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NUCLEAR WEAPONS AND BRITISH DEFENCE POLICY

An examination of nuclear aspects
of British foreign and defence policy
1940-1990

Malcolm George CHALMERS

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Introduction

This thesis is an attempt to understand the role of nuclear weapons in Britain's defence and foreign policies. It works from the assumption that decisions in relation to nuclear weapons can only be understood in the context of a broader overview of the British state's policies since the 1940's. In turn Britain's nuclear policies have made a decisive impact on defence policy as a whole and have had an important effect on international developments. It is hoped that this thesis will contribute to a better understanding of the causes and effects of the nuclear weapons policies adopted by the UK since the 1940's.

The thesis will focus on the politics and political economy of nuclear weapons and British defence policy. This central concern has required that a number of other important aspects of the subject have been given only peripheral consideration. The thesis does not attempt to provide a detailed technological history of Britain's nuclear force. Nor is it intended to provide particular new insights on the nuclear decision-making process. Rather it seeks to explore the underlying factors which have shaped both the technology and the perceptions of decision-makers.

There is no shortage of historical accounts of Britain's nuclear force. The unique contribution which it is hoped that this thesis makes, however, does not lie so much in its subject matter as in the way that this subject matter is approached. In my view that approach is sufficiently different from those of previous works in this area as to be both original and of some interest to other scholars in this field.

The thesis begins, in Chapter One, by providing a broad introduction to the main features of British defence policy in the period since World War Two. It looks at the changing position of Britain in the
world, and the response of the British state to this process of change. It examines the particularly important role that the 'special relationship' with the United States has played in post-war British policy; and it looks at how the nation's historical tradition has continued to influence its foreign and defence policies.

**Chapter Two** provides an historical overview of Britain's nuclear weapons policy. It begins by seeking to explain why Britain became, and then remained, a nuclear weapons power. It then argues that, although the main elements of Britain's nuclear weapons policy have remained in place throughout the postwar period, the political consensus in favour of an independent nuclear force has never been an absolute one. It then discusses the particular contradictions in that policy that have ensured that this should be so.

**Chapters Three to Five** then provide a detailed historical justification of the arguments presented in Chapter Two. They look in turn at the periods 1940-55 (Chapter Three), 1955-68 (Chapter Four), and 1968-85 (Chapter Five). They chronicle the elements of continuity in nuclear weapons policy, as well as examining the development of contradictions in that policy in response to economic and strategic developments.

**Chapter Six** looks in some detail at the military rationales for Britain's nuclear force, and how this affects the structure of that force. Because of the semi-dependent character of the British force, considerations of its actual purpose, and of its capability for independent action, are of considerable significance. This chapter seeks to appraise the debate in this area.
In the last two Chapters, we consider the future. We look at the main alternative policies that are now available to the British government. We assess their relative merits. In Chapter Seven we assess those options that involve an acceptance of the main tenets of postwar policy, but also an acceptance that economic circumstances may necessitate some adjustments in that policy 'at the margins'. Chapter Eight, on the other hand, argues that a more fundamental change in British policy is needed. It questions the reliance on nuclear deterrence as a foundation for international security, and discusses the case for independent British disarmament initiatives.

Finally we provide a bibliography which lists some of the articles and books which have proved most valuable in preparing this thesis.
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CHAPTER ONE

BRITISH DEFENCE POLICY SINCE WORLD WAR TWO

1. Introduction

Before seeking to present general hypotheses on the role of nuclear weapons in British defence policy since World War Two, it is necessary to outline the broader backdrop to that role: the changing position of Britain in the world and the response of the British state to this process of change. For it is the state's reluctance to adjust its overseas policies to the economic resources available, and the continuing priority given to international status over domestic economic performance, that lies at the heart of the commitment to create and maintain an independent nuclear force.

The aspiration for a world, or 'Great Power', role is deeply rooted in British history, and some understanding of that history is, therefore, a precondition for a full appreciation of the dilemma which has faced governments since the 1940s. This chapter seeks to outline the main elements of the foreign and defence policies chosen in the post-war period. Before doing this, it discusses some of the relevant trends in British development in the preceding century.

In the middle of the nineteenth century, Britain was indisputably the world's most powerful state. The Napoleonic wars at the beginning of the century had defeated Britain's main imperial rival, and the Royal Navy in consequence enjoyed unchallenged global military superiority. Together with, and indeed the basis for, this position, Britain's industrial revolution had made it the world's major producer of manufactured goods. As one author put it, "never before and never since has one country so dominated the world economy" (1)
The success of a small offshore European island in dominating the world economy, and directly controlling an Empire with a third of the world's population, was bound to be temporary. It depended heavily on its unique position as the first industrial nation. Once other nations, such as Germany, the US and France, also started to industrialise, Britain's relative strength would inevitably decline.

Indeed, in important respects, Britain's response to the challenge of these new industrial powers in the late 19th century was remarkably successful. Its initial response was to reach 'understandings' with the new powers to prevent conflict and preserve the status quo. Of these, the most longstanding proved to be the agreement to accept United States dominance over the Western Hemisphere, embodied in the "Monroe Doctrine," and thus lay the foundations for an alliance that would gain steadily in importance as Britain's own power declined. (2) An indication of the success of Britain's policy of forming alliances was its victory in the two world wars in 1914-18 and 1939-45. By using its diplomatic skill, many leaders believed, Britain could continue to be a Great Power despite its relative weakness.

In other respects, however, Britain's response to the demands of its new situation proved to be inadequate. The policies, structures and attitudes formed in the heyday of the Pax Britannica became impediments to the nation's ability to adapt to new circumstances. Economic policies which had served British ruling class interests well in the mid-nineteenth century now increasingly became costs to the economy. Moreover, although it had eventually achieved military victory in the world wars, the financial cost had been enormous. The massive overseas investments, built up over a century of capital export, and on which the domestic British economy had come increasingly to depend, were depleted in a few short years of battle. While the First World War
severely handicapped the British Empire, therefore, the 1939-45 war led to effective bankruptcy. From 1940 onwards, the survival of that Empire became totally dependent on economic and military assistance from the United States.

The victory in 1945 strengthened the determination of Britain's rulers to retain their country's international status, despite both its weak economic position and the growing costs of military power. The war had accelerated a number of trends, each of which increased the pressure on Britain. Firstly, it saw the involvement of both the US and the Soviet Union, who had adopted isolationist stances in the 1920s and 1930s, in world affairs. The Cold War, which the conflict between these two 'superpowers' created, in turn led to increased requirements for permanent peacetime military forces to provide for a possible outbreak of 'hot' war. Secondly, the war encouraged movements for national liberation throughout Asia and Africa, which threatened the continued existence of the Empire and increased considerably the costs involved in policing it. Thirdly, the rapid development of military technology during the war had increased the importance of scientific advance in warfare. Henceforth considerable resources would be needed to keep pace with the developing qualitative arms race between the major powers.

In the period after 1945 Britain's defence policy continued to be decisively influenced by the requirements of its world role. As a result, the costs of that policy were much greater than would have been needed for the defence of the British Isles themselves. While in the past there were economic gains from the state's global military role, however, these had now become liabilities. British defence policy in the post-war period proved to be very tenuously linked, if at all, to the needs of either homeland security or economic gain.
Britain's continuing aspirations to Great Power status were reflected in its simultaneous adherence to five major commitments in defence policy:

- the imperial, extra-European, role
- the European commitment
- the independent nuclear force
- the 'special relationship' with the United States
- the commitment to self-sufficiency in arms production

The attempt to maintain all these commitments, and the partial nature of the eventual retreat from the least tenable amongst them, explains why British military spending has been higher than that of most of its allies throughout the post-war period. And it also helps us to understand why it is considerably higher than Britain’s peacetime military spending before the Second World War. For, compared with that period, the perceived military requirements for international status have been greatly increased. The European and nuclear commitments are both entirely new and expensive. The costs of maintaining the imperial role and an independent arms industry have both considerably increased. And the need for close co-operation with the US has both permitted the continuance of otherwise untenable commitments and attitudes, and has created pressure for Britain to make a 'special contribution' to Western security as a whole in order to maintain its 'special relationship'.

2. Holding on to Empire

By the first decades of the twentieth century, the Empire was already, on balance, probably more of a burden on Britain's economy as a whole than a bonus. This burden, however, largely took indirect forms - the emphasis on overseas investment, the anti-technical bias in the upper classes, the maintenance of sterling as a reserve currency. The direct, military costs of Empire remained relatively cheap until the Second World War. After that war, however, the balance of
advantage shifted markedly. The rise of national liberation movements increased the need for military forces and provoked a series of costly counter-insurgency wars. Newly independent states and guerrilla fighters equipped themselves with modern weapons, supplied from both the West and the Soviet bloc, which further increased the capabilities required for British forces.

The key event in transforming the balance sheet of Empire, however, was the gaining of independence by India in 1947. British India had been not only the Empire's main economic asset, an employer of a substantial section of the home country's middle classes and a major protected market for its industries. It was also the source of most of its military manpower and the hub round which its string of military bases - Suez, Aden, Singapore - had been built and without which they made little sense. It was therefore remarkable how slow the impact of Indian independence was on Britain's commitment to the retention of its remaining possessions. Indeed humiliation at Suez in 1956 probably had a greater, or at least more immediate, effect on national opinion.

Until the mid 1960s, reluctant retreat from Empire was accompanied by continued attempts to retain a residual imperial commitment. Only after 1965, as the country's economic plight worsened and the costs of the East of Suez role continued to climb, did a Labour Cabinet agree to withdraw from most remaining bases in the Gulf and Far East by 1972. Even then the longing for a British military role outside Europe did not die. A number of residual commitments were maintained in the Mediterranean, Hong Kong, Belize and the Falklands, the last of which has proved extremely costly. And the structure and attitudes of the armed services - particularly that of the Royal Navy - continue to reflect to this day a desire for an intervention role outside Europe.
Arguments for a return to a 'maritime strategy', in which priority is given to surface naval forces at the expense of the land/air commitment to Europe, reflect this continued yearning for a world role amongst Conservative MPs, many of whom have close links with the influential Navy lobby, and it even enjoys support from a number of prominent Labour politicians. Indeed, partly in response to such pressure, the present government has already taken important steps to reverse what it believes was the overconcentration of forces in Europe that characterized the 1970s.

3. Committed to Europe

In the past, the security of Britain itself, and its sea links with the Empire, have been ensured by a policy of preventing the domination of the European continent by a single power. Britain has never been interested in controlling its European neighbours, only in preventing a threat to itself and its overseas possessions. As a result, throughout its imperial history Britain's leaders have looked with suspicion at, and feared entanglement in, European politics, and have pursued a policy of having no permanent allies or permanent forces in Europe.

This policy broke down temporarily, with disastrous human consequences, when Britain intervened in 1914 to prevent German domination of the Continent which, it was believed, would pose a direct threat to British naval power and national security.

Immediately after that war, however, the Army was quickly withdrawn and Britain reverted to its traditional policy. Only in the aftermath of the Second World War did Britain feel forced to agree to a permanent military alliance in Europe - the North Atlantic Treaty Organization (NATO). With the rise of Soviet military power it was believed that a
British commitment was now needed to ensure West European resistance to a further expansion of Soviet influence. In direct contrast to past policies, therefore, Britain actively promoted an alliance between the major West European powers and committed a large proportion of its armed forces to that alliance. This questionable strategic rationale - the need to avoid the possibility of Soviet dominance of Europe - was powerfully reinforced by the ideological antipathy of both Conservatives and most Labour leaders to Soviet-style socialism. Anti-communism - the foundation of the Cold War - became both an explanation of and justification for Britain’s military commitments in Europe and elsewhere.

However, the European commitment, as in the past, was somewhat ambiguous, continually competing with Britain’s world role for military resources. In 1952, Britain refused to merge its armed forces into a European army - the European Defence Community (EDC) - largely because of its continued belief in its role as an independent world power. At first, it refused to join the European Economic Community (EEC) for the same reasons. In the 1960s, its applications for membership were rejected on French insistence because of its continued close links with the Commonwealth and Empire, and with the United States. And by the time Britain did succeed in joining - in 1973 - the political momentum for unity had been dissipated, and the economic advantages of membership had diminished.

In Britain’s first decade of EEC membership both main political parties have been eager to stress their commitment to maintaining national ‘sovereignty’ and protecting national interests. Mrs Thatcher appeared to be shifting foreign policy away from Europe and towards a strengthening of both the ‘special relationship’ and
Britain's world role. And, although some Labour opponents distinguished between the capitalist-dominated EEC, which they oppose, and a united socialist Europe, which they would support, many of their colleagues continued to believe in quasi-imperial illusions about Britain's world role, of which an exaggerated importance given to Commonwealth economic links, inter alia, is a notable example.

4. The Nuclear Illusion

Reinforcing Britain's self-image as a great power has been its involvement with the most powerful weapons of all - the atomic and hydrogen bombs. In 1940, Britain had, briefly, led the world in atomic weapons research; and its scientists played an important role in the wartime Manhattan Project, which developed the weapons used on Hiroshima and Nagasaki. Even today, the link between international influence and possession of nuclear weapons is symbolized in the membership of the UN Security Council. The permanent members of that body - the US, the USSR, France, China and the UK - are the five states with acknowledged nuclear arsenals. Britain's nuclear force undoubtedly has contributed to the illusion that it is a step above most other medium-sized powers in the international pecking order, even if it is not a superpower. And, within NATO, the nuclear force, and the close nuclear co-operation with the United States, has reinforced Britain's feeling that it is number two in the alliance.

Moreover, the nuclear force helped to encourage, especially in the 1950s, the idea that Britain could afford to fulfil its military commitments in Europe and in Asia simultaneously without ruining its domestic economy. In Europe, it was argued, tactical nuclear weapons and a policy of 'massive retaliation' could compensate for NATO's supposed conventional inferiority. Non-nuclear land and air forces
could therefore be reduced to a 'tripwire' function, sufficient only to make it clear that a fullscale assault was underway before using nuclear weapons on a large scale. Even outside Europe, it was believed that nuclear weapons could be a cheap substitute for overstretched conventional forces in limited conflicts.

Both concepts proved to be illusions. In Europe, the growth in the Soviet nuclear arsenal, which had been virtually non-existent in the 1950s, led to an increasing reluctance in NATO to give up entirely the conventional option; and the political need for a symbol of Britain's commitment to Europe also meant that the cuts in its continental forces were not as great as had been hoped. In the Empire, nuclear weapons proved to be unusable in counter-insurgency warfare, or in limited confrontations such as that with Indonesia. If Britain wished to maintain both its European and imperial commitments, it discovered, it would have to pay dearly for them, or give one of them up.

In some respects, the nuclear force clearly complemented the imperial commitment. By encouraging continued illusions of national power it reinforced support for a world role and delayed a reappraisal. Yet at the same time, it also proved to be a compensation for the retreat from that role when it did take place. At the crucial moment after the Suez fiasco, an increased emphasis on Britain's independent nuclear status helped to silence those arguing for a more radical reappraisal. The British place at the 'top table' of arms talks served to further quell doubts domestically.

The nuclear force thus encouraged pretensions of being a world power, and indirectly contributed to overcommitment in defence policy as a whole. Its direct costs were, moreover, also considerable: certainly greater than governments liked to admit publicly. At the
peak of the V-bomber project, nuclear forces took between 10 and 20 per cent of the defence budget. Though the proportion spent on strategic nuclear weapons fell in the 1960s, some of the £12,500 million spent in the 1970s and 1980s on the Tornado bomber - now assigned to a 'theatre nuclear' role - should also be attributed to nuclear spending. And, in the late 1980s, the Trident project will ensure that nuclear costs will rise again, on conservative assumptions, to as much as 15 per cent of total defence spending.

5. A special relationship

Since the Second World War, British leaders have placed a high priority on maintaining their 'special relationship' with the United States. The war itself forged extraordinary close military and economic ties between the two governments. And, once it had ended, the survival of the Empire was clearly dependent on US approval, or at least tolerance. Moreover, the world's capitalist economies, and those of Western Europe in particular, needed an American lead in the 1940s to prevent a recurrence of the political traumas that followed the First World War. Binding these two ideas - tolerance of colonialism and aid to rival capitalist nations - together was the global contest with the Soviet Union. A narrow view of national economic advantage might have suggested that Europe, Japan and the British Empire were potential rivals in a conflict for domination of world markets, and that the US had little interest in their economic reconstruction. Its assumption of the role as leader of the capitalist world from 1947 onwards - a Pax Americana not unlike Britain's nineteenth-century dominance - led to such considerations being subordinated to the requirements for prosperity and unity between advanced capitalist states in the confrontation with the Soviet bloc.
The Cold War therefore proved the cement of American foreign policy, enabling short-run sectional economic interests to be overcome, and the US to commit itself to a leadership role in the capitalist world system.

