and physical basis to transcend the current style of warfare to be more effective in the future. In other words, the Army needs to have a solid

¹⁰² See McInnes, 1993, p.129.

¹⁰³ Interviews, Bagnall on 6 November 1993, Farndale on 19 May 1994, Inge and Kenny.

¹⁰⁴ Interviews, Bagnall on 6 November 1993, Farndale on 19 May 1994 and Kenny.

framework upon which it can build a more flexible and robust force suited to the envisaged future contingencies; requirements for peacekeeping, as well as other missions, would be addressed within this setting. 105

In fact, the Army's aspiration to conduct a major conventional war, such as the Gulf War if not a major war in Europe, and thus its desire to maintain the armoured forces and heavy arms, are vividly displayed by its decision to purchase a total of 386 Challenger 2 MBTs. ¹⁰⁶ Furthermore, it is still committed to the continuous introduction of other heavy weapon systems, such as AS 90 and MLRS, to its inventory. ¹⁰⁷ This is a reflection that the Army still sees its primary task as fighting HIC, and although the implementation of OFC would leave the Army heavy capability severely curtailed, it is reluctant to relinquish such a capability.

Some academics have raised the question of whether the Army should continually pursue this heavy capability. McInnes and Sabin have argued that the Army's present posture is ill-suited and too costly, and that, in order to maintain its efficacy, it needs to pursue some specialisation of its capabilities and pay more attention to mobility and rapid reaction capability. Sabin also argued that, due to the present and future budget constraints, without a long-term review and some specialisation, the Army might be forced to undertake a 'salami

¹⁰⁵ See A.I.G. Pollard, "The Army: Is Less Enough?" RUSIJ, Vol.136, No.3, (Autumn 1991), p.21.

^{106 &}lt;u>The Times</u>, 15 July 1994.

¹⁰⁷ See Cm. 1595, para. 53.

¹⁰⁸ See Philip Sabin, "The Shifting Trade-offs in UK Defence Planning," in Michael Clark and Philip Sabin, ed., <u>British Defence Choices for the Twenty-First Century</u>, (London: Brassey's, 1993), pp.171-2; and McInnes, 1993, p.131.

slicing' of its capability which would lead to an overall decline of its capacity. 109 It is argued by some academics that the Army no longer has sufficient funding to do everything it wishes, and the current programmes for the reduction of the military and the continuous falling of the defence budget indicate the inevitability of the Army having to make some hard choices. In order to maintain its potency, and avoid 'salami slicing,' Greenwood suggested that the Army should opt for some specialisation so as to aid its effort to continuously secure its leadership in the ARRC, and what he calls the 'coalition-in-waiting.' 110

Contrary to their views, the Army has chosen new heavy equipment (new tanks will cost it 1.1. billion pounds), and this has set the tone for its role for the foreseeable future. 111 It is clear that the Army has chosen the ability to fight a HIC in some strength over other contingencies for now. This move displayed that the Army is resisting any hasty changes of its traditional organisation and, most of all, of its heavy forces. Furthermore, the Army is being led by people who were at the forefront of the reforms, such as CDS (Field Marshal Inge) and CGS of the Army (General Guthrie), who might find it hard to let go of the things they so aspired to achieve. 112 Above all, this move could enhance the Army's ability to maintain significant representation in the ARRC, but may prejudice its capability to conduct a major conventional operation independently, or to cope effectively with peacekeeping and out-of-area operations.

¹⁰⁹ See Sabin, op. cit., in Clark and Sabin, ed., op. cit., p.172.

¹¹⁰ David Greenwood, "Concentration of Effort and Complementarity," in Clark and Sabin, ed., op. cit., pp.193-4.

^{111 &}lt;u>The Times</u>, 15 July 1994.

¹¹² Interviews, Bagnall on 4 May 1994 and Farndale on 19 May 1994.

8.4.4. THE PLACE OF THE REFORMS IN TODAY'S ARMY

Although the reforms complicate force planning by bolstering the Army's enduring aspiration to keep armoured and other heavy arms, the experience of the reforms and the application of operational thinking would offer some solutions to the Army to maintain a certain degree of competence to fight a conventional HIC. A direct comparison between the previous reforms and the current situation is impossible, but lessons of the rational use of existing resources and the use of force multipliers and technology to allow a significant increase in fighting power of the existing forces could offer some insights in the Army's current dilemma. 113 In particular, this could prove a crucial asset preventing an outright 'salami slicing' of major arms and its overall capabilities.

In fact, the effort to make the Army more flexible and mobile by further exploiting operational level thinking and manoeuvre principles is on the way. 114 Also, the benefits of high technology are being further utilised to support this objective by enhancing the mobility and firepower of weapons. The number of MBTs in the future armoured regiments will be reduced from 74 (66 in time of peace) to 39, which is possible by replacing old Chieftains and Challengers with new and more capable Challenger 2 MBTs. 115 Along with providing a real-time capability to conduct a 24-hour war, a capability which is enhanced by deploying new weapon systems, this emphasis on technology and innovative thinking will

¹¹³ See Sabin, op. cit., in Clark and Sabin, ed., op. cit., p.170, for a summary of the government's dilemma between the desire to obtain a high-profile presence in the Alliance and the limitation posed by the budget constraints.

¹¹⁴ See R.A. Smith, The Nature of Future Warfare, TDRC 10368.

¹¹⁵ See JDW, 6 August 1994, p.12; and Gander, op. cit., p.23, for details of the Armoured Regiment structure.

provide the means to substitute for the overall decline in the number of weapon systems, in addition to manpower, for some time to come. In this sense, the decline of the overall number of heavy units could be acceptable to a certain extent as long as it offers a means of creating more mobile firepower (for instance, by increased acquisition of MLRS-ATACMS assets), which could generate a similar level of firepower as before. 116 Also, further exploitation of force multipliers--better C3I systems and tools to enhance synchronisation, as well as digitising forces, something which the US Army is already exploring--would secure yet more flexibility and mobility to cover for the losses. 117

This would not remedy the problems of providing capability to counter the contingencies in out-of areas because of the lack of mobility of those heavy formations. ¹¹⁸ However, the creation of the ARRC Airmobile Division, which is the high-profile element of the corps, and the Army's continuous programme for the acquisition of AH and the expansion of airmobility, will offer substantial capability to not only counter contingencies in Europe but also in out-of-area operations since the unit possesses the necessary mobility and capability. Also, this offers a plausible basis for future specialisation if such a need arises.

In short, the experience of the reforms could be very beneficial in supporting the operations of the ARRC because it would provide the necessary mental capacity--flexibility and creativity--to ensure versatility of force suited for many different situations. Moreover, as long as the deployment of conventional forces of some strength in Europe is required, the lessons of the reforms will

¹¹⁶ See Pollard, op. cit., p.23.

¹¹⁷ See Barbara Starr, "'Desert Hammer VI' puts US Digitized Army to the Test," JDW, (9 April 1994), p.17.

¹¹⁸ See McInnes, 1993, p.131.

continually provide the necessary framework on which the future requirements for the defence by the ARRC could be established. This is especially so since the commander of the corps is British.

8.4.5. CONCLUSION

Although the reforms were a major reason why the Army is left with the capability to fight HIC, the spirit of the reforms will remain valuable, as they will enable it to cope with cuts without overtly degrading its effectiveness for some time. Also, the lessons of the reforms, and the validity of the operational thinking and manoeuvre spirit, are the means which could provide a framework within which the Army could develop a future operational concept versatile enough to meet a variety of missions. It is already playing a major role as it has provided a conceptual basis for writing new operational doctrine, <u>ADP--Operations</u>.

The rundown in the Army's capability has not hampered the currently pledged level of commitment to ARRC so far since the effect of the cuts has not been fully felt, but it will inevitably limit its ability to fulfil the duties of the ARRC and others, resulting in a serious overstretch. Any further decline in the defence budget will require a fundamental revision of its overall posture. It is hard to foresee whether this change would lead to a a general transformation of the whole Army, yet it seems that the Army will probably gradually detach itself from emphasising heavy arms in the future and seek some specialisation. This seems to be only logical choice if it wants to avoid an inevitable salami-slicing to accommodate various requirements. The Army is at a watershed and it has to make some difficult, yet crucial, choices. Will this lead to a radical restructuring of the Army? How will the Army look in the next century? These are two questions that will have to be answered sooner rather than later.

CHAPTER 9

CONCLUSION

The main aim of this thesis has been, as stated in the Introduction, to conduct a comprehensive historical survey of the reforms. Throughout, I have attempted to shed new light on the subject by discussing the historical background, identifying the contents and context, and discussing a number of important issues and debates. Therefore, in this concluding chapter I shall sum up and offer my own views regarding the reforms by providing some answers to what I consider to be crucial questions in understanding them.

1. Were the Reasons for Initiating the Reforms Justified and Logical?

The answer to this question has to be an affirmative one. As discussed in chapters two and three, Field Marshal Bagnall's ultimate logic behind the reforms was that under forward defence (particularly as it was understood by the Germans), if the WP succeeded in a surprise (especially standing start) attack, NATO's defence would quickly falter as a large portion of its forces would be dislocated and beaten piecemeal by the numerically superior WP. As a result, NATO would be forced to opt for nuclear-early-use in the case of war due to the lack of its conventional capacity to stop the WP initial onslaught. Otherwise, NATO would face the possibility of losing its territory and thus, inevitably, the cohesion of the Alliance. Yet, not only could nuclear-early-use bring a number of political and strategic ramifications, but it could also effectively nullify any cohesive defensive efforts by the Alliance as it would quickly lead to the loss of control of the battlefield and, eventually, to an escalation to strategic nuclear exchange. Under the circumstances, Bagnall felt that NATO's nuclear deterrence was just not credible, and forward defence, especially an over-literal interpretation of the strategy, was the major factor undermining deterrence--not vice versa--despite a number of political and strategic justifications offered by many others.

Therefore, Bagnall's reforms, which were among the first tangible proposals offered to the Alliance, were aimed at compensating for the loss of NATO's strategic credibility and its ability to maintain deterrence by enhancing its conventional defence to the level at which its defence would no longer have to rely on nuclear early use. It required strengthening NORTHAG's conventional fighting-power to a level sufficient to counter and, if necessary, destroy the WP's surprise attack from a standing start. Bagnall also felt that, by virtue of preparing for this contingency, he would be able to secure an ability to fight whatever scenarios might unfold. This was a means of having more flexibility and vigilance.