If the Cold War enabled the US to reconcile the elements of its own foreign policy, it was the 'special relationship' with the Americans that was the keystone enabling Britain to retain the trappings of its world status despite the crippling effects of the war. Its imperial - and later 'out of area' - policing role in the Third World was supported by the US as a contribution to the confrontation with the Soviet Union and with national liberation movements. In Europe, the US supported Britain's efforts to act as a bridge between North America and Europe, as an ally in opposing communist expansion on the Continent, and in sharing the financial burden of defence in Central Europe and in the North Atlantic. And Britain's independent nuclear force could not have been maintained without American help - at least not without sacrificing other military commitments.

The 'special relationship', for Britain, had an important additional advantage, as much psychological as material. It helped the transition from Pax Britannica to Pax Americana to be made relatively smoothly, and it provided the old, declining power with a role as an experienced advisor to the less sophisticated, if more powerful, 'new boy' - a role as elder statesman writ large. This conception accorded with British perceptions of their own greater wisdom and maturity. The willingness to compromise and manoeuvre, essential to Britain's past world leadership, would, it was thought, act as a valuable constraint on American impetuousness, its simplistic worldview and its reliance on brute power. Britain could in this way, its leaders believed, influence the path of world events without directly controlling them.
The price paid for this intangible 'advantage' was, however, considerable. In return Britain was expected to support the US stewardship of the capitalist world in words and in deeds. British policymakers believed that, in order to influence American policy, they had to support it. To preserve the trappings of its past power, Britain had to subordinate them to US designs. Though important scope remained to influence policy at the margins, especially in the first post-war decade, major decisions taken by the US government were shaped by its conception of its own interests. Britain, by contrast, found itself bearing the burden of a world role, while its political and economic influence declined still further. In return for its high level of military spending, it found itself with only the illusion of international political power, rather than the reality. The latter belonged to the United States.

Britain's commitment to high defence spending was, from the United States' point of view, an important component of the 'special relationship'. If Britain wished to have greater influence in Washington than other medium powers, it was argued, it had to share the costs of America's military leadership. The most costly consequence of this belief occurred during the Korean war in 1950-2 when, in response to demands from the US, Britain agreed to a massive rearmament programme which halted the domestic economy in its tracks. More than any other event, this programme handicapped Britain in competition with the emerging economies of West Germany and Japan, which had no comparable military burden. It raised defence spending to a higher plateau, on which it remained for the next three decades. Yet the increase in expenditure was motivated mostly by Britain's concern to retain influence in Washington and thus avoid America becoming embroiled in a major Asian war. Fears of a new and immediate Soviet
offensive - then sweeping the United States - appeared to have been very much a secondary factor in British considerations.

Finally, the 'special relationship', linked as it is with imperial and nuclear commitments, has played some part in preventing Britain's transformation into a European power. Other European countries, and France in particular, have often voiced suspicions that the UK would be a 'Trojan Horse' for the Americans within Europe, as it was at least as interested in maintaining its close Atlantic ties as it was in European co-operation. Indeed the 1962 Nassau agreement, under which the US agreed to sell Polaris ballistic missiles to the UK, was one of the factors which precipitated de Gaulle's veto on British EEC membership shortly after. It is significant that the most enthusiastically pro-European Prime Minister - Edward Heath - was also the one who placed least emphasis on the 'special relationship'. For, if the 'out-of-area' and American commitments were complementary, both have in practice often been alternatives to closer ties with Europe. Under the Conservatives in the 1980s, there are signs of a modest, but significant, shift back towards these old priorities.

6. Buying British

The final factor that explains Britain's high level of military spending is its continued commitment to maintaining the domestic arms industry. Self-sufficiency in weapons supplies has been seen as an important requirement for both political influence and operational independence. Occasional doubts have found difficulty making progress against this view in the face of a powerful industrial and military lobby anxious to protect the interests of uncompetitive, but profitable, arms manufacturers. Yet, in reality, the arguments of that lobby have become increasingly dubious. For not only has the cost of only
'buying British' in arms grown considerably. The military value of such independence has also been reduced.

The costs of remaining independent in military production have escalated ever since the beginning of the Second World War. The 'advances' in military hardware during that conflict - radar, jet aircraft, nuclear explosives, rockets, etc. - proved to be only the beginning of an extended technological arms race. The post-war confrontation between the two superpowers created external pressures for continually refining weapons systems, while the acceleration in industrial technology as a whole provided new opportunities for military innovation. As both superpowers devoted massive scientific and industrial resources to improve their relative position in the Cold War, the costs to other powers of keeping up with them grew. Though the basic types of non-nuclear weapons - planes, tanks, ships - were the same as had been used in the 1939-45 conflict, new technologies were transforming their destructive capabilities. And, as a result, the cost of producing each unit of equipment rocketed. One of the more remarkable, but by no means exceptional, examples of this process is in military aircraft. The cost (after making allowance for inflation) of producing 385 Tornadoes for the RAF of the 1980s will be greater than the cost of 21,000 Spitfires made before and during the Second World War. (3)

For Britain to keep up technologically with this arms race has required a massive investment in military research and development (R & D). Growth in R & D was particularly marked in the 1950s, when it grew from £69 million in 1949-50 (9.3 per cent of total defence spending) to £204 million in 1956-57 (13.3 per cent of the total). (4) Yet it still proved impossible for a relatively small power, as Britain was.
and is, to develop and produce the entire range of modern weapons. The R & D cost for each new type of weapon is largely independent of the number to be produced. Those countries with a much larger order book can, therefore, spread these overheads more thinly than is possible for the UK, and thus lower the average cost of each unit. Unless British producers are able to export a considerable proportion of their output, or collaborate successfully internationally, they will start with a severe handicap in competition with larger US producers.

As a result of this logic, the 1960s and 1970s saw exceptions to the principle of self-sufficiency being made in some of the most difficult 'high-tech' areas - notably ballistic missiles (i.e. Polaris) and military aircraft. In general, however, these concessions were reluctant and partial. In the 1980s Britain continues to devote a higher proportion of its defence budget to R & D than any other NATO member, (5) and still produces a wide, though now incomplete, range of different weapons. The unit costs of its producers, consequently, often compare unfavourably with foreign competitors - and the numbers produced of each type has tended to diminish with each successive generation. If cost escalation continues at past rates, further erosion of the principle of self-sufficiency is inevitable.

7. Conclusion

As a result of the multiple commitments outlined so far, Britain has consistently spent a higher proportion of its national income on the military than most of its economic competitors. There is considerable evidence that this heavy military burden has made an important contribution to Britain’s relative economic decline since
Continued poor economic performance has in turn created intense pressure to reduce military commitments to match resources available, and a long-term process of retreat in Britain's global influence. As the next chapter will discuss, nuclear weapons played an important part in the attempt to remain a Great Power without the resources to do so.
NOTES


CHAPTER TWO

AN OVERVIEW

1. Why Britain is Nuclear

Britain's nuclear force has played an important role in the postwar external policy of the British state, and in particular in its attempt to retain at least some part of the international influence which it had enjoyed previously. The commitment to the nuclear force has been reinforced by, and indeed is in large part a result of, the state's commitment to Great Power status. At the same time, the technical success of the nuclear project has in turn encouraged these pretensions to international prestige, and thus delayed the process of reappraisal and adjustment in Britain's role in the world.

In the war years and the decade that followed (1940-55), Britain's involvement with nuclear weapons was seen by its leaders as an essential component of being a Great Power. At the end of World War Two, with the defeat of Japan and Germany and the weakness of France and China, Britain was clearly if temporarily the world's number three power. It still possessed a worldwide empire, and in 1945 participated actively in the Yalta and Potsdam conferences which presided over the division of postwar Europe. The decision to go ahead with an independent nuclear project, formally taken in 1947, must be seen in the light of the general understanding at the time that Britain would continue to be a world power indefinitely. If the United States and the Soviet Union saw nuclear forces as essential for their own security - as they clearly did - Britain also needed a nuclear force of its own. Otherwise, in the words of Lord Cherwell, one of the most influential officials on nuclear matters in this early period, Britain would "sink to the rank of a second-class nation." (1)
By buttressing a national self-image based on influence and power rather than prosperity, the nuclear force has been an important element in the ruling elite's world-view. Moreover, the commitment to the nuclear force has not only been overwhelmingly supported by the traditional 'Establishment' - senior civil servants, the armed forces, the Conservative Party. It has also helped to legitimise the priority given to international status in mass politics, and within the labour movement in particular. Through the first two postwar decades, the Labour Party's leadership was as committed to Britain's world role as the Conservatives, reflecting the strength of imperialist views within the working class itself. Although subsequent Labour governments, in 1964-70 and 1974-79, have chosen to publicly play down the independent nature of Britain's nuclear force, this has been a result of internal party divisions. Until 1979, no substantive difference existed on nuclear weapons policy between the leadership of the two major parties. A significant minority in the Labour Party had opposed Britain's nuclear commitment since the late 1950s. Only during the period since 1980, however, has the bipartisan consensus at leadership level been undermined.

In explaining Britain's continuing commitment to an independent nuclear force, an important role was also played by bureaucratic momentum. Britain was the first country to consider that an atomic bomb was a practical possibility. The extensive effort put into the nuclear programme meant that, by the time a formal decision to produce a bomb was taken in 1947, it had a considerable alliance of vested interests built up in its favour. Partly because of the secretive nature of decision-making, this lobby had a major advantage in internal government debates. Those who might have been most sceptical of a nuclear programme have not usually been included in these debates. Indeed even leading members of
the Cabinet were often unaware of crucial discussions. Those few critics who were involved in the internal debate often found their access to information reduced as their opposition became clear.

The importance of 'momentum' must be seen, however, within the framework of the over-arching commitment of the state and ruling elite to a Great Power role. It has been the strength of that commitment and the unwillingness to challenge prevailing perceptions of Britain's appropriate world role, rather than the momentum behind an individual project, that has ensured the nuclear force's survival. The lack of a crisis sufficiently great to destroy the dominant paradigms of external policy has meant that adjustment to economic decline in foreign and defence policy has been slow and reluctant. This reluctance has been reflected in nuclear weapons policy. Indeed, during some periods, notably in the late 1950s and early 1960s, an increased emphasis on the independent nuclear force was used to conceal the decline in Britain's world role in other respects.

Not all commentators would agree, however, with the interpretation of Britain's nuclear commitment presented in this thesis. In a recent book, for example, Peter Malone argues for "the primacy of security over political considerations in British nuclear weapons policy." He argues that neither the 'special relationship' nor prestige considerations - which for Britain have been closely connected - have been crucial. (2)

The contrasting merits of 'prestige' and 'security' arguments depends in part on definitions, as Andrew Pierre has pointed out:

"one of the salient characteristics of the nuclear age is that, more so than in the past, military power has been politicized and international politics have become militarized. To engage in debate, as has so often been done, on whether the British nuclear force has been maintained for
reasons of status or security is sterile and fruitless. The answer is both and the 'mix' has varied at different times" (3)

What is clear is that, in defining security and status, Britain’s relations with its Allies have played a role as, or more, important than those with the Soviet Union. The maintenance of a special relationship with the US, together with a leading military role in Europe and Asia, have been perceived as necessary for both security and status.

The discussion of Malone’s argument is complicated by the peculiar nature of the security which nuclear weapons endow. For such security is only achieved if deterrence 'works' and the weapons are never used. Those who believe Britain’s nuclear force has contributed to security thus argue that it has 'kept the peace for forty years' precisely because it has never had to be used.

Such an explanation does offer important insights into the role of nuclear weapons. Indeed, it can be argued that the military posture as a whole functions in large part as a political signal. Yet by itself it is inadequate. It fails to explain why Britain has developed nuclear weapons while most other states have not done so. In particular, it does not tell us why nations under greater immediate threat - such as West Germany - have abstained from a national nuclear option. Only by also examining the political role Britain sought within the Western alliance can one appreciate its commitment to an independent nuclear force.

The period since World War Two has been one of continual decline for Britain’s rulers. As other second-rank powers recovered from war, it soon became clear that Britain’s international ranking was considerably diminished. Partly because of the heavy burden of its overseas commitments, it failed to keep pace with the economic 'miracles' in Japan.
and Western Europe. In addition, after Indian Independence in 1947, it became increasingly clear that the Empire was set on a long course of disintegration. For the next two decades, culminating in the 1968 decision to withdraw from most remaining 'East of Suez' commitments, the long retreat from world status was a central element of defence policy.

During this period of retreat, the nuclear force played an important political role. It sustained the morale of the ruling class, and was seen as a means of guaranteeing Britain's position as the United States' most important ally. It disguised the extent of decline by encouraging the perception that Britain was still a military Great Power. It helped to encourage an emphasis on military strength as Britain's main area of relative advantage compared with, economically more healthy, countries such as Japan and West Germany. Even in the 1980s, with the Empire gone and Britain now one of the weaker middle-rank powers, the Thatcher government has shown that the desire to use military strength to maintain the illusion of Great Power status has not yet disappeared.

Since the beginning of the century, however, Britain's rulers have been aware that its continued world status has been dependent on the support, or at least tolerance, of the United States. (4) By 1941 that dependence had become brutally clear. The war against Germany could not have been continued without US financial, and then military, support. The British Empire itself could not survive after the war, if the US chose to undermine it.

A foreign and defence policy based upon an alliance with the US, moreover, had unique advantages which a long term pact with Germany - or still less with the Soviets - would not have created. It allowed a relatively smooth transition from the Pax Britannica, on which the structure of British society and the attitudes of its elites had been
based, to a new world order. For, like the Pax Britannica, a world dominated by the US would be based on free trade and capital movements, enforced by maritime supremacy. In contrast, alliances with Germany or the Soviet Union would have had to reconcile Britain's interests with the protected markets and continental military power on which those nations' economic strength was based. The cultural and personal links, and political affinity, with the US provided an additional, though probably subsidiary, incentive for a trans-Atlantic alliance. The common political system of the two nations, capitalist democracy, and their common language, English, made an alliance widely acceptable in a way in which alternative alignments, for example with Nazi Germany, would certainly not have been.

Britain's rulers recognized, from 1943 onwards if not before, that in any post-war alignment with the US it was bound to be a junior partner. The US's vastly superior industrial and military capabilities, demonstrated in the war effort, would ensure that. They were also anxious, however, that Britain should not be entirely subordinate to American policy and priorities, and should retain some influence over common policy. This wish was made more pressing because most of the ruling class - personified in the strongly pro-imperial Winston Churchill - had until recently believed in the possibility of restoring the 'Golden Age' of 19th century British power. Through the war years, Churchill therefore fought a protracted campaign to ensure that, although the Pax Britannia could not be restored, it could be reincarnated - in the shape of a 'Pax Anglo-Americana' in which Britain would play an important role as a junior partner. This objective implied a permanent 'special relationship' between the two nations. The extraordinarily close wartime military co-operation, which went far beyond normal ties between allies and amounted almost to full integration, was seen by Churchill as the precursor for a post-war world order.
Britain's postwar special relationship with the US depended, however, on its exclusive nature. Thus Churchill was to insist that France be denied access to the nuclear secrets shared by the US and UK. Even more emphatically, Britain opposed moves towards conciliation between the two emerging superpowers, and urged instead a policy for 'containment' of the Soviet Union. British leaders were suspicious of American proposals which suggested the possibility of a postwar entente with Stalin. They feared that such an understanding would greatly diminish Britain's value as a junior partner of the US and might involve the sacrifice of perceived British interests in Europe and in the Empire. (5)

Nuclear weapons played a central part in Churchill's vision of the post-war alliance. By freely making available to the US the results of the Maud Report - the first official report to recognize the feasibility of bomb production - Britain had accelerated the Manhattan Project. Wartime nuclear co-operation led Churchill and Roosevelt to envisage a postwar world dominated by an Anglo-American monopoly of atomic air power - much as the Royal Navy had been the basis of British power in the 19th century. This understanding was embodied in the 1943 Quebec Agreement and the 'aide memoire' of 1944, in which the close and exclusive nuclear relationship was set out.

Britain's strong commitment to nuclear interdependence was demonstrated clearly in the policies followed immediately after World War Two ended. The US, under its new President Harry Truman, had reduced the degree of military co-operation from war-time levels, and virtually frozen any nuclear collaboration, in clear breach of the recent agreements between Churchill and Roosevelt. Even when the US decided to adopt a doctrine of containment, and NATO had been formed, the exchange of nuclear weapons information remained minimal. Not until 1954 did the
flow of such information increase significantly; and only after the 1958 Mutual Defence Agreement did it return to war-time levels. Yet, throughout thirteen years of what Britain perceived as a breach of war-time agreements, the UK continued to be a loyal partner to the US in virtually every area of its foreign and defence policy. Indeed this longstanding loyalty was the main reason why, in 1958, co-operation was eventually restored and has continued, albeit with some hiccups, to the present day.