Above all, this was Bagnall's way of remedying the political and strategic problems through offering a purely military innovation to provide the political leadership with more choices in managing a crisis with the WP. In the case of war, he thought that NATO's strong conventional resistance with the capability to pause, and, if necessary, win a conventional war against the WP, would persuade the WP to consider an early negotiated settlement since NATO's threat of nuclear use would be more credible in that situation. Indeed, demonstrating NATO's ability to win the war against the WP would be a positive factor dissuading it from initiating a conflict, while the presence of a strong in-theatre force would lessen NATO's dependence on mobilisation, which could be an instrumental factor in preventing the WP's miscalculation and misunderstanding. These requirements and their reasoning demanded drastic changes in NORTHAG's conventional posture since there was only a finite amount of resources available to effect the changes, and the reforms offered the necessary framework and guidance for achieving these goals.

2. Did the Reformers have Sufficient Resources to Implement the Reforms?

It was true that the resources, which were secured through the 1981 defence review, as discussed in chapter three, were beneficial for the successful implementation of the reforms in the measure to which they were manifested by 1986, when the adoption of the new army group operational concept was officially acknowledged by the Alliance. It also has to be established that, without the renewed financial support of the government, the scope of the reforms would have been smaller in scale, and extending them to other corps would have been troublesome because such an effort would have been criticised as a futile attempt to impose British views on them without offering any tangible solution to the army group's problems. Meanwhile, the new financial resources allowed for the acquisition of new weapon systems and provided more support to increase sustainability and training on which the reforms became dependent. Particularly, the role of C3I to create an environment for combined and joint operations, which was a highlight of the envisaged concept, was critical because it was viewed as a major force multiplier facilitating such a series of complex operations. In this context, the reforms in NORTHAG were feasible partly due to the government's financial support, and the review's main benefit was that it allowed the purchase of the weapon systems outlined after the 1974 review and the LTDP.

Conversely, the reforms were originally planned with the resources already available to the 1 (BR) Corps, and cooperation with other corps in the army group was supposed to be achieved by introducing operational level thinking, which could offer a different way of handling the existing resources without an increase in their numbers. Therefore, it has to be concluded that the impact of the 1981 review could be regarded as starting a synergistic effect which accelerated and expanded the speed and scope of the reforms, while it had

only a moderate direct influence on their promulgation. This was particularly so since the main contribution of the government was not to pursue heavy cuts in the Army and RAF strength under the 1981 review.

Nonetheless, as discussed in chapters seven and eight, the Army persistently suffered from a lack of necessary resources to fully implement the reforms, and one of the most important reasons for restraining them from becoming an instrument of NATO's conventional retaliation and deterrence was the diminishing financial budget after the government's abandonment of the LTDP in 1985, and the subsequent real cuts in spending. By then, it had been decided that the British Army could not jeopardise the introduction of new weapon systems; therefore, it had to look for savings by cutting stocks and training, which was the only short term option.

There was no doubt that NORTHAG was able to offer a more prolonged conventional resistance than was previously possible, but it would only have been sufficient for what Bagnall had initially envisaged during his tenure as COMNORTHAG (one major counter offensive against the enemy first echelon, and possibly another one with 3 (US) Corps if it were available in time) but no more, and certainly not to the level Farndale had hoped for. The lack of sustainability meant that NORTHAG might have to avoid an operation which could put greater strain on its resources. One of the reasons for its return to the original idea, after Farndale, could be traced to this factor, i.e. the realisation of the nonexistence of sufficient resources and sustainability.

In conclusion, drawing on the findings, I have to supply a mixed answer to question 2. While there were some benefits in the 1981 review, it was the Army which had made the reforms possible through numerous efforts at rationalisation and redeployment of forces, since the amount of new financial

resources made available was not sufficient to support the reforms to their fullest extent.

3. Did the Adoption of Operational Thinking and the Land/Air Battle Doctrine Provide the Necessary Conceptual and Pragmatic Framework around which the British Army Could Build the Reforms?

Although the process had required a long digestion period, as the new army group SOP was only adopted in 1988 and the first BMD written in 1989, the reformers consciously endeavoured to instil operational level thinking in the British Army from the onset of the reforms. This was a particularly crucial task since a whole new concept had to be introduced to an Army which did not have traditional experience in utilising operational thinking.

As discussed in chapters four and eight, although there was a persistent lack of full comprehension of operational thinking by people in both the British and other armies (since many mis- and over-interpreted it as either having a set of rules or involving unrestrained freedom of action), they have since been gradually conforming to the true ethos of operational level thinking. Above all, it was easier to provide a pragmatic framework by constructing a military doctrine such as the BMD, but it seems that understanding the conceptual and more abstract aspects of the operational thinking would require longer time for full acceptance by the military. As Bagnall repeatedly insisted, it is not about having a set of rules but about a state of mind and fostering a different mentality, in order to nurture a more positive feeling and confidence in what one is doing and one's capability. The production of the <u>ADP--Operations</u> indicates that the Army has developed a broader and greater understanding of the operational level and has begun to address itself more to the abstract elements of the concept.

In fact, one of the most important reasons for initiating the reforms was the need to reinterpret forward defence so as to enable NORTHAG to exercise more flexibility and elasticity in its defence. Previously, there was a lack of economy of force at theatre level, which made NATO's defence very rigid. This problem was further aggravated by its relatively small size and weak fighting power compared to the CENTAG and WP forces. Consequently, operational level thinking was intended to allow the redeployment of the NORTHAG forces to undertake a more elastic defence based on the principles of mobile defence and manoeuvre warfare. The ultimate aim was to achieve economy and concentration of forces simultaneously by gaining more operational flexibility, which would be vital if a small army were to fight a larger one. In short, the main focus of Bagnall's operational thinking involved avoiding waste of valuable resources and duplication of efforts to create the operational reserve, and this was to become possible by promoting more flexibility and creativity. These principles were ultimately extended to the 2ATAF because the main reason underlying the adoption of the Land/Air Battle doctrine shared exactly the same logical background as the land forces' concept. In this sense, it was a fitting manifestation of the ethos of Bagnall's operational thinking.

Above all, the impact of operational thinking in the British Army and NORTHAG had been instrumental in fostering a new-found confidence and boldness which were reflected in the expansion of the reforms. Particularly, the greater capacity for the cross-border counter offensive, and the ability to successfully execute REFORGER 87, demonstrated that the army group had achieved a major transformation of its posture and mentality as a result of embracing operational thinking. In this sense, it was one of the most incisive highlights of the reforms, which *did* really matter in the defence of NORTHAG.

4. Were Counter Stroke and Counter Offensive Possible?

Regardless of Bagnall's and others' insistence, an objective answer to this question can only be found in history. As discussed in chapters four and eight, there were many instances during which defenders were able to launch successful counter offensives which brought them disproportionate victories. Also, there were occasions when such an operation failed to return favourable results to the defenders. This past experience suggests that such operations must meet a number of operational imperatives to be successful. These were: maintenance of strong reserves and air superiority, generation of sufficient fire support and mobility, superior (flexible and creative) command performance, good training and sustainability, securing surprise, and most of all, setting an attainable aim.

The capability of the British Army to execute a complex and daring mobile operation was auspiciously demonstrated during the Gulf War, and based on this fact, there is a strong chance that NORTHAG would have been able to meet these requirements. If that were the case, and the people I have interviewed insisted on the point, NORTHAG's local counter stroke operations could be a feasible option, as at Arras in 1940 or the German counter operation on the Eastern front during World War Two. This was especially so since the execution of violent tactical mobile battles of a relatively short duration in local areas would put less pressure on the resources available than larger counter offensives. Particularly, the superior training, skill, and command flexibility of the NORTHAG forces, as compared to their WP counterparts, were major factors supporting this conclusion.

Meanwhile, it would have been more dangerous and daunting for the army group counter offensive to achieve victory due to the sheer scale involved. There was also a number of crucial factors which made this a more dangerous

option than the tactical level operation. Most of all, the size of force involved and the length of operation both in time and space were much greater. Because of these two determinants, it would have been extremely difficult to satisfy the aforementioned prerequisites throughout the operation. Therefore, it would have involved a lot of uncertainty, something which could not be risked unless the attainment of its operational objective was absolutely essential for the defence of NATO. In fact, Bagnall's concept of the army group counter offensive would have been, although to a much lesser extent than Farndale's, a calculated gamble, something closer to the desperate German counter offensive in the Ardennes in 1944, which could have been attempted only if Bagnall had had a chance to secure the necessary requirements.

The success of the counter offensive would have depended critically on the timing and goal of the operation. It was evident that common wisdom preferred the operation at the early stage of the conflict because of many operational advantages, while there was no clear consensus for its scope and objective, especially in the case of Farndale's concept. As mentioned, the main target would have been the enemy's centre of gravity, but waiting for it to reveal itself would have postponed the operation significantly, while attacking without knowing it would have endangered the operation itself. Furthermore, unless there had been a clear notion of the purpose of the operation, the planners could have over-extended its aim (as the Germans did in 1944), which could have resulted in a major operational defeat. Despite the assurance that NORTHAG would manage to find the enemy centre of gravity in time for an early counter offensive (and Bagnall's counter offensive during CPX-83 supported such a claim), there was no guarantee that the army group would have been able to clearly identify its objective.

In short, while the tactical level operation had a strong chance of being successful, the operational level operation was a very dangerous gamble. Nonetheless, as the people I interviewed have repeatedly emphasised, the army group was committed to launching at least one major counter offensive at the time despite the dangers involved. This was because it was the only plausible way of buying a few more crucial days without compromising territory, especially under the surprise attack scenario, during which NATO could attempt to convince the WP of the futility of continuing the conflict under the threat of escalation to nuclear conflict. It is clear from the discussions in previous chapters that the leaders of the British and some of the NORTHAG Armies belonged to the school which thought a short-violent offensive was better than a prolonged conflict under the threat of nuclear devastation; it could offer the chance of a negotiated settlement since its success would undoubtedly bring a pause for some time. As the experience of the German counter offensive in 1944 showed, even a failed operation of this kind was able to retard the Allies offensive for sixweeks. Such a gamble in Europe in the 1980s could have brought about more favourable results because of the existence of nuclear weapons. Such a pause, backed up by a blunt threat of nuclear retaliation, would have been a very strong tool in convincing the WP to seriously reconsider continuing with its renewed onslaught. In this sense, the gamble would have been worth taking.