The resilience of Britain’s nuclear relationship with the US can thus only be understood in the context of the wider complex of relationships that have reinforced Britain’s importance to US objectives and alliances, and have cemented Britain’s commitment to the Atlantic Alliance. Throughout the post-war period Britain has made a major contribution to the West’s worldwide military capability, consistently spending a greater proportion of its national income on defence than any other ally with the exception of the US. In the first two decades, it played a major supporting role in the containment of Communism and national liberation movements in Asia, sending in troops to major wars in Korea and Malaysia. In Europe, it had a pivotal role in the formation of NATO, made considerable economic sacrifices to maintain permanent armed forces in Germany, and consistently supported the US’s leadership within NATO even when other members, notably France, questioned that leadership.

Britain’s commitment to close ties with the US has perhaps been most clearly demonstrated by its willingness to act as a major base for US strategic nuclear forces. In the late 1940s, at a time when US support for Britain’s independent force was minimal, it agreed to the stationing of B29 bombers at British bases. During these early years, the US became heavily dependent on the availability of UK airfields from
which to launch nuclear attacks against the Soviet Union in the event of war. Yet, far from seeking reciprocal concessions for these facilities, the British government welcomed them enthusiastically. Even the Americans professed themselves surprised at the ease with which the planes were accepted.

In the early 1950s, new US bomber bases were constructed in the UK, and a growing number of nuclear weapons came to be stored in them. The squadrons of US strategic aircraft were reinforced in the late 1950s and early 1960s by the stationing of Thor ballistic missiles and Polaris submarines in Britain, the latter in direct exchange for American supply of Skybolt missiles to Britain. Though the US nuclear presence in Britain declined in the late 1960s, the 1970s and 1980s saw a number of new developments. By 1984, Britain again became the only foreign country with a 'triad' of US land, sea and air-based strategic nuclear forces on its territory.

Together with the access provided to the unique and valuable intelligence facilities in Britain, these bases constituted an important incentive for the US to support Britain's own nuclear force. Indeed, with Britain a constant and loyal ally, the possibility that it might one day wish to use its nuclear force against American wishes - which worried US leaders in the early 1960s - has become a subsidiary concern. The enthusiastic support given to President Reagan by Mrs. Thatcher, and her reluctance to criticise US policy even when substantial differences do exist, demonstrates the continued convergence of outlook which has provided the basis for the nuclear interdependence between the two nations.

Throughout the period since World War Two, therefore, British nuclear policy has been based on remarkably consistent principles. It has been founded on the state's attempt to retain perceived Great Power
status. Both the continuation of the wartime alliance with the US, and
the development and possession of an independent nuclear force, have been
used to fulfil this objective. It has been an indication of the skill
with which this policy has been pursued that these two instruments,
potentially in direct contradiction, have instead complemented each
other. For the independent nuclear force has enabled Britain’s leaders
to believe they can speak with the US from a privileged position within
the Western alliance, and thus reinforced the view that a special
relationship still exists. And the unique military facilities and
political loyalty that Britain has been willing to provide as part of
that relationship has in turn cemented American willingness to support
Britain’s own nuclear forces.

2. Contradictions

If Britain’s nuclear weapons policy has so far been remarkably
consistent, however, it has not been exempt from political controversy.
While a political consensus in favour of the independent nuclear force
has existed through most of the period, it has never been absolute; and
dissent has grown as the disparity between the reality of economic
decline and pretensions of national grandeur has become steadily more
apparent. Today, of the major political parties, only the Conservatives
are unambiguously committed to maintain the independent force. The
Liberal/SDP alliance is clearly divided on the issue. And in the Labour
Party the opponents of the nuclear force appear to have consolidated
their party’s commitment to non-nuclear defence. Of all the acknowledged
nuclear powers, Britain is now the only one in which the abandonment of
its national nuclear force is a serious political possibility. In the
remainder of this chapter, we outline the background to these current
debates by looking at inherent contradictions and tensions in Britain’s
policy. These tensions, it is argued, have been recurring themes
throughout the nuclear force's history, and together help provide an explanation for its peculiar vulnerability. Chapters 7 and 8 will discuss in more detail the significance of the erosion of the political consensus on nuclear weapons.

2.1 An Incredible Deterrent

For Britain's nuclear force to provide any military, or in the last analysis political, benefit there must be a perception that it could, in some circumstances, be used. In order to deter a potential opponent - usually assumed to be the Soviet Union - from actions harmful to British interests, that opponent must believe that the British government might choose to use its nuclear force if those actions were taken. Over and above this deterrent function, in order to sustain domestic political support for the nuclear force, there must be a general perception that the nuclear force could, and should, be used in certain circumstances.

In the first postwar decade, when the Soviet Union had few if any deliverable nuclear weapons, the credibility of the West's nuclear forces on both these counts was relatively high. The US had actually used nuclear weapons twice against a non-nuclear power in August 1945. It was generally believed to be willing to use them again, on a large scale, against Soviet cities in the event of perceived aggression. Indeed evidence now available shows that the US seriously considered the use of nuclear weapons on several occasions in the 1940s and 1950s (7). Even after the Soviets tested their first nuclear device in 1949, and had perfected a hydrogen bomb in 1955, the US remained willing to use nuclear weapons first in the event of a major war. (8) Until the late 1950s it was generally assumed that a large scale nuclear first strike against Soviet military and industrial targets would be the likely response to major Soviet aggression. Because the Soviet nuclear arsenal
remained clearly inferior to that of the US, and most of it could be destroyed in a pre-emptive attack, the US nuclear force was believed to constitute a credible deterrent. The people of the Western democracies could be convinced that nuclear deterrence was 'working'.

However, as the period lengthened during which nuclear weapons had not been used, despite major wars in Asia, and as their numbers and destructiveness increased, the political constraints on their use grew. Especially after the launch of Sputnik in 1957 and the subsequent rapid expansion in the Soviet capability to attack the US itself, the credibility of nuclear deterrence clearly declined. As nuclear weapons became increasingly perceived as harbingers of universal holocaust, public acceptance of the policy of nuclear deterrence became dependent on the belief that the weapons would never actually have to be used.

Since the West's security policy was based on the assumption that, in order to deter, it must be willing to implement its threats to use nuclear weapons, however, this condition created severe problems. It meant that, in periods during which the perceived likelihood of war had increased, public support for nuclear deterrence policy would decline - as it did in the early 1960s and again in the early 1980s. It also meant that, given the continuing growth of the Soviet nuclear arsenal, US threats to use nuclear weapons first were increasingly believed either to be dangerous or to be bluff. The considerable political and military value derived from possessing nuclear weapons, which the US had enjoyed in the early postwar years, had now considerably declined as a result of both the US's own unwillingness to use these weapons even against non-nuclear opponents and the Soviets' development of its own nuclear capability which made the US itself vulnerable to nuclear destruction.

It is thus a notable paradox of British policy that, during the period when the policy of nuclear deterrence was most credible, Britain
itself had no strategic nuclear force of its own. While nuclear deterrence played an important part in Britain's defence policy throughout this period, particularly after the 1952 Global Strategy Paper, it was not until the late 1950s that its nuclear arsenal took on significant proportions. Between 1956 and 1961, the number of warheads in Britain's possession increased from 14 to 195. (9) And, coinciding with this buildup, the Defence White Papers of 1957 and 1958 increased the public emphasis on the value of Britain's 'independent deterrent'. Just as reliance on nuclear weapons was increasingly coming under question as incredible and unacceptable, therefore, Britain seemed to move further towards such a policy.

There is general agreement that it was in the first postwar decade, when Britain did not possess an independent nuclear force, that its political influence and prestige was greatest. With Germany and Japan disarmed and their economies devastated, and other medium powers in turmoil, Britain was clearly, albeit temporarily, the West's number two power. Although costly, the special relationship still appeared to afford Britain some influence over US policy in Asia and Europe.

However, although Britain's position during this period did not depend on possession of an independent nuclear force, its leaders believed that such a force was necessary to maintain Britain's Great Power status. This view was powerfully reinforced both by the perceived utility of the US's nuclear weapons during a period in which it held a nuclear monopoly, and by the central role played by nuclear weapons in war plans for the 'defence' of Western Europe.

Awareness of Britain's economic weakness reinforced the commitment to develop an independent nuclear force. It was seen as a relatively cheap means of retaining political influence and of strengthening the
special relationship. Combined with a Western military doctrine which relied primarily on nuclear deterrence, this policy, it was believed, would not only reduce the crippling burden of military spending on the domestic economy. It would also enhance the position of the US and UK, the two nuclear powers, within the Alliance, thus making Anglo-American domination of NATO permanent despite the economic recovery and military buildup in both France and West Germany. (10)

From the 1952 Global Strategy Paper onwards, therefore, Britain played an important role in urging the US, and NATO as a whole, to adopt a policy of 'massive retaliation' which provided for large-scale, and early, use of nuclear weapons in the events of war. The adoption of this policy, together with British insistence on an independent nuclear force as an essential attribute of Great Power status, was in large part responsible for France's decision to follow Britain's lead and develop its own nuclear force. British policy during this period therefore made a considerable contribution to starting a process of nuclear proliferation which has continued to this day.

Britain's commitment to a NATO policy of 'massive retaliation' was thus in large part a response to the problem of retaining Britain's influence within the Western alliance despite the decline in its relative economic position, and therefore in the resources available for defence. It therefore proved relatively insensitive to the growing doubts about the credibility of nuclear deterrence expressed in the late 1950s and early 1960s. These doubts convinced the US, especially after John Kennedy's election in 1960, to press for a revision of the policy of reliance on early first use of nuclear weapons. The US was concerned that, given the growth of the Soviet arsenal, it would no longer be rational to use nuclear weapons in response to small-scale conventional aggression. With the experience of crises in Berlin and Cuba, it was
believed that war, while not likely, was possible. Therefore, it was believed, the US and its allies must have a rational policy for fighting such a war. For this purpose, the US proposed a policy of 'flexible response' involving centralised (US) control of all NATO nuclear weapons, no use of these weapons before conventional defences had been given a chance, and increased capabilities for limited nuclear warfare. (11)

Britain was suspicious of these proposals. It was determined to maintain its independent nuclear force, not because it would be a useful contribution to US capabilities for a 'rational' nuclear war, but because it was thought to enhance its own political status. It opposed American suggestions that this force should be run down. Instead, by skilful diplomacy, and the threat of a dissolution of the 'special relationship', it secured US supplies of Polaris missiles, effectively safeguarding the future of the independent force for two more decades.

As the military justification for Britain's nuclear force became less credible, however, the prestige and influence which nuclear weapons bestowed also declined. A growing number of people were unconvinced that there existed circumstances in which the force could be used. It came increasingly to be seen by many as a marginal, rather than a central, part of Britain's defence effort.

The declining credibility of nuclear deterrence in an age of Mutual Assured Destruction (M.A.D.) is a problem faced by all nuclear powers. In public perception at least, however, it is considerably more severe for medium-size states. In Britain's case the force's credibility is further undermined by the force's dependence on the United States for technology, and some targetting and operations. Chapter 6 will attempt to disentangle if, and in what sense, Britain's force is 'independent'. It is sufficient to observe at this point that Britain's open dependence on the US for the maintenance of a weapon system, whose primary function
were it truly 'independent' would be to enable the British government to use nuclear weapons when the US did not wish it to do so, leaves it vulnerable to considerable criticism. Not only does it undermine the force’s credibility in the perception of the potential nuclear opponent, the Soviet Union. It has probably never been significant for them. More importantly, it has opened the force to scepticism and criticism from allies and domestic opponents who argue that, if it is not independent, it is of little military value. The prestige accruing from the force within the Western alliance, and the perception of its value to national defence, are thus further reduced.

2.2 Nuclear weapons and the defence budget

The commitment to an independent nuclear force has always been vulnerable to the economic constraints on military spending. Britain has consistently spent a greater proportion of its national income on defence than any other medium-rank power in an attempt to maintain military capabilities out of proportion to its economic strength. Despite this, however, its continued relative economic decline, to which high military spending may itself have contributed, has created constant pressure for reductions in defence spending. Expenditure on the strategic nuclear force has not been exempt from these pressures.

In its first years of development in the 1940s, economic pressures undoubtedly lengthened the period of time before Britain possessed a fully-fledged nuclear force. A number of senior officials, notably Henry Tizard, argued that reliance on the US nuclear umbrella would be more compatible with Britain’s reduced nuclear status. (12) Not until the Conservatives returned to power and the Global Strategy Paper was adopted in 1952 was the nuclear weapons programme given top priority.

Through the rest of the 1950s, however, governments argued that, far
from being constrained by the country’s economic weakness, Britain’s nuclear force could, in part at least, compensate for it. Possession of a nuclear force would strengthen Britain’s position relative to other medium powers and, especially after the advent of the hydrogen bomb, narrow the gap between itself and the two superpowers. At the same time the adoption of a policy of 'massive retaliation' by NATO, based on the West’s nuclear superiority, would allow major cuts to be made in non-nuclear defence spending, thus releasing resources desperately needed for the civilian economy.

As we have seen already, however, the development of a large Soviet nuclear force soon brought the credibility of this policy under severe question. By 1959 Britain began to face growing resistance, from the US and European NATO members, to cuts in its conventional forces. At the same time, rapid developments in the technology of strategic delivery systems, and in missiles in particular, threatened to put a credible nuclear force beyond Britain’s financial reach. During the late 1950s it appeared possible that Britain might soon be squeezed out of the nuclear arms race by the superpowers only a few years after it had succeeded, at great cost, in entering the nuclear club.

This cost crisis came to a head with the cancellation of the Blue Streak missile project in 1960. Intended as the successor to the V-bomber force, which was expected to become obsolescent in the 1960s, Blue Streak proved too expensive to develop. Moreover it was thought by many to be excessively vulnerable to pre-emptive attack, and therefore unsuitable for Britain’s 'deterrent' force. Instead Britain decided to abandon the attempt to maintain an independent capability for the manufacture of ballistic missiles and instead purchase such missiles from the United States. Only by relying on the US was Britain able to keep pace with the superpower technological arms race at a feasible cost. The
self-reliance which was still judged to be necessary in most conventional weapons was no longer thought possible for Britain's strategic nuclear force.

The French experience in the development of its national nuclear force in the 1960s presents an interesting contrast to Britain's. France had no pretence to a 'special relationship' with the US, and indeed had established that force in part because of its distrust and resentment at Anglo-American domination of the Alliance. Indeed de Gaulle's drive for a nuclear force was accompanied by an aggressively independent foreign policy, the expulsion of US bases and withdrawal from NATO's military command. As a consequence of the estrangement from NATO, France felt less need than Britain to maintain its conventional forces in response to American pressure for reduced reliance on nuclear weapons. Indeed, after disentangling the Army from its entanglement in Algeria, de Gaulle pushed through massive cuts in conventional defences. (13) Despite a large increase in the funds devoted to the nuclear force, total military spending fell considerably and allowed resources to be made available for France's remarkable economic recovery. In contrast to the UK, France's nuclear force was almost completely independently manufactured. As a consequence France felt no obligation to tailor its force, or indeed defence policy as a whole, to US priorities or doctrine.

For Britain, however, such a course of action would have been inconsistent with deeply rooted principles in its foreign and defence policies. Britain's nuclear force has always been viewed, by successive governments, as one element in an overall project for retaining the country's international prestige, which in turn relied heavily on a close relationship with the United States. That alliance would have come under severe strain if Britain's retention of a nuclear force had been accompanied by heavy cuts in its conventional contribution to NATO. Nor
would use of the nuclear force to emphasise the country's independence from the US - as de Gaulle had done - have been compatible with the continuation of the US aid to that force which had, it must be remembered, only resumed fully in 1958 after a break of thirteen years.

The agreement, signed at Nassau in 1962, for the British purchase of Polaris missiles, was therefore a welcome reprieve for Britain's nuclear force. It effectively allowed Britain to avoid, at least temporarily, a major choice between conventional and nuclear commitments. The most sophisticated nuclear system then available would be provided to Britain at a token development cost, and total expenditure would amount to considerably less than that of the V-bomber force it would replace. The opportunity cost to Britain's conventional forces was, as a result, relatively small.

For the US the agreement had the advantage, as Macmillan forcefully reminded Kennedy, that it preserved Britain's position as a loyal ally and ruled out the possibility of a British 'Gaullist option'. (14) If the US had refused to aid its nuclear force in the early 1960s, on the other hand, Britain might well have felt obliged to follow France's example, reducing its conventional forces to pay for a fully independent nuclear force and pursuing a much more independent, and therefore potentially anti-American, foreign policy. Such an option was not attractive to either the US government or to a British elite strongly committed to the 'special relationship'. The Nassau agreement ensured that it received no serious consideration.

The reprieve which the 1982 agreement provided for Britain's strategic nuclear policy may prove, however, to be only temporary. Today, despite a 30% rise in defence spending between 1978/9 and 1984/5, the defence budget is again under growing strain. Britain's weak economy, and in particular the likelihood of declining oil revenues in
the late 1980s, makes further increases in total defence spending unlikely in the near future.