5. Was Personality Both the Most Important Factor behind the Formulation of the Reforms and the Main Focus of the Debates and Disputes?

As discussed throughout the chapters, it can be concluded that personality was a major element in the formulation and implementation of the reforms, as well as a source of disputes, more so than any other political and strategic imperative.

Particularly, as concerns the nature of the development, which was shielded from both immediate public and political scrutiny, it is clear that the feasibility of accepting the changes depended heavily upon the personal perceptions of the military leaders, and became a testing ground for projecting their own contemporary beliefs.

Although some changes were inevitable, it is true that the reforms would not have happened without Bagnall and his subordinates' enthusiastic support. Equally, Bagnall's unorthodox approach--for example, in establishing the TDC--was an ingenious method which expedited the process of implementing them while avoiding the build-up of opposition. Nonetheless, Bagnall's overpowering personality, and the risky methods he used, could have been a destablising element in the relationship among the Allies. Also, it offended some people in the British military establishment as they considered his approach unacceptable to the military hierarchy.

Only in retrospect can one recognise that such an approach was successful due to the urgency involved in introducing the reforms, and that the risk was ultimately justified. This is particularly relevant concerning the disputes Bagnall had with Chalupa. It is clear now that the earlier German opposition was not concerted, but stemmed primarily from Chalupa since the disputes quickly disappeared once he left his post. However, if this change had not occurred, the result could have been vastly different from what we see today.

It was fortunate that taking risks paid off in the end. However, it is quite clear from the investigation that the dispute could have become a major threat to the cohesion of the Alliance, potentially igniting even political disputes if it were perpetuated. In particular, Chalupa's intention to overrule Bagnall using his seniority could have sparked a major political split between the governments. It was only a stroke of luck that Von Sandrart shared a similar line of thought with

Bagnall, and he was willing to arbitrate the disputes between Bagnall and Chalupa during Chalupa's tenure as CINCENT. It showed how personal, and even national, differences can be transcended when the major protagonists hold similar views and mutual respect, and hence are able to forge strong cooperation. The reforms and the debates surrounding their implementation were, therefore, as much products of personality as of circumstance.

6. Was the Attainment of the Conventional Deterrence Element Desirable?

This question concerns the expansion of the reforms by Farndale, and eventually (to a certain extent) the inevitable surfacing of a desire to give more emphasis to conventional retaliation and deterrence as more capabilities were becoming available. Ideas revolved around the fact that adding the capacity to punish the enemy conventionally, in addition to the existing punishment capability provided by nuclear weapons, would further enhance the ability to maintain deterrence. Also, this reflected the fact that punishment could be inflicted using conventional forces only, which could result in taking tokens in the form of territory in eastern Europe. There was also an element, especially among the Germans, which indicated that this ability could offer a chance to liberate the lost territories in the east, and this was what the Germans were desirous of doing if forced into a war with the WP.

Nevertheless, having such a capability was neither feasible nor desirable. First of all, the sheer scale of the operation would make it very difficult to support, not only in terms of the logistics penalty and sustainability problem, but also in terms of the impediments involved in the movement of such a large-scale force over such a distance, while providing the necessary fire and air support would also have been difficult. Also, the force density in the theatre would be considerably higher during Farndale's time compared to Bagnall's. This would

make the movement of a large counter offensive force, and thus its speedy committal, virtually impossible. These factors prohibited the launch of such an operation in reality. Secondly, the political ramifications of such a concept, especially if it became a declaratory concept of NATO, would have provoked the WP into devising countermeasures and could have resulted in a stepping-up of the arms race between the two blocs, causing a further deterioration in their relationship. Thirdly, it would have provided the WP with a propaganda coup, especially over the German desire for reunification, as evidence that NATO was an expansion-seeking Alliance, not a defensive one, thus causing a major split in the Allies' cohesion with members who found this unacceptable.

What was required, as well as the core ethos of the reforms, was to have the ability to counter various and unforeseen contingencies in the case of war. In fact, the origins of considering the possible cross-IGB operation lay in a purely military logic, a requirement of fulfilling operational aims. The reason behind the sudden upsurge of a desire for conventional retaliation and deterrence was based on an incremental expansion of the reforms; once the ability for successful defence was attained, it was only natural to consider other options. The inherent problem of this idea, however, was the fact that it was a deviation from the original aims of the reforms, and was planned on nonexistent resources and capabilities.

Those behind the exploration of this idea cannot be blamed for their boldness; in fact, they have to be praised for their confidence and diligence in expanding NATO's horizons. Nonetheless, theirs were not realistic options, and, as the ultimate settling of the reforms showed, the ideal capability and operational aims of NORTHAG were to secure a sufficient ability to deter, and, if necessary, to meet and stop the WP onslaught as near to the IGB as possible without losing its territory. This was best served if only conventional means were

applied in the process, and this was what was hoped and expected of the military.