With pressures for increased conventional military spending unabated, these circumstances are bound to make Britain's programme to purchase the Trident system vulnerable to cancellation on cost grounds. On government estimates, Trident is planned to cost £9,265 million at 1986/7 prices - around four times the cost of the Polaris system it replaces. By the late 1980s, it will account for 5-6% of total defence spending, and over 20% of new equipment spending. As Chapter 7 will explore in detail, given current plans for the total defence budget, this is bound to lead to major cuts in conventional equipment spending. These in turn are likely to jeopardise support for Britain's nuclear policy, not only amongst its allies, but also within Britain itself. The possibility of such cuts has already been responsible for considerable opposition to Trident in the armed forces and the Conservative Party. It is possible that, in the near future, the British government could decide that political influence within NATO, and with the US in particular, might be better served by preserving conventional forces. For the alternative will be to cut them to pay for an incredible nuclear force which now provides a diminishing political dividend.

2.3 The damaging relationship?

The 'special relationship' has been a consistent feature of Britain's policy since the 1940s, and a key determinant of its nuclear weapons policy. As well as benefits, however, it has also involved disadvantages. It has exposed Britain's nuclear force to the criticism that it has tied the country too closely to US policies and priorities in defence and foreign policy as a whole. In the nuclear field in particular, it has led to such a degree of dependence that there must be severe doubts as in what sense the force is 'independent'. Over time

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these criticisms have eroded support for the nuclear force.

During the war years, and arguably for the first postwar decade, the 'special relationship' did at least have the advantage that it afforded Britain considerable influence over US policy. As Chapter 3 discusses, Britain played an important role in convincing the US to adopt a more anti-Soviet position in the critical years between 1944 and 1947, and subsequently in the formation of NATO in 1949. It also had some influence, albeit probably a marginal one, on the US conduct in the Korean War and on its decision in 1954 to delay military intervention in Vietnam. This period of greatest influence was achieved despite Britain's lack of a national nuclear force.

As Britain's relative decline continued, however, even the limited degree in influence which it exercised in the early 1950s was further reduced. The Suez debacle of 1956 brought home to Britain its own lack of power and its dependence on the US. As other medium powers recovered from the war, and Britain's own economy failed to match the performance of its rivals, the Churchillian vision of a Pax Anglo-Americana became increasingly unrealistic. The special relationship became even more a one-way affair, in that it tied the UK to uncritical support of US policies, without giving it any influence on what those policies were. As the Vietnam war in the late 1960s and the 1973 Arab-Israeli war demonstrated, Britain was incapable of exercising any restraint on US involvement in dangerous conflicts of which it disapproved.

The problem is likely to become more severe in the 1980s as American and European perspectives on foreign policy continue to diverge. The US's increasingly aggressive military posture has created deep unease in many West European countries, including the UK. Partly as a result, the
broad political consensus in Britain on defence policy, in existence for forty years, has come to an end. The current Conservative government has been an enthusiastic supporter of President Reagen's militant policies, backing cruise and Pershing II deployment, increasing defence spending by over 3 per cent annually, and continuing to be the US's most loyal European ally. But it seems certain that any alternative government, drawn from the Labour and/or Alliance parties, would be much less sympathetic to current US policy.

Britain's independent nuclear force is bound to be vulnerable to these shifting trends in the relationship with the US. If Britain remains loyal to the US, under its current leadership, the domestic legitimacy of its defence policy will be further eroded. If, on the other hand, it adopts a more independent position the US may not continue to be willing to provide support for Britain's nuclear force.

Not only does Britain's nuclear policy tie it closely to US defence and foreign policy as a whole. It also involves a unique form of nuclear dependence. Britain is the only country in the world which both possesses its own nuclear force and allows another country to station nuclear weapons on its soil. Moreover, primarily for political rather than military reasons, it is the only country, with the exception of the US itself, to accept a complete 'triad' of American strategic nuclear forces: F111 aircraft, Poseidon submarines and ground-launched cruise missiles. US aid to Britain's own nuclear force is undoubtedly closely linked, implicitly and at times explicitely, to continued British acceptance of the bases for these forces.

Yet the presence of these bases in Britain involves considerable political and security risks. As opinion polls show, they are unpopular...
amongst a large proportion of the general public. In addition, if a nuclear conflict were to occur, they would constitute high priority targets in a Soviet pre-emptive strike.

The presence of US bases, together with the dependence of Britain's own force on the US, erodes support of current policy both from a nationalist and from an Atlanticist position. Those who would prefer a more nationalist defence policy argue against dependence on the US and support either a system of British control over US weapons based here or their removal altogether. Those who believe in close ties with the US argue that Britain should rely on the US to provide a 'nuclear umbrella', and not divert large sums from conventional defence to finance a super-sophisticated independent nuclear force. The ambiguities and contradictions in Britain's nuclear relationship with the US have, therefore, helped leave its independent force peculiarly vulnerable and friendless.

Finally, Britain's commitment to an independent nuclear force, and its determination to meet that commitment through co-operation with the US, has from its inception been in contradiction to its hopes of closer ties with the rest of Europe. Churchill's wartime project for a Pax Anglo-Americana backed by nuclear air power explicitly excluded not only the Soviet Union but also France. In the decade immediately after the war, Britain's policy of using nuclear weapons to retain a privileged position within the Alliance was certain to be resented by other European powers. British decisions to stay outside the European Defence Community in 1950, and outside the EEC in 1957, were largely motivated by a national self-image aligned more to the Empire and the Atlantic Alliance than to continental Europe. Even after the EEC accepted Britain into membership in 1973, the military alignment with the US seemed to be in contradiction to the economic and political pressures for increased
West European co-operation.

A possible solution has existed for some time to this dilemma: a switch from Anglo-American nuclear co-operation to co-operation with France. Such an alignment could make use of France's experience with ballistic missiles - the main area in which Britain has little expertise.

It could in the long term provide the basis for a West European nuclear force. This would, its advocates argue, be a more credible deterrent than the US nuclear umbrella as it would be employed in 'defence' of the homelands of those who controlled it. In addition it would give a major impetus to European military and political co-operation in general, and enable Europe to pursue a foreign policy genuinely independent of the US.

However, despite these supposed attractions, such an option would involve such difficulties that it is unlikely to be adopted in the near future. The effect of a break with the US would be disruptive and traumatic. And even while it would appear to align Britain's military posture more clearly with its economic interests, it would produce other problems of its own. It would be unlikely to be cheaper than reliance on the US. Indeed, if an attempt were made to transform Europe into a third nuclear superpower, it would be much more expensive. In addition, such a course would inevitably involve West Germany influence, if not control, over nuclear weapons policy, and could create increased strategic instability.

Although not a serious possibility at present, support for this policy does serve to underline the contradiction between Britain's close military relationship with the US and its commitment to European co-operation. As such, it constitutes a further source of weakness for both the special relationship and for current nuclear weapons policy. Although now relatively unimportant, the tensions between an Atlantic and
a European alignment could become increasingly significant if either the general direction of US policy became unacceptable to the British government or a renewed drive for European political and military union developed. If both occurred simultaneously, it is difficult to believe that Britain's independent nuclear force, in its current form, could remain unaffected.

3. Conclusions

Britain's commitment to a national nuclear force has been a consistent feature of its defence policy since World War Two. It has been supported by governments of both major parties, reflecting the underlying consensus between Conservative and Labour on the basic objectives of foreign and defence policy.

Britain's nuclear weapons policy can, in large part, be understood by its commitment to the status of a Great Power in the years after World War Two, and by the recognition that some form of close alliance with the United States would be a prerequisite for achieving this ambition. Together, these dual objectives help to explain why Britain's nuclear force has, on the one hand, been used to emphasise the state's independent world role and status yet, on the other hand, has been closely integrated with, and indeed dependent upon, US technology and strategy. For nuclear interdependence with the US is not simply an unfortunate necessity forced on Britain by economic circumstances. It has also been a reflection of the more general perception that only by a close 'special relationship' with the US could Britain retain the degree of political influence to which, it is widely believed, its historical experience entitles it.

As Britain's relative economic and military decline continued through the 1950s and 1960s, however, the wartime vision of a Pax Anglo-
Americana, the basis of the 'special' relationship, was increasingly seen as an unattainable dream. British governments were forced, reluctantly, into a series of adjustments in defence policy, most notably the withdrawal from East of Suez, in line with the country's reduced economic resources.

There has never been a complete domestic political consensus in favour of Britain's nuclear force. Much more than in other nuclear weapon states, Britain's commitment to such a force has been an object of political controversy. Although it was not until the 1980s that the leader of a major political party has taken a position clearly opposed to an independent nuclear force, the erosion in the public consensus can be traced back to the intensive debates of the late 1950s and early 1960s. Only the government's success in achieving favourable terms in the 1962 Nassau agreement, together with the general easing of Cold War tension after the Cuba crisis, enabled the pressure against nuclear weapons to abate. Since that time both the independent nuclear force and the special nuclear relationship with the US have remained secure from the long term process of adjustment to reduced economic status.

Although the national nuclear force survived, the debate of the period from the late 1950s to the early 1960s had highlighted a series of contradictions in Britain's nuclear policies which would continue to erode its support, and would emerge with force in the 1980s. Firstly, there were severe doubts whether any circumstances existed in which Britain's nuclear weapons could be used if the US was unwilling to use its own. For, once the Soviet Union had acquired a substantial nuclear arsenal of its own, such an action would be instantly suicidal. And reliance on US technology and targeting plans further increased scepticism that it would even be technically possible.
Secondly, the special nuclear relationship with the US not only meant dependence on that country for equipment for, and maintenance of, the national nuclear force. It also required general loyalty to US global policy, the acceptance of US nuclear bases on British soil and severe constraints on Britain's ability to articulate clearly national justifications for its nuclear force. Thus a relationship intended to protect Britain's Great Power status has also emphasised its lack of independence and subordination to American plans and priorities. The long-term, if faltering, trend towards European co-operation, especially after Britain entered the EEC in 1973, only makes this subordination more acutely difficult to justify.

Thirdly, the national nuclear force has been seen by many of its proponents as only one factor in Britain's special relationship and in its quest for a major role within the Western Alliance. It has therefore always been vulnerable to criticism when its existence appears to be at the expense of other components of the country's military efforts. Unlike France, where there is a greater willingness to concentrate a large proportion of the defence budget on nuclear forces, Britain's commitment to a national 'deterrent' depends on its relative cheapness. With its economy in decline, and the costs of the latest nuclear weapons technology rising steeply, it may not always be possible for Britain to reconcile its nuclear and non-nuclear military objectives.

The Trident programme has brought all these contradictions to the surface in the 1980s. The debate on Trident has coincided with a increased level of tension between the superpowers, and with the closely related revival of peace and anti-nuclear movements throughout the Western world. These new movements have criticised the morality, and the rationality, of a 'defence' policy based on threats which, if ever carried out, would be both genocidal and suicidal.
Moreover by the 1980s, much more so than in the debate in the 1960s, the idea that Britain can be seen as a Great Power is widely viewed as absurd. Only a few residual possessions remain from the Empire, and the Falklands War is widely viewed as a tragic anomaly in an era during which Britain's security interests are overwhelmingly in Europe. And, with the US government adopting an increasingly independent and controversial strategic nuclear policy, support for a close relationship with the US is probably at a historic low.

Trident is certain to involve a major increase in nuclear weapons spending in the late 1980s, during a period of static or falling total defence spending. For the two decades since Nassau, the fragile political consensus for the national nuclear force has been reliant on nuclear weapons remaining cheap. With Trident currently estimated to cost over four times the weapon system it replaces, support for the nuclear force is declining markedly. Long-standing anti-nuclear politicians have been joined by a large body of opinion, including many on the Centre and Right of politics, who consider that Britain can no longer afford a nuclear force.

As a result of the convergence of all these factors, the political consensus on defence policy, and on nuclear weapons in particular, has now been breached more decisively than at any time since the Second World War. The Labour Party, together with large sections of the Liberal Party, is now firmly opposed to the maintenance of a national nuclear force. If the Conservatives lose the next General Election, Trident will almost certainly be cancelled. If it is, it is unlikely that Britain's independent nuclear force can be sustained beyond the 1990s. The fate of
that force now depends, therefore, on the vagaries of an electoral process in which defence issues may play a minor role. It may survive that process. Only time will tell.
Notes


CHAPTER THREE
THE FORMATIVE YEARS 1940-55

1. Introduction

This chapter is concerned with the years in which Britain developed its first nuclear weapons. It starts with the Maud Report, the first government-sponsored document in any country to consider that an atomic bomb was a practical possibility. It outlines the relationship between the British nuclear weapons programme and British foreign and defence policy as a whole during the subsequent fifteen years of development, years which laid the foundations for the defence policies on which Britain relies today.

The early sections of the chapter look at the drastic consequences for the British state of the events of World War Two, and how it chose to respond to these problems. In particular, it examines the acceleration in the decline of Britain's economic and political power which this conflict brought, and how this influenced the country's relationship with the two emerging 'superpowers'. It then discusses the role of nuclear weapons in the context of these overall developments in British policy. The chapter argues that many of the key features of Britain's nuclear programme can be understood by an appreciation of the importance of the 'special relationship' with the United States in the fulfilment of UK postwar objectives. It shows how Britain, during the formative years of the Cold War, consistently attempted to involve the US in a Pax Anglo-Americana, a central part of which would be its commitment to the 'containment' of Soviet influence and power, both in Europe and elsewhere.
2. The War Years 1940-45

2.1 Coping with Decline - British objectives for the Postwar World

The World War dramatically exposed the overextended - and in the long run untenable - nature of Britain's international position. Even before the start of the war, in the late 1930's, the Treasury had warned that high military spending was threatening economic stability:

"Defence expenditure is now at a level which must seriously call into question the country's ability to meet it, and a continuance at this level may well result in a situation in which the completion of our material preparations against attack is frustrated by a weakening of our economic stability, which renders us incapable of standing the strain of war or even maintaining those material defences in peace". (1)

Once 'total war' began, and Britain was forced to fight Hitler without allies, the situation deteriorated quickly and seriously. By summer 1940 the country's dollar reserves had been almost entirely depleted and the country faced imminent bankruptcy. A large proportion of Britain's overseas assets had to be sold off, often at knockdown prices. All fresh purchasing from abroad had to be stopped shortly before the granting of Lend Lease by the US Congress in March 1941. (2) Without US assistance, there must be considerable doubt whether Britain could have avoided the choice between a likely military defeat or a negotiated peace with Hitler.

When in 1941 the United States and Soviet Union entered the war against the Axis powers, Britain's relative decline became even more apparent. The massive US rearmament programme soon meant that, in addition to financing a large part of the British effort through Lend Lease, its own military power surpassed that of the UK. In the East Stalin's success in averting defeat in 1941 or 1942, apparently
against American expectations, (3) ensured its place as a post-war 'superpower'. While Britain remained one of a number of medium sized powers - perhaps even *primus inter pares* if one excludes the superpowers - the reins of global power were now clearly passing to the United States, and to a lesser extent to the Soviet Union. The British establishment remained nevertheless strongly committed at this time to a continued role for their country as a Great Power with a world military role, influence in continental Europe, and continued possession of a world-wide Empire. While many ordinary British people fought in the war to defeat Fascism and the threat to their own homes, for their leaders the preservation of the British Empire was a central objective of that war. (4) Indeed so important was the priority given to imperial over domestic economic concerns, that Churchill constantly argued for a greater British role in the war in Asia, despite the economic costs involved. (5)

British objectives for the postwar world thus reflected its traditional concerns as a Great Power, modified to take account of new international circumstances. First was the preservation of its Empire in the Far East, India, the Middle East and Africa: the basis of Britain's claim to Great Power status. Second was to avoid the dominance of the European continent by a potentially hostile power. With the projected demise of Nazi Germany, the Soviet Union was the obvious candidate for this role. Finally was the restoration of a world economic order favourable to the interests of British capital. This, it was believed, required restoration of free trade and capital flows and a stable international monetary order.

A necessary, and central, condition for the achievement of these three objectives was, it was believed, the acceptance by the United States of its leading economic, and probably military, role in the world system.
British leaders hoped that, in such a system, its continued military power and political influence would enable it to retain a privileged position - a 'special relationship' - as a junior partner in this enterprise. The successful Pax Britannica of the mid-19th century could be a model for a new, and equally successful, Pax Anglo-Americana.

Given the US's superiority in economic and military resources, British leaders were well aware that its acquiescence would be essential if Britain were to preserve its overseas Empire. Moreover, in Europe itself, British policymakers did not believe that the UK alone could act as a counterweight to the military strength - or ideological appeal - of the Soviet Union, particularly since France, Germany and Italy would be gravely weakened in the aftermath of war. Finally, the struggle against fascism during the war had created an upsurge of popular support for radical change in Europe and European-controlled colonies. This support threatened the continued existence, not only of the British Empire, but of capitalism itself, over large parts of the world. A repetition of the recession that followed the 1914-18 war could thus have disastrous political consequences for the West. US leadership - through economic aid, currency reform and international monetary agreements - would be essential in restoring European economics and containing the threat to Britain's interests worldwide.