In retrospect, the major benefit of exploring such ideas, and of REFORGER 87, was achieving a psychological victory, without actually fighting a war, by displaying such capability. In fact, what could have become a major source of political dispute between NATO and the WP, unintentionally became a factor reinforcing NATO's stance against the WP, hence strengthening deterrence by impressing the WP without arousing suspicion of it being a practice for an offensive war.

7. Are the Lessons of the Reforms Relevant Today?

In a practical sense, the lessons of the reforms are not as relevant today as they might have been. The aims of the reforms were focused on fortifying the Army's conventional war-fighting capability in a major HIC in Europe, but no real necessity for this exists in the foreseeable future, while there are more pressing needs for the Army, such as supporting out-of-area peacekeeping missions. Along with the recent cuts, which have targeted a reduction of overall aspects of its capacity, including manpower, equipment, and sustainability, any action which is intended to reinforce its conventional capability at the moment seems to be redundant and unwarranted. This will seriously undermine the Army's capability to fight a major conventional war, but it seems that it has no alternative but to make some painful choices to incorporate the current projected cuts. Although the Army is still sceptical about the reduction of its heavy arms (armour and artillery), there has to be a trade-off in order to finance other formations and structures, for instance more mobile and lighter elements with a rapid reaction capability, which are more suited to the currently outlined missions. Despite the fact that its leadership in the ARRC would require it to continuously maintain

some heavy elements in Germany, it seems inevitable that the Army has to conform to the changes in its environment.

Therefore, the primary relevance of the lessons of the reforms in the post-Cold War era is the fact that, although they can no longer provide the basis for the operation by large heavy formations in a major contingency, their spirit, which promoted ways of doing more with less and fostered more flexibility and creativity in mind, would play a crucial role in maintaining the efficacy and prowess of the future Army. Equally, the operational thinking and use of manoeuvre principles would enable smaller British forces to be effective in their operations in various theatres regardless of the nature of their formations and character.

8. How Successful were the Reforms and What were their Main Benefits?

The answer to the first part of this question is that, despite some difficulties surfacing during the implementation of the reforms, they were largely successful, especially in fostering flexibility and creativity in the armed forces—the overriding ethos of the reforms. They not only encompassed the physical character of the forces, but were also extended to everything necessary in the conduct of the armed forces' businesses throughout the hierarchy. The adoption of the operational concept, and the very idea of embracing operational art, in the Army has been, more than anything, the attainment of this transition of thought, enabling individual officers to cultivate independent judgement and decision-making skills. The Gulf War experience was a very important occasion which largely validated this approach as the capability to put the lessons into practice was successfully demonstrated throughout the command, as well as in the use of weapon systems and support. Most of all, flexibility allowed the maintenance of tempo and speed of operation by each formation even when ordered to change

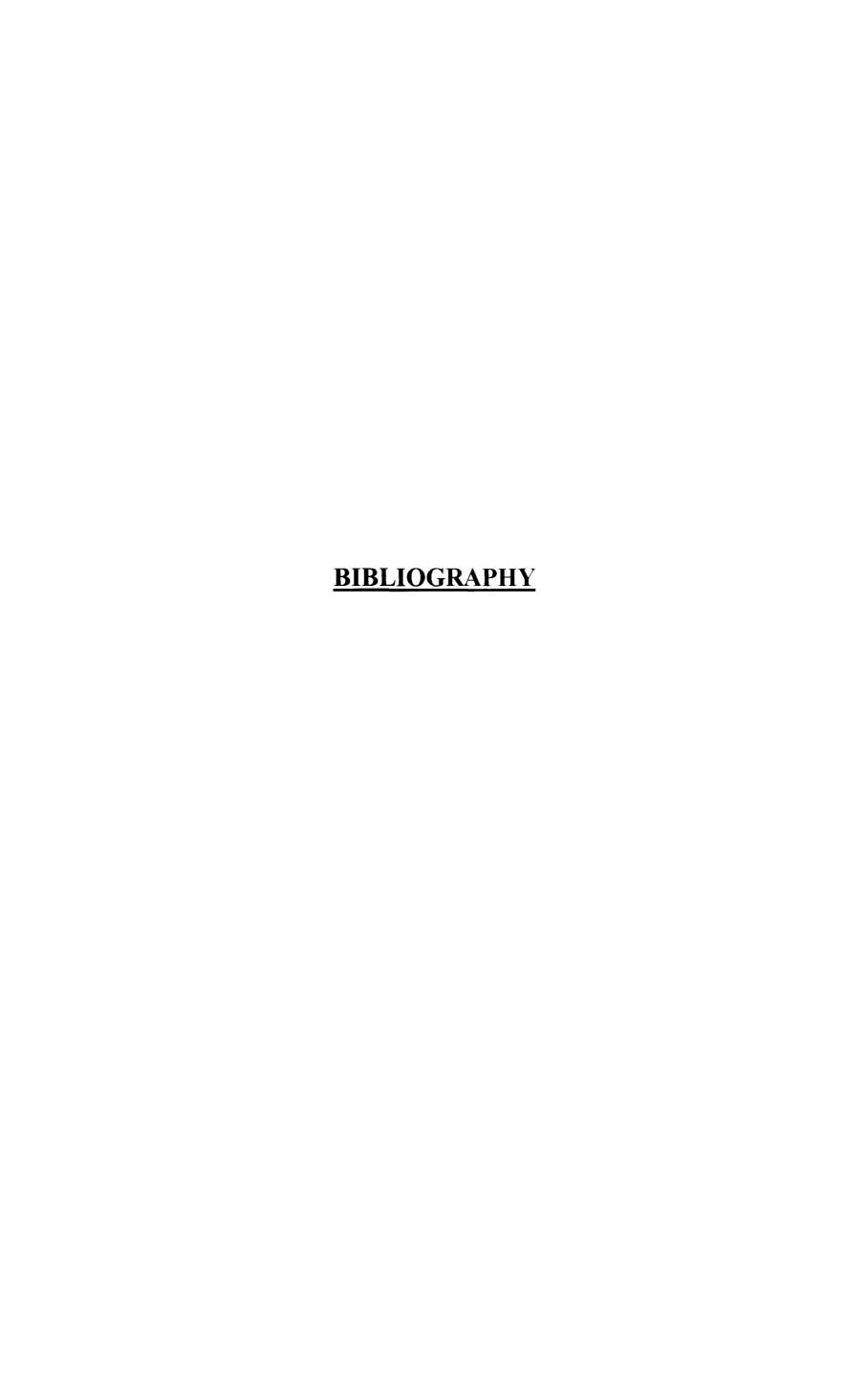
its direction and objectives. This was why 1 (BR) Armoured Division was able to undertake missions other than those it was originally allocated. Indeed, the reforms had a major impact on the British Army's outlook, as it has been transformed from a passive and largely static institution to one that is active and confident. It is up to the Army to carry these successes into the next millennium.