During the war these British objectives were partially fulfilled. The entry of the US into the conflict against Hitler in 1941 ended its previous isolationist policy. President Roosevelt made it clear in private that he believed that the US should take a major 'policing' role in the postwar world. (6) Britain's aspirations were also gratified by its own presence at the wartime conferences between the 'Big Three' which decided wartime, and latterly postwar, strategy and policy.
Moreover, although Roosevelt continued to keep his options open on postwar relations with the Soviets, the war was already cementing a uniquely close relationship between the US and UK. The integration of military planning, intelligence operations, and economic planning was considerably closer than in a traditional alliance, and fuelled British hopes of a permanent partnership after the war. (7) This 'special relationship' stood in marked contrast to the secretive and separate manner in which the other Ally - Stalin - was conducting his share of the war against Hitler.

At the same time, however, there was also considerable strain between the two countries which heightened British fears that its post-war objectives would not be met. Firstly there was apprehension at the opposition of many Americans to British colonialism and, indeed, to any major postwar world role for Britain. Secondly, the US remained reluctant to accept, at least to the same extent, the UK's fears of Soviet expansionism, or to alter Western policy for the prosecution of the war in Europe to meet those fears.

In the first area, British leaders feared that the US was committed to the dismantling of old European empires, including their own, after the war. Britain had already been forced to abandon its system of imperial preference in return for lend lease aid, thus opening protected markets to penetration by US business. It was feared that US capital would push Britain out of one area of the world after another if its colonies were given independence. As the Foreign Secretary, Anthony Eden, commented, the Americans hoped that ex-colonies "once free of their masters, would become politically and economically dependent upon the United States". (8)
Roosevelt was blunt in his views, reflecting an antagonism towards an Empire in revolt against which, it must be remembered, the US itself was formed. In 1941, Roosevelt is reported to have told Churchill that: "I can’t believe that we can fight a war against fascist slavery and at the same time not work to free people all over the world from a backward colonial policy". (9) At the Cairo conference two years later he told him "You have four hundred years of acquisitive instinct in your blood and you just don’t understand how a country might not want to acquire land somewhere if they can get it". (10)

Conflict in the second area - the strategy for the war in Europe - became particularly acute in the last two years of the war. It was by this time clear, after the German defeat at Stalingrad, that Hitler would eventually be crushed. En route to Tehran in November 1943, Churchill told Harold MacMillan "Germany is finished, though it may take some time to clean up the mess. The real problem now is Russia. I can’t get the Americans to see it". (11) By August 1944, the British Chiefs of Staff were speaking of Russia as "enemy number one" and even considering securing German assistance against her. (12)

As a result of these fears, Britain pressed strongly for an Anglo-American Policy that would keep the Red Army as far east as possible. It urged a rapid military push through the Balkans in order to reach Prague and Vienna before the Soviets. While Eisenhower, the US commander-in-chief, emphasised his primary military objective - the defeat of Germany - Montgomery, the British commander, emphasised the political consequences for post-war Europe of military strategy during the war.

The solutions of the strains between the US and Britain in these two areas were closely linked. British leaders believed that, to the
extent that the US could be persuaded to join in a policy of 'containment' of the Soviets in Europe, it would also gain a greater interest in both the viability of the British economy and the contribution of its imperial "peacekeeping" forces in preventing rebellion by anti-Western forces in Asia, the Middle East and Africa. Britain's Ambassador to Washington, Lord Halifax, summarised a generally held view in 1945: Britain's "stocks in the United States appreciate when those of the Soviet Union decline". (13)

2.2 The beginnings of Britain's nuclear weapons project

It is within the general context set out in the previous section that Britain's initial decisions regarding nuclear weapons must be set. The ruling elite - both Labour and Conservative - shared the assumptions that Britain should remain a Great Power, that a close relationship with the US would be a necessary condition for the fulfilment of this aim, and that the interests of such an alliance would probably be opposed to the ideological and territorial objectives of the postwar Soviet Union. The commitment to the development of an independent British nuclear force once such a development was technically feasible was largely a result of the perceived requirement to remain a Great Power. The particular forms which this commitment took, however, were closely related to the means whereby the requirement was met - i.e. alliance with the United State in a policy of containment of the Soviet Union. At the same time, US wartime policy towards the British project also reflected their general ambivalence towards Churchill's attempts to give Britain a privileged position in such a postwar alliance.

The beginnings of Britain's nuclear weapons programme can be traced to the late 1930s, when the first serious suggestions that an atomic bomb
might be technically possible began to circulate. On the eve of war, in 1939, a series of articles appeared in the open scientific literature on new discoveries in nuclear physics, prompting C.P. Snow to write "Some physicists think that within a few months, science will have produced for military use an explosive a million times more violent than dynamite. It is no secret .... It may not come off ...." (14)

A crucial turning point came in 1940 with a short memorandum - on three typed foolscap pages - by two refugee scientists working in Britain, Otto Frisch and Rudolph Peierls. In their memorandum, they argued that an atomic bomb was feasible, suggested some of the basic requirements for its construction, and outlined a possible method for production of its raw material. They concluded by estimating that the radioactive fall-out produced would kill everybody in a strip several miles long, and arguing that "Effective protection is hardly possible". (15)

By this time, Britain was already at war. The Frisch-Peierls memorandum received prompt attention by government, and a Committee of leading scientists was set up to co-ordinate further work. The "Maud Committee", as it was named, worked with considerable efficiency, heightened by the pressures of war and the possibility that Germany might acquire an atomic weapon first. By July 1941, the Committee was ready to conclude that: "As we proceeded, we became more and more convinced that release of atomic energy on a large scale is possible and that conditions can be chosen which would make it a very effective weapon of war .... we consider that the destructive effect, both material and moral, is so great that every effort should be made to produce bombs of this kind.... Even if the war should end before the bombs are ready the effort would not be wasted, except in the unlikely event of complete disarmament, since no nation would care to risk being caught without such a weapon of such decisive possibilities." (16)
As a result of the Maud Committee’s work, Britain led the world in the race to produce the atomic bomb through 1940 and 1941. Indeed it is extremely doubtful whether, without its preparatory work, an American bomb would have been ready in time for use against Japan. (17)

The recommendation that Britain produce an atomic bomb was forwarded to Prime Minister Churchill who, on 30 August 1941, wrote: "Although personally I am quite content with the existing explosives, I feel we must not stand in the path of improvement." Four days later the Chiefs of Staff urged that the project be given top priority, and that it should be conducted in Britain and not abroad. (18)

From its very inception, Britain’s nuclear programme was developed within the framework of its special relationship with the United States. Even before Churchill had himself approved the conclusions of the Maud Report a copy had been sent to the United States government although it had not yet formally joined Britain in the war against Germany. (19) During the same period the UK Minister of Aircraft Production, Colonel Moore-Brabazon, articulated what appears to have been the emerging official consensus when he argued that the new weapon presented the world with the real possibility of an international police force. If the bomb proved effective, he argued, America and Britain could jointly control the world. They would, through this control, be able to know if other countries were working towards the bomb and take measures to stop them. (20)

Three months after Churchill’s decision to proceed with the atomic bomb project, on December 6th, the Japanese attacked Pearl Harbour and the Americans entered the war. Partly as a result, the US government began to devote massive resources to their own nuclear programme; and within six months they had overtaken the less lavishly financed British effort. (21)
In late 1941, the British has been reluctant to respond to American proposals for a combined Anglo-American project. By mid 1942, as the US surged ahead, the incentives to the latter of such a programme fell rapidly. By underestimating the scientific and industrial capabilities of the US, and thus failing to understand their own relatively weak long-term position, the British had missed a short-lived opportunity to establish a joint project on equal terms. Henceforth British participation in such a project, when it came, would be in a clearly subordinate role. As in the war effort as a whole, Britain's relatively weak economic position was therefore already leading to a drastic diminution of its power relative to that of its major ally. By July 1942, the US project was sufficiently advanced for Lord Anderson to warn Churchill that "the pioneer work done in this country is a dwindling asset ... unless we capitalise it quickly, we shall be rapidly outstripped. We now have a real contribution to make to a 'merger'. Soon we shall little or none. (22)

At first, however, Britain's change of heart on a collaborative project proved unsuccessful. The Americans felt that they were already doing ninety percent of the work, and now saw little reason to give the British scientists access to knowledge of their new methods for production of fissile material. By November 1942 the free interchange of information which had existed a year earlier had dried to a trickle, fuelled to a large extent by American suspicions that Britain's main interest was in the commercial applications of the US research. (23)

In fact these suspicions were quite wrong. Britain's main interest was in the military applications of atomic energy, and in the importance of nuclear weapons in ensuring its post-war political influence, not in the economic benefits which atomic
power might bring. British leaders believed that only by becoming a nuclear weapons power could they participate, even as a junior partner, in a post-war Pax Anglo-Americana. It was widely believed, on both sides of the Atlantic, that given the likely importance of the weapons, the conclusion of an atomic collaboration agreement during war time would undoubtedly lead to a permanent military alliance once the war was over. (24)

Through 1943 and 1944, as Martin Sherwin's excellent study reveals, (25) a heated debate took place within the US Administration on the wisdom of agreeing to British proposals. After a number of misunderstandings, caused mainly by Roosevelt's peculiarly secretive method of conducting business, this internal debate was substantially resolved with the crucially important Quebec Agreement of August 1943 between the leaders of the two countries. Under this agreement Britain expressly disclaimed its industrial interest in the project in return for "full and effective interchange of information and ideas" on the military development programmes in the two countries. In line with Churchill's desire for a post-war alliance excluding both France and the Soviet Union, the Agreement also specified that "we (i.e. the US and UK) will not use it against third parties without each other's consent" and that "we will not either of us communicate any information about Tube Alloys (i.e. nuclear weapons) to third parties except by mutual consent". (26)

By endorsing the Agreement Roosevelt had decisively committed himself to supporting Churchill's hopes for an Anglo-American nuclear monopoly as a basis for world order. In the remaining years of the war, as a result of the agreement, British scientists were able to gain much more knowledge more cheaply than could have been obtained with an independent project. (27)
2.3 Taming the Bomb?

With Roosevelt and Churchill apparently firmly committed to a post-war joint police force, backed up by an Anglo-American monopoly of nuclear weapons, the chances of a post-war settlement with the Soviets were already slight. So far, however, the existence, far less the full impact, of their agreement was a closely-guarded secret. Suspicion of Britain's motives amongst the American public grew in response to its policy in Greece and elsewhere. As late as December 1944, 54 percent of Americans dissatisfied with co-operation among the Big Three blamed Britain, while only 18 percent blamed the Soviets. (28) And as we have seen already, the US Administration itself continued to view British policy in Europe and elsewhere with suspicion, and adopted a more cautious approach towards the Soviet Union.

A post-war accommodation with the Soviets, however, would have required some agreement on the atomic bomb, which Roosevelt and Churchill had agreed should be an Anglo-American monopoly. Their insistence on this policy in the last years of the war was an early demonstration of the persistent illusion that the ownership of nuclear weapons could be translated into overwhelming political power. It would also ensure that the post-war world would have only a short respite before being plunged into a new and potentially more deadly conflict - the Cold War.

While the leaders of the two Western allies were resolved on using nuclear weapons to police the post-war world, there were others who argued that such a policy was illusory and dangerous. As a result a number of alternative proposals were aired amongst the small number of people who were concerned at the implications of an atomic bomb for humankind. On both sides of the Atlantic, and from both politicians and scientists, the
last two years of the war saw successive attempts to understand the impact of the new bombs on international relations and to formulate solutions to the dangers which, it was believed, their production would pose. In doing so they anticipated many of the dilemmas faced throughout the post-war period, and which remain unresolved. Ultimately, perhaps, their failure may be ascribed to the inability of their leaders to realise the extent to which the new discovery would change the nature of international relations. The prospects for the radical type of solution that would be necessary to prevent a nuclear arms race may always have been slender. The commitment of the two Western wartime leaders to an Anglo-American nuclear alliance ensured that such a solution remained unexplored.

The most influential of the arms control proposals was made by Niels Bohr, a leading Danish physicist, and Nobel Prize Winner, who had a major role in the series of discoveries that led to the Frisch-Peierls memorandum, and was widely recognised as one of the greatest scientists of his time. After fleeing Nazi-occupied Denmark in 1943, he learned of the Manhattan Project and resolved to bring his own analysis of the atomic danger to the attention of policy makers. On Bohr's employment on that Project as a consultant, Oppenheimer commented: "Officially and secretly he came to help the technical enterprise, [but] most secretly of all .... he came to advance his case and his cause." (29)

Bohr feared a post-war nuclear arms race, and the threat to world peace that this would mean. He argued only international control of atomic energy could prevent such a development. In such a regime, inspectors would have to be granted full access to all factories, military and civilian. Only by this substantial erosion of the sovereignty and secrecy of states could the world save itself from eventual nuclear destruction.
Bohr then argued that for the Soviet Union to agree to such a scheme it would be essential for the US and UK to take it into their confidence before the atomic bomb was ready for use. Bohr proposed that the Soviets be told of the existence of the Manhattan Project, concerning which their espionage efforts must already have informed them, but that technical details be withheld. Further information would be released only in return for Stalin's agreement to international control. It was emphasised that it was essential to take this initiative before the bomb was ready or had been used. Otherwise disclosure would be perceived as an act of hostility rather than friendship. (30)

Bohr's ideas met a favourable response from crucial individuals on both sides of the Atlantic. Sir John Anderson and Lord Cherwell, Churchill's two senior advisers on nuclear matters, urged that serious attention be given to the proposals. There was much to be said, argued Anderson, for communicating to Stalin the fact that the Americans expected to have such a weapon by a given date, and inviting him to collaborate in a scheme for international control. Were the Soviets to refuse little would be lost since they would in any case learn of the existence of the bomb in the near future.

Cherwell and Anderson were joined in their pleas by Sir Henry Dale, President of the Royal Society, and by Field Marshal Smuts, both of whom had been influenced by Bohr's ideas. The Prime Minister in response agreed to see the Danish scientist in what proved to be an unsuccessful meeting. Churchill's primary concern was to preserve his Quebec agreement with Roosevelt, on which his post-war aspirations for British power was based. Ideas of international control were viewed by him as utopian and a potential threat to his own visions, shaped as they were by the hope of a new world order modelled on the nineteenth century paramountcy of the
British Empire. As Bohr recorded later "We did not speak the same
ing language." (31)

Though apparently more friendly to Bohr, Roosevelt's position was
identical to that of Churchill. International control was a threat to the
Quebec agreement and to the possibility of enhanced diplomatic leverage
which an Anglo-American nuclear monopoly would give the Western powers.
This identity of views was reflected in the Aide-Memoire of their
conversations at Hyde Park in September 1944 which stated:

"The suggestion that the world should be informed
regarding tube alloys, with a view to an
international agreement regarding its control and
use, is not accepted. The matter should continue to
be regarded as of the utmost secrecy, but when a
'bomb' is finally available, it might perhaps, after
mature consideration, be used against the Japanese,
who should be warned that this bombardment will be
repeated until they surrender.

2. Full collaboration between the United States and
the British government in developing tube alloys for
military and commercial purposes should continue
after the defeat of Japan unless and until terminated
by joint agreement.

3. Enquiries should be made regarding the activities
of Professor Bohr and steps taken to ensure that he
is responsible for no leakage of information
particularly to the Russians". (32)

Not only did the Hyde Park agreement state clearly the two leaders'
intense distrust of Bohr and their commitment to maintaining the 'secret'
of the bomb. It also involved two further concessions by Roosevelt to
British requests. Firstly, it established that collaboration would
continue after the war had ended (a point resisted by Roosevelt's advisers
and later reversed under his successor). Second, it lifted the
restrictions on UK commercial use of nuclear technology imposed by the
Quebec accord. Roosevelt now argued that the US must ensure that Britain
remained strong, economically and militarily, once the war had ended: "the
real nub of the situation is to keep Britain from going into complete bankruptcy at the end of the war". (33) As Roosevelt's chief scientific adviser, Vannevar Bush, wrote shortly afterwards: "The President evidently thought he could join with Churchill in bringing about a US-UK post-war agreement on this subject [the atomic bomb] by which it would be held closely and presumably to control the peace of the world". (34)

Roosevelt neglected to divulge the contents of the Hyde Park aide memoire to even his closest advisers, a decision which would later enable his successor to reverse American policy without appearing to contradict the wartime leader's wishes. Meanwhile it allowed Bush, together with his deputy Conant, to press an alternative policy on Roosevelt. They believed that an exclusive partnership with Britain "might well lead to extraordinary efforts on the part of Russia to establish its own position in the field secretly, and might lead to a clash, say 20 years from now." They doubted that the present monopoly could be maintained for more than three or four years and warned that it would be only a matter of time before a 'super-super-bomb' (the hydrogen bomb) would be developed, which would dwarf even fission bombs in destructive potential. Bush argued that "the close collaboration with the British, without considering simultaneously the entire world situation, might lead to a very undesirable situation indeed on the subject with Russia." (35) His pleas fell on deaf ears.

Further attempts continued to be made to change US policy, amongst which the Francks report of June 1945, from scientists at the University of Chicago, was one of the most clearly argued. (36) By now, however, the bomb was almost ready for use and political leaders increasingly saw its potential diplomatic value in coercing the Soviet Union into accepting American post-war designs. Secretary of War Stimson now argued that the
bomb should be used to open up Soviet society, or at least keep Eastern Europe free of Soviet control. (36)

In February 1945, in the spirit of compromise which Yalta engendered, Roosevelt appears momentarily to have faltered in his commitment to an Anglo-American monopoly and spoke to Churchill of "revealing the secret to Stalin on the grounds that de Gaulle, if he heard of it, [from French scientists employed on the Manhattan project] would certainly double-cross us with Russia." Churchill persuaded him otherwise. As Churchill explained to Foreign Secretary Eden in March 1945:

"My agreement with President Roosevelt in writing forbids either party to reveal to anyone else the secret. I believe you underrate the lead which has been obtained by the United States, in which we participate ... This matter is out of all relation to anything else that exists in the whole world ... I shall certainly continue to urge the President not to make or permit the slightest disclosure to France or Russia. Even six months will make a difference should it come to a show-down with Russian, or indeed with de Gaulle". (37)

This memorandum, outlining Churchill's approach to nuclear weapons, clearly demonstrated his preference for the special relationship with the US over either the prospect of West European co-operation and/or the search for a post-war agreement with the Soviet Union. It would be a preference that would continue to dominate British foreign and defence policy for the next two decades.

Soon after Yalta, on April 12, Roosevelt died. Harry Truman, his untutored and inexperienced Vice President, took over; and was immediately confronted with multiple and intricate problems. Less than a month later, Germany formally surrendered. Three days after that, on May 11, Truman was
persuaded to sign an order cutting off lend-lease to the Soviet Union and even ordering ships en route to turn back. (38)

In these four confused weeks the new President also accepted the argument of Churchill and Stimson that nuclear weapons could be used to persuade the Soviets to 'play ball'. It was to prove a disastrous mistake which, far from inducing Soviet co-operation, intensified their suspicions of Western intentions and helped fuel their fears for their own security. As Britain’s Ambassador in Moscow, Sir Archibald Clark-Kerr, argued later that year, the leaders of the Soviet state had lived their lives in constant fear for their own survival and for that of the revolutionary state they had created. Tsarism, the civil war, foreign intervention and Stalin's purges had been followed by German invasion. Now, with victory over Hitler, "There was a great exultation of hearts that Russia could be made safe at last" until "plumb came the atomic bomb" threatening the security established at such a heavy price.

Clark-Kerr explained that, in his view, the Russians hoped that their Western allies would share the bomb with them but "as time went on and no move came from the West disappointment turned into irritation and, when the bomb seemed to them to become an instrument of policy, into spleen. It was clear that the West did not trust them. This seemed to justify and quicken all the old suspicions. It was humiliation also and the thought stirred up memories of the past." (39)

In the months before the bombing at Hiroshima, Truman heightened these suspicions by brandishing the bomb in his diplomatic efforts with the Soviets. Apparently harbouring the illusion that the Soviets would "never" acquire a bomb, (40) or at least not in the foreseeable future, Truman brought forward the New Mexico test of the first atomic device to
July 16. This coincided with his Potsdam conference with Stalin and Churchill. On hearing the 'successful' result of the test, Truman's reaction was instant: "He stood up to the Russians in a most emphatic and decisive manner telling them as to certain demands that they absolutely could not have .... He told the Russians just where they got on and off and generally bossed the whole meeting." (41)

On July 24, a week later, Truman sought to press his advantage. In an apparently casual aside, he told Stalin "that we had a new weapon of unusual destructive power." The Soviet leader's response - he was "glad to hear it and hoped that we would make good use of it against the Japanese" - convinced some Americans that Stalin was unaware of the full impact of Truman's disclosure. As more recent Soviet memoirs have disclosed, however, Stalin understood only too well. That evening he told Marshal Zhukov and Molotov "They simply want to raise the price. We've got to work on Kurchatov [director of Soviet energy research] and hurry things up". (42) In August 1949, the Soviets would test their first atomic device, thus exposing the United States itself to the threat of nuclear destruction. The Anglo-American nuclear monopoly would last for scarcely four short years.

2.4 The bomb is used

While Truman was beginning the disastrous policy of atomic diplomacy in relations with the Soviets, final preparations were also being made for the bomb's use against Japan. Arguments for a demonstration use of the bomb, together with proposals for forewarning the Soviets, had been overruled.

Reports that Japan was prepared to surrender with only one condition - that it be allowed to retain its Emperor - were brushed aside,
with Secretary of State Byrnes even arguing that the bomb would have to be used to convince Congress that the Manhattan Project had shown results for the $2 billion spent already. (43) The only significant 'concession' in the proposed military plans was made by Secretary of War Stimson who struck Japan's ancient capital, Kyoto, from the target list, arguing that the "bitterness which would be caused by such a wanton act would make it impossible during the long post-war period to reconcile the Japanese to us in that area rather than to the Russians". (44)

As a result of the Quebec agreement Britain had, in theory at least, a veto on the use of the bomb, though it took no part in the detailed planning of targets, etc, in the Interim Committee. Indeed both Anderson and Lord Halifax do appear to have had some doubts as to the morality or wisdom of using the bomb without warning. According to Churchill, however, "there never was a moment's discussion as to whether the atomic bomb should be used or not"; and Margaret Gowing, the official historian, records that the use of the bomb was not even recognised as being a matter of controversy, at least at ministerial level. (45) In June 1945, Britain recorded its formal agreement with the decision to use the bomb at a meeting of the Combined Policy Committee set up under the Quebec Agreement. (46)

By this time, British stock in Washington was fading under a new, and less sympathetic, President. The Interim Committee had already unanimously passed a motion in favour of revocation of Clause Two of the Quebec Agreement [the provision for British consent to the bomb's use]. (47) It is thus doubtful whether a British veto would have had any effect on the American decision to bomb Hiroshima and Nagasaki.

The American decision, and Britain's easy acquiescence to it, illustrated the moral depths to which World War Two had brought humankind.
Japan and Germany had been responsible for widespread atrocities in their occupied territories, and the Allies had been conducting bombing campaigns intended to 'break the will' of urban populations in enemy cities. (48) Politicians who had spent years fighting a war by such vicious and unrestrained means were ill suited to make moral distinctions between conventional and nuclear genocide, and saw the bombing of Japan as an effective way of ending the war quickly and saving American lives. Despite the considerable efforts of imagination by individuals such as Niels Bohr, the nations' leaders still thought nuclear weapons could be used as a political lever in pursuit of traditional goals of military victory and world power.

While the primary American motive for using the bomb was to end the war quickly, it is clear that the US also considered the effects that a powerful demonstration of the new weapon would have on the Soviet Union. It was widely believed that the shock of bombing Hiroshima without notice would have a restraining effect on Soviet behaviour. In fact, it ensured a heightening of Soviet fears, and contributed to the tensions that would soon coalesce into Cold War and an uninhibited nuclear arms race.

With the hindsight of history, it is a tragedy of unmeasurable dimensions that the proposals of Bohr and others were not attempted at the crucial juncture which 1944 and early 1945 provided. Counterfactual arguments on alternative histories would be unhelpful, especially given the deeprooted conflicts of interest and ideology with which any system of international control would have had to contend. Yet it is possible to conclude that an opportunity, slender though it may have been, for a more secure world was lost as a result of the decisions of British and American leaders at the time. Britain’s commitment to the objective of remaining a Great Power after the war, together with Roosevelt’s commitment to
supporting this goal through the creation of an exclusive Anglo-American nuclear alliance, played a decisive part in ensuring that such an opportunity was not taken.

3. The Cold War Begins 1945-50

3.1 A Post War Consensus?

On August 14th, 1945, Japan surrendered and World War Two came to an end. The war had contributed to a revolution in the structure of international power. The United States and Soviet Union emerged as the primary arbiters of the post-war world, while both the defeated middle-size powers (Germany, Japan, Italy) and their victorious counterparts (Britain and France) suffered a drastic decline in status. The forces of national liberation in the 'Third World' emerged strengthened, indicating that the era of the European colonial empires was ending.

These shifts in the balance of international power were accompanied by far-reaching changes in the instrument by which that balance was maintained - military power. The age of 'mutual assured destruction' was foreshadowed by the involvement of the whole population in the war effort, the global nature of the conflict and, most of all, in the role played by mass bombing raids on cities. The 'successful' testing of a nuclear device in 1945, the culmination of this process, meant that, henceforth, humanity would be living on borrowed time.

For Britain the end of World War Two presented immense problems which its leaders had shelved during the conflict. Since 1941, Britain's war effort had been financed by Lend-Lease aid from the United States, enabling Britain to concentrate its resources on military mobilisation. Britain had lost about 10 percent of her pre-war wealth -25% if external disinvestment were included. (49)
In its eagerness to retain its colonies in the Far East, Britain had continued to devote immense resources to the war in Asia even after the immediate threat to the British Isles from Germany had ended. Now, on the same day that Japan surrendered, Keynes told the Cabinet that Britain faced a 'financial Dunkirk'. A paper prepared for the same meeting stated that without American aid the country would be "virtually bankrupt and the economic basis for the hopes of the public non-existent". (50)

The Labour Party, elected with a considerable majority less than three weeks previously, was faced with the task of confronting these problems. It soon became clear that, in doing so, its leaders would approach them with a worldview not dissimilar to that of the Conservatives. Five years of coalition government had forged a consensus between leaders of Britain's three main parties on the broad outlines of post-war policy. In the wartime government Ernest Bevin had been able to improve working conditions and trade union participation as Minister of Labour, while dramatically increasing government intervention in the economy and helping to bring about a considerable redistribution of wealth and income. (51) Liberals such as Beveridge and Keynes had played an important role in the discussions of post-war economic and social policy. While the Conservatives had accepted the case for greater state planning and for the Welfare State, Labour leaders were now convinced of the need for a continuing Great Power role for Britain. Bevin, now Foreign Secretary, epitomised this convergence between, and merger of, imperialism and reformism. (52) In 1947, he told the House of Commons:

"Her Majesty's Government do not accept the view ... that we have ceased to be a Great Power, or the contention that we have ceased to play that role. We regard ourselves as one of the Powers most vital to the peace of the world and we still have our historic part to play. The very fact that we have fought so hard for liberty, and paid such a price, warrants our
retaining this position; and indeed it places a duty upon us to continue to retain it. I am not aware of any suggestion, seriously advanced, that by a sudden stroke of fate, as it were, we have overnight ceased to be a Great Power." (53)

The serious nature of Britain's crisis, and the consequent difficulty of transforming this ambitious consensus into reality, was dramatically brought home by the events of the weeks that followed. Only days after Japan surrendered, the supply of Lend Lease to Britain was abruptly stopped, forcing the government to enter immediate negotiations with the United States on the conditions and terms on which it would be granted a post-war loan. These would include, it soon became clear, measures that would effectively subordinate the British economy to US leadership of the world financial system. (54)

Anglo-American relations also quickly deteriorated in the military field. In September President Truman announced the dissolution of most of the Combined Boards that had played a central role in the close, and unique, wartime military co-operation between the two countries. (55) By October 1945, Lord Alanbrooke, Chief of Imperial General Staff, noted that there was anxiety in London that Britain was being "frozen out of the atomic bomb by our American friends." (56)

Finally, British fears were further fuelled by the confused policy towards the Soviet Union which the US Administration followed throughout the remaining months of 1945. President Truman, and his Secretary of State Byrnes, still hoped that a deal with the Soviets could be made. Many British still feared that the two superpowers might "carve the world into spheres of influence to suit each other, leaving Britain out in the cold". (57)
In this difficult situation, the British government's response was clear and consistent: a continuation of Churchill's wartime policy of working for a world order based on a Pax Anglo-Americana. Such a policy was necessary in order to, simultaneously, maintain sympathetic capitalist regimes in Western Europe and to preserve Britain's imperial role outside Europe. Only by enlisting the support of the new US president, Harry Truman, who did not share Roosevelt's natural sympathy for Britain, would this ambitious scheme be possible. British leaders feared that, without American support, Western Europe would soon face economic collapse, and the communist and socialist parties (which had formed the basis of anti-fascist resistance movements) would seize political power. Soviet influence - economic and perhaps military - would then, it was thought, dominate the Continent. Moreover it was realised that the survival of Britain's Empire depended on continued US tolerance of its existence and on the relative priority given by the US to containment of the Soviet Union versus the claims of national independence for the peoples of the European empires.

In pursuit of this central objective - a permanent alliance with the US against the Soviet Union - Britain adopted a 'two track' approach. Firstly, it delayed the demobilisation of its armed forces, deploying them worldwide as part of an effort to 'hold the fort' against an expansion of Soviet influence. Secondly, it launched a campaign to convince the US government - seriously divided on the best course to take - that it should adopt Britain's proposals.

While US overseas troop development fell rapidly, therefore, Britain maintained a relatively high level of military spending and a large worldwide military presence. British soldiers not only garrisoned regained colonial possessions such as Singapore, Malaya, Hong Kong and
Burma. They also helped to restore a pro-Western 'order' in Indo-China, the East Indies and ex-Italian colonies in Africa. In the Middle East fear of Soviet intentions and unrest in Palestine required further commitment. In Europe, Britain maintained large occupation forces in Germany, Austria and Italy. In Greece, British troops fought to protect the rightist government against the guerilla forces of ELAS. In total, Britain still had half a million troops overseas in 1947. (58)

Given the condition of its economy, however, it was clear that Britain could not continue this level of commitment for long. If the dual objectives of retaining the Empire and holding the line against the spread of socialism were to be achieved, US support would be necessary.

The British government's campaign to enlist the support of US elites for a policy of 'containment' took many forms, most of which were greatly aided by the ease of personal and cultural interchange between two countries. In the campaign to convince Congress and American public opinion, however, two events in particular appeared to have had a considerable impact. The first was Bevin's vigorous stance at the first UN meeting in January 1946, in which he attacked the continuing Soviet occupation of Azerbaijan in northern Iran.

Bevin's uncompromising position, which contrasted with US Secretary of State Byrnes' silence, prompted key US delegates - such as Senator Vandenberg - to press for a harder American line towards perceived Soviet violations of the UN charter. Partly as a result, US policy began to shift towards a more clearly anti-Soviet position.

The second important development in Britain's campaign occurred only a few weeks later - Churchill's speech at Fulton, Missouri on 5
March, 1946. He warned that:

"From Steltin in the Baltic to Trieste in the Adriatic, an iron curtain has descended across the Continent"

and urged that:

"Neither the sure prevention of war, nor the continuous rise of world organisation will be gained without what I have called the fraternal association of the English-speaking peoples. This means a special relationship between the British Commonwealth and Empire and the United States." (59)

Although publicly critical of the speech, Truman was warmly supportive in private. He now believed that Churchill had been right all along, arguing that:

"Churchill had tried to get me not to withdraw our troops from Prague. I told him we were bound to do that by our agreements with the Russians. But if I had known then what I know now, I would have ordered the troops to go to the western boundaries of Russia'. (60)

There is little doubt that the British campaign, culminating in the speeches by Bevin and Churchill, helped to accelerate the commitment by the US to a policy of containment. As the American people became more anti-Soviet, moreover, the support for an alliance with Britain grew. As a result, 1946 saw a rearrangement of international politics in line with Britain's long term objectives.

For Britain, the most important immediate consequence of the new US approach was the approval of the $3.75 billion Loan. During early 1946 the loan had been in severe difficulty in Congress from representatives opposed to "propping up" imperialism and British welfare socialism. With the hardening of attitudes towards the Soviet Union in the following months, however, such considerations became subordinate to the perceived necessity of an Anglo-American alliance. (61)
Many Americans believed that without the loan Britain would be forced into bankruptcy, greatly weakening the chances for a healthy capitalism in Western Europe as a whole.

The subsequent approval of the loan - in July 1946 - enabled the British state to postpone making hard choices in foreign and defence policy. It could sustain significant worldwide military forces and retain the trappings of a 'Great Power', albeit now clearly dependent on the US for economic support. Both the domestic and foreign objectives of the post-war consensus could be fulfilled now that US support had been won.