All in all, the main benefits of the reforms could be identified as two-fold. Firstly, the reforms achieved their goal of raising the nuclear threshold and reinforcing deterrence through providing the ability to maintain the status quo by destroying enemy forces with conventional means alone. This was a capability which did not exist earlier. The focal point was to secure maximum capability to offer the leadership more options at the critical time; the reforms achieved exactly that. This was one of the reasons why the debates were limited, and when they did break out, they usually revolved around the approach to fighting a war.

Secondly, they were instrumental in reinforcing the government's stance and leadership among the European Allies by proving the credibility of Britain's commitment to Europe in general. The reforms demonstrated that Britain had both the capability and resolution to carry out a series of complex changes even in a time of financial difficulties, and its aspiration to maintain a leading role in NATO was, in fact, a positive element which strengthened NATO's ability to maintain deterrence. It has to be said that the government was fortunate to have achieved such a result despite abandoning its much-needed financial support to the Army in the mid-1980s, but it nevertheless played a significant role in providing the initial impetus by giving the reforms a chance to become what they were in the end.

* * *

This thesis has endeavoured to fill the gap in the existing literature and sources and shed light on hitherto unknown information by discussing the various elements involved in the formulation and implementation of the reforms. It has been a study of a turbulent era when the British Army had to make difficult choices, and take chances, to fulfil the task it was given, that is the maintenance of deterrence in Europe, in the face of diminishing resources. Against this daunting background, the reformers were forced to find an alternative, and their prudence and relentless pursuit of the changes did in the end enable the British Army and NORTHAG to fulfil their duty of defending, and preventing a war in, Europe. What this thesis has shown is that the reforms were, in fact, the most significant development in British Army thinking since the end of the Second World War, and as a result of the reforms, the Army was transformed into one of the most effective forces in the Alliance, while fundamentally altering its outlook and tradition in warfare. Above all, they significantly reinforced NORTHAG's ability to counter a WP surprise attack, and if it had been required, the army group had a very strong chance of checking the progress of a WP attack by conventional means alone.