3.2 Nuclear Weapons and the Cold War

The origin and cause of the 'Cold War' between the US and Soviet Union is the subject of considerable historical controversy. It is not the purpose of this thesis to examine this debate in detail except where it clearly relates to British defence policy and nuclear weapons. It is, however, necessary for this purpose to examine the role which perceptions (in British and the US) of the importance of nuclear weapons as a 'winning weapon' may have played in the origins of the post-war confrontation.

By late 1945 a series of factors were working towards a deterioration in Soviet-American relations. British pressure had found a ready audience in a US ideologically hostile to Soviet communism. Soviet leaders, in turn, were deeply suspicious of the major Western countries, which had sought to strangle the Bolshevik revolution at its birth in the wars of intervention. Soviet suspicions were heightened by a series of British and American actions. First the abrupt cessation of lend lease to the Soviets in May 1945, with ships en-route to Russia being ordered to return immediately to the US. (62) Second, the close economic and military collaboration between the US and the UK, together with the clear
British interest in an anti-Soviet alliance. Third, the Western countries' attitude towards Soviet occupation of Eastern Europe, which the Soviets viewed with suspicion given Western moves to support sympathetic regimes, and disarm the resistance, in Greece, Italy and Belgium. Fourth, and finally, US use of its nuclear monopoly as a diplomatic 'stick' at Potsdam, soon reinforced by its use against Japan, heightened Soviet fears.

Partly in response to these multiple pressures, the Soviets tightened their control over Eastern Europe. Noncommunist politicians were purged. Opposition to Communist regimes was eliminated, often brutally. As Stalin made clear at Yalta, and thereafter, Poland (and, to a lesser extent, other East European countries) was central to Soviet aims.

"To the Russians the Polish Question is not only a matter of honour, but also a matter of security ... This is only because Poland is a country bordering on ours ... Throughout centuries, Poland was always the corridor through which the enemy came to invade Russia. The Polish question is a matter of life and death for the Soviet state." (63)

This intransigent position in turn fuelled the increasingly belligerent attitude of the US, and persuaded US leaders to adopt British proposals. As an important study of this period concludes:

"... the British could not have changed American policy without the assistance of the Kremlin ... Soviet actions in Eastern Europe, Korea, Iran and the eastern Mediterranean offended Americans and frustrated first Roosevelt and then Truman ... as doubts increased about Russian designs, the two presidents and their advisers began to look for alternatives. At that point British proposals became attractive." (64)

The US's monopoly of nuclear weapons played an important role in shaping its policies during this period. In 1945 and early 1946, it faced
considerable domestic pressure for rapid demobilisation of US forces. In
response Army numbers plummeted from 12 million to 1.5 million, and by
mid 1947 the US Army was only the sixth largest in the world. (65)
Nuclear weapons enabled political leaders to continue with this popular
policy while simultaneously adopting an increasingly tough line towards
the Soviet Union.

As a result, US leaders and the US military placed increasing
importance on the role of nuclear weapons in both peace and war. Truman
believed that the US nuclear monopoly would, and did, influence Soviet
actions (e.g. in the Iran crisis in 1946). (66) He firmly believed in
maintaining the US monopoly of the new weapons. As early as autumn 1945,
General Groves argued that the US should consider a nuclear strike against
foreign atomic-research facilities to guarantee a continued US monopoly.
(67)

This support for a policy of nuclear monopoly was reflected in
proposals made by the US to the UN Atomic Energy Commission negotiations
on A-bomb control. In a partial response to the ideas floated by Bohr,
Einstein and others, the US put forward a plan of its own for
international control of atomic energy. The hawkish US delegate, Bernard
Baruch, however, made crucial changes to the original draft proposed by
Acheson and Lilenthal. Given growing Soviet suspicion at the US policy
of atomic secrecy, it is unlikely that even this plan would have been
acceptable. (68)

Rejection was made inevitable by Baruch's proposals that the UN
Security Council would be able to punish—presumably with nuclear weapons
—alleged transgressors, and that the Soviets would have no veto on that
US-dominated body. To the Soviets the Baruch Plan must have appeared as
an attempt to preserve a US atomic monopoly while giving the West access
to knowledge of the secret Soviet programme. The Soviet counter-proposal
was, however, not much more realistic. The talks soon broke down. (69)

While US leaders discussed the Acheson-Lilenthal plan, a parallel
debate took place in Britain on the viability of international control.
Churchill had vetoed such ideas in 1944 and 1945. Now members of the new
Labour government, with the shock of Hiroshima and Nagasaki fresh in their
minds, reconsidered the issues Bohr had raised. In August 1945 Prime
Minister Attlee wrote:

"The only course which seems to me to be feasible and
to offer a reasonable hope of staving off imminent
disaster for the world is joint action by the
USA, UK and Russia based upon stark reality.
We should declare that this invention has made
it essential to end wars". (70)

Ex-Premier Churchill was consulted and argued against the 'act of
faith' proposed, though only in vague terms, by Attlee. In line with his
view during the war, he argued that such a proposal would arouse American
suspicions. Instead he urged that Britain should build on its special
relationship with the US and the nuclear agreements reached with
Roosevelt, rather than subordinate these to a general international
agreement.

Churchill's view was eventually to prevail. At first, however,
the Labour leaders pressed ahead with their attempts to find an
alternative. Bevin himself, later to be a major architect of containment
policy, told Cabinet colleagues in October 1945 that he believed that many
of the difficulties encountered with the Russians were a result of
resentment at Western atomic secrecy. He argued that there was little to
lose, and everything to gain, by giving Russia information on the bomb
project as a first step towards an international agreement. "We should take the risk of giving this information to the Russians in the interests of our foreign policy". (71)

Attlee's anguish, but failure to find a solution, was expressed in his September 25 letter to Truman:

"... the responsible statesmen of the great powers are faced with decisions vital not merely to the increase of human happiness but to the very survival of civilisation... We have, it seems to me, if we are to rid ourselves of this menace, to make very far-reaching changes in the relationship between States.... (and) a new valuation of what are called national interests".

In a rebuttal of the suggestion that the mutual possession of nuclear weapons would deter their use, Attlee drew on the experience of the recently concluded war:

"In many discussions on bombing in the days before the war it was demonstrated that the only answer to the bomber was the bomber. The war proved this to be correct. This obvious fact did not prevent bombing but resulted in the destruction of many great centres of civilisation. Similarly if mankind continues to make the atomic bomb without changing the political relationships of States sooner or later these bombs will be used for mutual annihilation." (72)

Within a few weeks, however, both Bevin and Attlee were to retreat from this position towards a more cautious policy. Suspicion of Russia amongst official advisers led them to support Bevin's reassessment of policy on the atomic bomb. Attlee himself was forced to face the unpalatable reality that only the abandonment of nationalist ideas, the subordination of all states to international authority, and the abolition of war could allow the threat of nuclear war to be ended. Yet if a world organisation could not be built immediately, the pressures for a nuclear arms race were immense. As Gowing records, Attlee's thoughts "pointed the
paradoxes and dilemmas of a world power in the nuclear age: while waiting for mutual trust to be established and Utopia to arrive, each such power must look to its own interests and make itself as strong as possible in nuclear weapons, even if thereby mutual mistrust was engendered and the chances of ultimate international control diminished." (73)

3.3 The decision to build a British bomb

As prospects for international control diminished, it also became clear that the US was taking an ambivalent position towards Britain's atomic project. The November 1945 meeting between Truman and Attlee discussed the question, but the outcome of their discussion was confused. Even in 1946, as Anglo-American relations in general improved, the supply of nuclear information remained scarcely a trickle. With the passing of the McMahon Act by Congress in the summer of 1946, the flow ended altogether. Gordon Arneson, a regular participant in the negotiations between the two governments, has argued that the McMahon Act was seen by the Truman administration as an easy way to end the awkward agreements reached by Roosevelt and Churchill in the 'aide memoire' without telling key US officials. (74) Certainly the McMahon Act only reinforced the view of the Administration that the nuclear secret should not be shared with any other power, including Britain.

The attempt to 'freeze' the British out of the nuclear business, however, strengthened the determination of the latter to push on with their own project. As Attlee commented later.

"That stupid McMahon Act ... They [the Americans] were rather apt to think they were the big boys and we were the small boys, we'd just got to show them they didn't know everything." (75)
The freeze on nuclear interchanges increased British suspicions of US motives, together with fears of renewed US isolationism. These in turn added to pressures for Britain to continue its own bomb project. As Attlee explained later:

"At that time we had to bear in mind that there was always the possibility of their withdrawing and becoming isolationist once again. The manufacture of a British atom bomb was therefore at that stage essential to our defence.

You must remember this was all prior to NATO. NATO has altered things. But at that time, although we were doing our best to make the Americans understand the realities of the European situation - the world situation - we couldn't be sure we'd succeed. In the end we did. But we couldn't take risks with British security in the meantime. We had worked from the start for international control of the bomb. We wanted it completely under the United Nations. That was the best way. But it was obviously going to take a long time. Meanwhile we had to face the world as it was. We had to look to our defence - and to our industrial future. We could not agree that only America could have atomic energy." (76)

Indeed Andrew Pierre goes so far as to argue that "if America had not ruptured the special relationship, if the restrictive provisions of the McMahon Act had excluded Britain from their application, if British security had been guaranteed then as it came to be in the NATO treaty two years later, the decision of 1947 to start on an independent nuclear weapons capability may have been different". (77)

Pierre's thesis is unproveable. However it may be that it underplays an important point - the elite's image of Britain as a Great Power and the close association of nuclear weapons with that position. Nuclear weapons had been - and were clearly perceived to be in future - central to the preservation of the 'special relationship' with the US. To opt out of nuclear weapons development, and accept a US-Soviet joint
monopoly, would have been to accept a reduction in international status unacceptable to most British leaders.

Moreover Britain's independent project had developed considerable momentum by this stage. Since 1940 it had been assumed that Britain would build its own nuclear bombs after the war ended. It would have been a major decision not to proceed, and would have questioned the whole development of British policy over the previous seven years.

The decision to proceed was formally taken by GEN163, a Cabinet sub-committee which met only once (for this purpose) in January 1947 and which excluded both the Chancellor of the Exchequer and the President of the Board of Trade. (78) The decision was taken in conditions of extreme secrecy with the Cabinet as a whole left uninformed. The project's existence was only revealed to Parliament through an extremely vague written statement more than a year later. (79)

There appears to have been, by this stage, little serious opposition to the project from within government. There were, however, some notable exceptions to this general rule. In a renewal of the themes pursued by Bohr, and echoing Attlee's concerns in late 1945, Professor Blackett, at the time a member of the government's Advisory Committee on Atomic Energy, argued that Britain should renounce nuclear weapons and unilaterally open its atomic facilities to international inspection. Unaware of the GEN163 decision taken several weeks before, Blackett concluded that:

"it is probable that the decision to manufacture or to acquire atomic bombs now would tend to decrease rather than to increase our long-term security".

Instead Blackett suggested that it was "highly probable" that
unilateral renunciation would lead to nearly all countries (except for the US and Soviet Union) following suit in permitting international inspection. Once such a system was established, he argued, there would be considerable pressure within the United States itself in favour of a policy of control and "the groups which wish to use the bomb for coercive purposes would be correspondingly weakened." (80)

The project also encountered some opposition on economic grounds. In an argument often to be repeated in coming years, it was argued that Britain no longer had the resources to remain a world power. Sir Henry Tizard wrote that:

"We persist in regarding ourselves as a Great Power, capable of everything and only temporarily handicapped by economic difficulties. We are not a Great Power and never will be again. We are a great nation but if we continue to behave like a Great Power we shall soon cease to be a great nation." (81)

3.4 The Blocs Harden

The decision, in early 1947, to continue with the British atomic project was taken at a time of considerable international uncertainty. The economies of western Europe were in severe difficulties, creating fears in Britain that radical political changes, and perhaps Communist takeovers, were still possible. Britain itself was gripped by a fuel shortage, a growing balance of payments deficit, and a rapid depletion of the loan from the US. Most worrying of all, although the US was now clearly aligned with Britain against the Soviet Union, it had still not committed itself to economic or military aid in maintaining capitalism in Western Europe - a task for which Britain by itself did not possess sufficient resources.
Within the next few months the situation changed dramatically. An unprecedently cold winter, combined with the after effects of negligible civilian investment during the war, brought a virtual breakdown of fuel supplies, communications, and industrial production. A major row erupted within the British government on the resources devoted to the military. Economic pressure now demanded a major effort to cut back imperial and 'peacekeeping' commitments. Thus the decision to press ahead with the atomic bomb project was followed, only weeks later, by agreement to grant independence to Burma and India and to hand Palestine to the UN. (82)

The pressure from the Treasury for cuts in defence spending also forced an end to Britain's expensive commitments in Greece and Turkey. On 21 February 1947, the British embassy in Washington told the US government that Britain would cease military aid to the two Aegean countries within six weeks. It was this British decision, by a combination of chance and design, that was to prompt the US to involve itself much more directly in the military defence of capitalist nations under threat - a major shift in policy announced in the Truman Doctrine. Shortly after, this increased military commitment was followed by the announcement of the Marshall Aid Plan, which was to play a major role in restoring the economic fortunes of ailing European economies. Taken together, these two policies were to contribute to a marked strengthening of pro-American forces throughout Western Europe and a receding of the 'threat' of radical political changes.

While the US became increasingly committed to the support of Western Europe, however, this commitment took the form mainly of economic and military aid, rather than increased levels of US troops in Europe. Indeed even in late 1948 the British occupation forces in Germany and Austria exceeded those of the United States. (83)
For some US policy-makers - such as George Kennan, then the State Department's Director of Policy Planning - the low level of US troops in Europe was justified by their assessment of the Soviet threat as primarily one of subversion and political instability, rather than of military invasion. For others, the Soviets were seen as a major military threat. The best response, however, was seen as increased reliance on the United States 'winning weapon' - the atomic bomb. As Secretary of Defence James Forrestal argued, the US atomic monopoly allowed the US to take risks internationally without major increases in the defence budget. (84) Even the 1948 crises over Berlin and Czechoslovakia, therefore, led only to increased tension between the two blocs, not to any major increase in defence spending in the US or in Britain.

The 1948 crises instead helped to accelerate the increasing emphasis being given to nuclear weapons in US war plans. Proposals for international control faded into oblivion. Infused with the idea that it possessed a long term atomic monopoly, and under pressure from the growing vested interests now attached to the A bomb programme, the US increasingly came to rely on immediate atomic attacks on Soviet cities as soon as a Soviet conventional invasion had been launched. The moral implications of such a genocidal policy were brushed into the background.

The reports that the Soviet Union would soon acquire its own atomic bombs were ignored. And, as stocks of nuclear weapons increased, the US adopted an emergency war plan (code-named Fleetwood) which envisioned that a sudden nuclear attack on Russia might be sufficient to win the war, avoid a protracted conventional conflict, and restrict any Soviet ground advances to east of the Rhine. (85)

In its eagerness to exploit its temporary atomic monopoly in plans for West European 'defence', the US was laying the foundations for a NATO
policy which would outlast by decades the end of that monopoly. Yet recent studies of declassified documents from this period throw doubts on one of the key assumptions supposed by some to be key to the policy - that the Soviets possessed a massive superiority in conventional forces in Europe. Matthew Evangelista, for example, concludes that "Stalin's post-war army was not capable of a successful blitzkrieg invasion of Western Europe during the period preceding the formation of NATO". (86)

British military leaders in the late 1940's appeared to concur with this assessment. In a memorandum written in late 1947, the Chiefs of Staff argued:

"It is unlikely that before 1955-1960 the Soviet Union will be capable of supporting her armed forces entirely from natural resources now under her control, in any major war except one of very short duration ... The Soviet armed forces, despite certain deficiencies, could embark on a land war at any time and would at least in the early stages, have the advantage of numbers against any likely combination of opposing forces. In any major war, however, that started before 1955-1960 at any rate, this initial advantage would be increasingly counterbalanced, as hostilities continued, by Russia's economic insufficiency. Moreover the strategic air situation is, at least at present, unfavourable to the Soviet Union ... we consider it unlikely that the Soviet Union will possess, before 1957 at the earliest, a sufficient stock of (atomic) bombs to produce a decisive result, by these means only, even against the United Kingdom alone ... Failing the early development of biological or surprise weapons to a point which she believed would ensure her rapid victory, the Soviet Union's economic difficulties are likely to be decisive in making her wish to avoid a protracted major war, at any rate until 1955-1960." (87)

Despite confidential analysis which suggested the contrary, however, the illusion of Soviet conventional superiority -together with the perception of the importance of the US nuclear umbrella - has continued to this day. (88) These two concepts, mutually reinforcing,
have played a central role in determining the manner in which NATO policy has evolved in the intervening years.

The central role of the A bomb in US strategic plans had important consequences for Britain. Firstly it led to renewed negotiations between the two governments on access to British-controlled uranium ores in the Congo, which resulted in the 'modus vivendi' of January 1948. Secondly it led to the basing of US B29 bombers in Britain, the start of a commitment which would continue for the next 37 years and would earn Britain the title of 'Airstrip One'.