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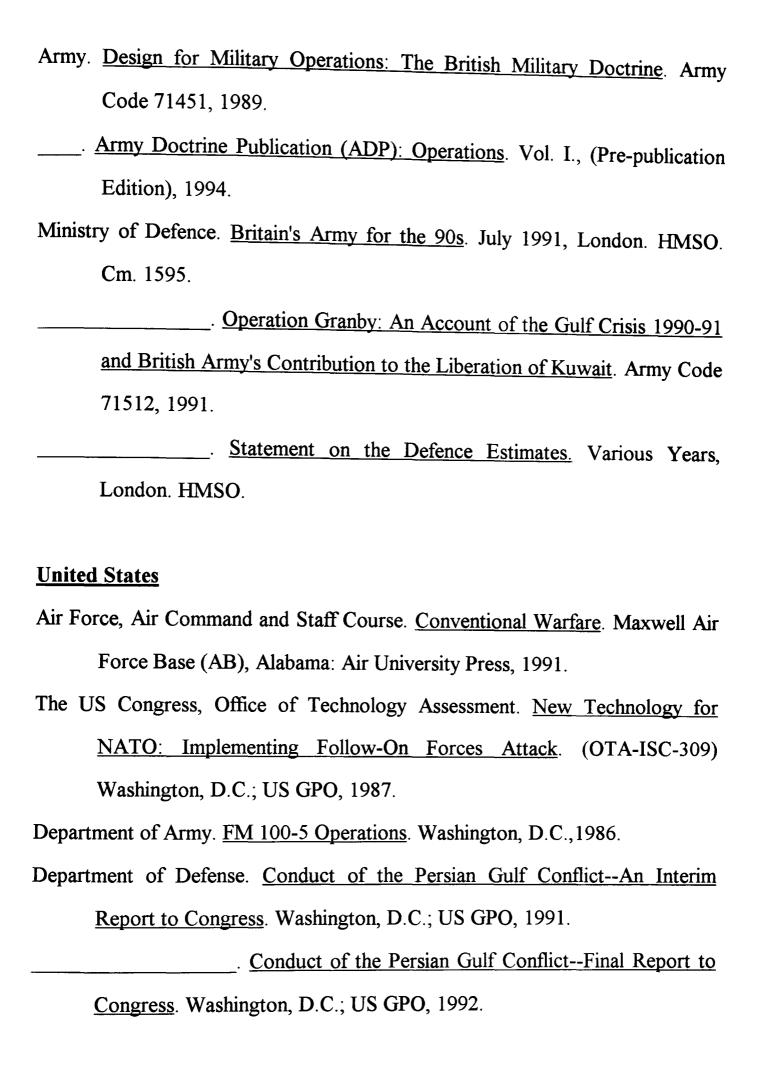
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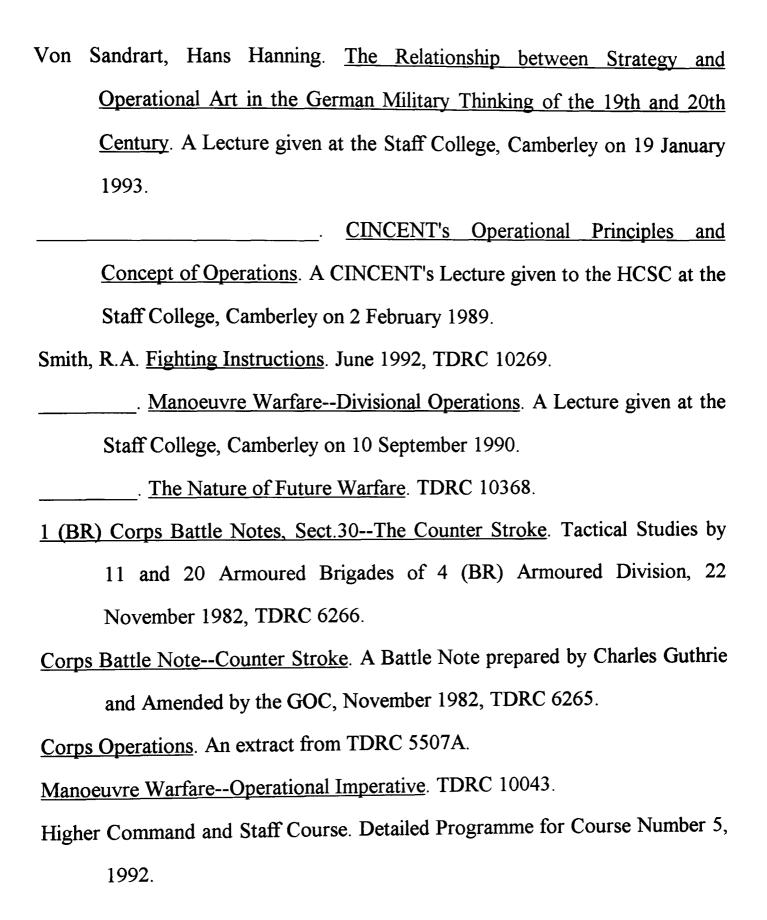
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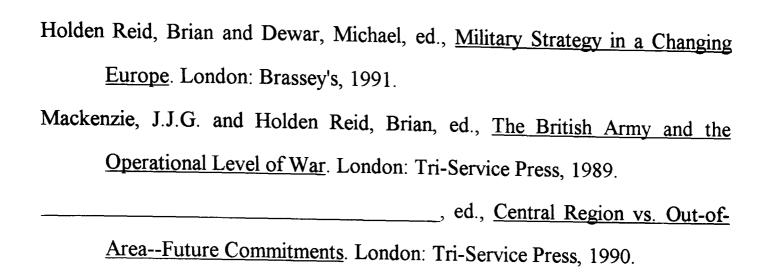
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• ARTICLES

Abbreviation of Periodicals

AFJI Armed Forces Journal International

AL Army Logistician

AP Adelphi Papers

AQ&DJ The Army Quarterly and Defence Journal

BAR British Army Review CQ Conflict Quarterly

CWIHPB Cold War International History Project Bulletin

DA Defense Analysis DD Doctrine Digest

FA Foreign Affairs

IDR International Defence Review

IS International Security

JDW Jane's Defence Weekly

JSIR Jane's Soviet Intelligence Review

MR Military Review MT Military Technology

NR NATO Review

NFN NATO's Fifteen Nations

NSN NATO's Sixteen Nations

RUSIJ Journal of the Royal United Service Institution

SD Strategy and Defence

SJMS Sandhurst Journal of Military Studies

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