The renewed American interest in an agreement with the British which emerged in late 1947 was a direct result of the high priority the US attached to its atomic bomb programme. Britain had an option on half the uranium ore production from Belgian Congo (then producing 90% of available world production outside the Soviet bloc). The Americans needed to obtain access to these British-controlled reserves in order to keep their bomb production programme on schedule. In return for a reallocation of ore supplies in the US's favour the latter agreed, in the modus vivendi of January 1948, to a limited loosening of the McMahon Act's freeze on information exchange on atomic energy.

Finally, as part of the modus vivendi, Britain formally renounced the veto on American use of the bomb included in the 1944 Quebec Agreement. The Chiefs of Staff argued that the veto agreed in Quebec had little real value and, therefore, there was little point in advocating it given the strong opposition to such a clause in the US Congress. (89)

Soon after the modus vivendi agreement was reached, another development took place with considerable long term importance for British defence policy. The Berlin crisis led to the stationing of 60 American
B29 bombers at British bases, the beginning of a US military presence which has lasted to the present day. The UK government saw this step as a further success in their efforts to bind the US to West European defence. Consequently there was no attempt made to obtain a right to consultation as to the use of the bombers, far less any attempt to revive the veto abandoned in the modus vivendi. As the commander of the USAF in Britain commented at the time: "Never before in history has one first-class power gone into another first-class power's country without any agreement. We were just told to come over and "we shall be pleased to have you". (90)

3.5 The 1949 discussions

In the space of the two years since the 1947 decision to press ahead with atomic weapon development, therefore, the situation facing Britain had changed radically. The US had now abandoned its previously ambivalent attitude towards overseas involvement, the economic and political situation in Europe had stabilised, and the NATO Treaty (signed in April 1949) would formalise the alliance between the US, the UK and Western Europe. In parallel with these developments, the role of nuclear weapons in international affairs had been confirmed and indeed visibly increased. Plans for 'defence' of Western Europe now rested clearly on immediate, and massive, US retaliation with its strategic nuclear bombers.

As a result of the growing US commitment to Western Europe’s defence, in 1949 the debate on the wisdom of the UK nuclear programme was reopened. Sir Henry Tizard questioned the need for diverting a high proportion of the country’s most highly skilled scientific personnel to atomic work, and argued that it would be better to rely on the US’s nuclear force for deterrence purposes. Unlike Blackett’s 1947 proposals,
however, Tizard's ideas included continuing research and development of atomic weapons and long range aircraft. Only production would be concentrated in the US. (91)

Proposals for an incorporation of the UK project into the US programme gained considerable support on both sides of the Atlantic. By late 1949, the British government team at the negotiations had developed proposals for a transfer of some of its key scientists and some raw materials to the US. Britain would gain considerably by its access to the experience built up by American projects. At the same time it was proposed that the British should be "free to start up in the United Kingdom any new processes connected with the manufacture of atomic weapons" and would require a stockpile of atomic weapons - 'about 20 bombs' based in the UK. (92)

The 1949 talks were unsuccessful. Many in the US saw them as a means of cutting Britain out of the nuclear weapons business altogether. Lack of knowledge regarding the British project made it difficult to convince congressional leaders that the 'secret' of the bomb should be shared. (93)

As the talks floundered, two new developments shattered the relative calm which the Truman Doctrine and the formation of NATO had restored in Europe. In China, the Communist Party came to power, creating fears of a major threat to the United States' recently established hegemony in the rest of East Asia. In September 1949 a further shock was felt as news arrived of the event which Truman had predicted would "never" happen. The Soviets had tested an atomic bomb. (94)

By now, however, it was too late to return to the plans for international control discussed in 1944 and 1945, and rejected by the
Western powers partly because of belief in the power an atomic monopoly would provide. Instead, as the next section of this chapter will show, the Soviet test simply added a new twist to the arms race, leading to increased reliance by the US and UK on new and more destructive weapons in their plans for deterrence and, if necessary, war.

4. The Bomb Comes Of Age 1950-55

4.1 NSC-68 and British Rearmament

By the late 1940's, the British government had some reason to be pleased at its achievements since 1945. On the domestic front full employment had been maintained, the beginnings of the Welfare State had been established, and civilian industrial production had grown at an unprecedented rate. (95) Simultaneously, Britain had achieved the central objectives of its foreign policy - to both retain its status as a world power and to protect its security interests in Europe by enlisting the power of the US in the creation of the new Pax Anglo-Americana. The formation of NATO in 1949, and the establishment of permanent US Air Force bases in Britain, symbolised the success of the government's attempt to involve the Americans in Europe. The retention of Britain's world military role, with American support, together with its independent nuclear programme, still largely without American aid, were seen as evidence that Britain's status in the new structure of world power was not an entirely subordinate one.

In 1949, two events occurred which were to lead directly to a major rethink of US containment policy, and prompt far-reaching consequences for Britain. First, the Administration's working assumption that its A-bomb monopoly would last many more years was shattered by the Soviets' nuclear test. Second, the US stood by powerless while Mao Tse Tung led the
Communist Party to power in China, prompting fears of a new phase of Soviet expansionism in Asia.

Truman responded to these developments by ordering a go-ahead on the 'super' - the H bomb - and by ordering a high-level review of US security policy. (96) The result was National Security Council Memorandum 68 (NSC 68), prepared by a joint State Department-Defence Department working group under Paul Nitze and completed in April 1950. It argued that, as a result of the new developments, the policy of 'containment' of the Soviet Union, as represented by the Truman Doctrine and Marshall Plan, now had to take on a more directly military meaning. It redefined containment to include seeking

"by all means short of war to 1) block further expansion of Soviet power, 2) expose the falsities of Soviet pretensions, 3) induce a retraction of the Kremlin's control and influence and 4) in general, so foster the seeds of destruction within the Soviet system that the Kremlin is brought at least to the point of modifying its behaviour to conform to generally accepted international standards." (97)

The authors of NSC-68, conscious of the declining bargaining power which the A bomb gave to the US, then argued that a military build up was required:

"Without superior aggregate military strength, in being and readily mobilizable, a policy of "containment" - which is in effect a policy of calculated and gradual coercion - is no more than a policy of bluff."

The increase in military spending proposed was massive. NSC-68 recommended that the budget be raised from $13 billion to $35-50 billion. The bulk of the increase would be on conventional forces, but a massive nuclear effort was also urged.
Finally, NSC-68 urged that Britain's military role in Europe and Asia should be strongly supported with US economic and military assistance:

"a strengthening of the British position is needed if the stability of the Commonwealth is not to be impaired and if it is to be a focus of resistance to Communist expansionism in South and South East Asia. Improvement of the British position is also vital in building up the defensive capabilities of Western Europe." (98)

Initially the proponents of NSC-68, the foremost of whom was Secretary of State Dean Acheson, were uncertain of receiving a favourable Congressional response. Indeed Truman himself had severe reservations about the scale of expenditure suggested. (99) Before the outcome of the debate within the Administration could be decided, the issue was effectively forced by invasion of South Korea on 25 June 1950 and the subsequent rapid Communist advance. NSC-68 supporters were able to use events in Asia to build Congressional support for the massive military buildup in Europe which their proposals required. Following only months after the Communist victory in China, the Korean invasion was widely seen as a new and more dangerous phase in a worldwide Soviet offensive. As the expectation of a third World War increased, the remaining constraints on military spending quickly dissolved.

As the US started its rearmament programme, pressure grew for similar military buildups on the part of its European allies, including a campaign for German rearmament. The transformation of NATO into an integrated military organisation began as the US appointed its leading World War Two commander - Dwight Eisenhower - as the first Supreme Allied Commander Europe (SACEUR). Britain, as the leading US ally in NATO, was expected to make a particularly large contribution to the American efforts at a Western European arms buildup.
At first Britain responded to the pressure reluctantly. In July a British army brigade was sent to Korea and it was announced that an extra £100 million was to be spent on military equipment in 1950-51. (100) As US war fever grew, and its own rearmament programme was accelerated, however, Britain found itself forced into making larger increases in planned military spending which were to have major costs for its economy in the years to come.

The British government's main concern during this period appears to have been fear that the US would be drawn into a major war with China in Asia, leaving Europe undefended against Soviet expansion. It therefore responded rapidly to reports of a press conference on November 30 at which President Truman appeared to suggest that the US might escalate the Korean War by using atomic weapons. On December 4th 1950 Attlee flew to Washington and obtained an undertaking that Britain would be informed before the bomb was used. (101) (The possibility of a British veto, it will be recalled, had been dropped during the modus vivendi talks in 1948). In return, Attlee had to pay a heavy price in agreeing to US demands for even larger increases in British military spending. (102) The full price of Britain's 'special relationship' was now becoming apparent.

It is still unclear how important British pressures were in influencing US policy during this critical period. From recently declassified US documents, it appears that Truman and his Chiefs of Staff were, in any case, most reluctant to use nuclear weapons in Korea. General Omar Bradley, chairman of the joint chiefs, stated that "I've never heard anything so preposterous in my life" (103) Moreover, although there was considerable domestic pressure for a shift in priorities towards Asia, and for a widening of the conflict to include 'liberation' of China, such a shift would have been a major setback for the advocates of NSC-68.
Like the British, the leading US policy makers - Acheson, Nitze and Marshall - had their sights firmly on Europe. Britain by its actions may thus have reinforced the American government in its determination not to yield to the "Asia first" lobby. There is no evidence however that, at this time, Britain by itself effected any major change in US strategy or policy on employment of nuclear weapons.

If the benefits from Britain's 'special relationship' were unclear, the costs were not. The 56% increase in defence spending between 1950-1 and 1952-3 had a crippling effect on the British economy. Production stagnated, civilian investment fell and the balance of payments went into severe deficit. The long term economic effects were particularly serious because of the rearmament programme's emphasis on increased equipment spending. Scarce skilled manpower and the resources of the capital goods sector were diverted into military production just as several of Britain's main international competitors, such as Germany and Japan, were re-entering world civilian goods markets. The subsequent decline in Britain's competitive position would be one from which it would never recover. (104)

A notable feature of the British rearmament programme was the emphasis given to conventional weapons. Faced with the need to plan for the possibility of a war within two years, the government gave top priority to areas such as the fighter programme and defensive guided missiles. The programme for the production of a strategic nuclear bomber force - the V bombers - continued to be given a relatively low priority, as indeed it had been through much of the late 1940's. (105)

4.2 The Global Strategy Paper

The Labour government's £4700 million defence programme had led to
the first major crack in the consensus built up in the war years. Nye Bevan and Harold Wilson had resigned in protest from the Cabinet in response to the re-imposition of health service charges. Their resignation had also been prompted, however, by their opposition to the scale of the rearmament programme itself. They argued that, given the severe shortages of raw materials and skilled manpower that existed, the programme was simply not attainable. (106)

The Conservative administration under Winston Churchill which took over in October 1951 accepted this argument. Concerned at the damage which was being done to Britain's economy, and conscious that the acute fear of imminent war that had swept the United States the previous winter had now abated, the government ordered an immediate slow down in the arms programme. (107) As a result, defence spending 'only' rose as a proportion of national income from 5.8 per cent in 1950-51 to 8.7 per cent in 1952-3. If the £4700 million programme had been fully implemented the 1952-3 figure would have been 10 per cent and would have risen further to 11 per cent in 1953-4. (108)

Faced with the conflicting demands of economic growth and rearmament, Churchill ordered the Chiefs of Staff to conduct a major review of Britain's military policy, taking particular account of the economic constraints involved. The result was the Global Strategy Paper, adopted by the Cabinet without significant amendment. (109) It argued that henceforth the West should base its defences on the threat of use of nuclear weapons at the onset of war. Tactical nuclear weapons should be deployed both to counter Soviet conventional forces in Europe and to deter limited conflicts in Asia. In this way, the level of conventional forces in Europe and in the Empire could be substantially reduced. Britain could remain a Great Power by reliance on its independent nuclear force, while
significantly reducing the burden its military commitments placed on its economy.

The independent nuclear force, therefore, was given a much more central role in British military thinking than it had enjoyed before the Global Strategy Paper. The government now finally agreed to Royal Air Force demands for top priority to be given to a British-made strategic nuclear bomber force after years in which its progress had been a secondary priority. Shortly after the approval for the V bomber project, Britain tested its first atomic device at Monte Bello in the Indian Ocean. (110) Although Britain's first operational nuclear bomb would not be available until 1956, it was clearly firmly 'on the road' to becoming a fully-fledged atomic weapon power. (111)

Indeed such was the priority now given to the V bomber programme that it was agreed to go ahead with the development of three separate models - the Vulcan, the Victor and the Valiant. As a result the programme cost soared, making the search for economies in defence spending as a whole still more difficult. Ministers, it appeared, were still convinced by the aerospace companies' argument that a largescale peacetime manufacturing capacity would be useful in war. The impact of nuclear weapons on the nature of war had yet to affect this aspect of procurement policy. (122)

The basic rationale for Britain's bomber force was given by Sir John Slessor, the main architect of the Global Strategy Paper and recently the Chief of Air Staff:

"For a century before 1914 the Pax Britannica rested squarely on the British fleet. Then came thirty-five years of grey twilight when there was nothing to take the place of our sea power. Today I believe the Pax Atlantica depends as surely, and probably more permanently, on Anglo American air power, of which
the decisive expression is the long range atomic bomber." (113)

It was essential, argued Slessor, that Britain make a contribution to the Western 'deterrent' force. He could not conceive of circumstances in which Britain would use it independently of the Americans. Its existence, however, increased Britain's influence in Washington and provided a means by which to maintain the special relationship between the two countries. As he argued in 1954:

"If we were to leave to any ally, however staunch or loyal, the monopoly of an instrument of such decisive importance in the stupendous issues of war and peace, we should sink to the level of a fourth-rate power'. (114)

Britain's progress in its nuclear programme, and its successful 1952 test in particular, had the desired results on US government opinion. After the virtual freeze in information exchange since 1946, only very partially lifted by the modus vivendi, the Americans now saw very real advantages in a revival of the close nuclear collaboration between the two countries. Technically they found that British scientists were ahead of the US in some areas and their discoveries could benefit their own programme. Militarily, the Americans were interested, as part of their own New Look, (see next section) in training NATO allies in the use of nuclear weapons. (115) Politically, renewed cooperation would recognize the inevitable -the British determination to produce their own weapons - but ensure that they remained a close ally. Their new President, Dwight Eisenhower, thus agreed at Bermuda in December 1953 to request modifications in the McMahon Act; and these were duly passed the next year.

4.3 The Americans follow the British lead: the 'New Look'
As the British considered the Global Strategy Paper, the US government faced pressures of a similar type. The Korean War continued, but the point of maximum danger had passed. The chances of general war had, it was thought, receded. At the same time the US stockpile of nuclear weapons was rapidly increasing, and military planners were beginning to consider the implication of the H bomb (to be successfully tested in 1954).

At first the Americans were reluctant to follow the British example. The 1952 attempt by Sir John Slessor to explain the Global Strategy Paper to the Joint Chiefs was met by suspicion, and viewed by them as a means of rationalising the UK's failure to meet its conventional force commitments. With the election of a new Administration later that year, pledged to economy in government spending as a whole, the situation changed. 1953 and 1954 saw a major shift in US strategy towards 'massive retaliation.' As one historian has commented:

"Changes in American policy often come two or three years after changes in British military policy. The New Look originated with Churchill and the British Chiefs of Staff in 1951 and 1952; it became American policy in 1953 and 1954. While the wealthier country was able to develop new weapons earlier than the poorer one, nonetheless the poorer one, largely because of its more limited resources, often was first in adjusting its military policy to the new technological requirements." (116)

The new US policy was given its most dramatic presentation in January 1954, when the Secretary of State John Foster Dulles announced:

"The basic decision was to depend primarily upon a great capacity to retaliate instantly, by means and at places of our choosing... As a result it is now possible to get, and share, more basic security at less cost." (117)

It would be wrong to exaggerate the shift in policy which the New Look represented. Since the late 1940s US strategic thinking had been
dominated by the assumption that massive use of nuclear weapons against the Soviet Union would take place within days of the start of a major war. It did, however, appear to give greater credence to the idea that in less-than-total wars (such as Korea) the US might be willing to use nuclear weapons at an early stage. Even for limited wars such ideas were not entirely new. The possibility of escalating the Korean War by using nuclear weapons against China and Russia had been actively considered by Truman and his advisers. (118) What was most clearly new about the 'New Look' was the way in which the increasing stockpile of nuclear weapons was now used to justify a cutback - as in Britain - in the conventional military forces built up as a result of NSC-68. Demobilisation from the Korean War enabled total military manpower to fall from 3.45 million to 2.84 million, while the manpower of the Air Force - the custodian of the strategic nuclear force - rose by 20,000. (119)

It is important, therefore, to emphasise that though the declaratory nuclear policy under the New Look differed from that under the Truman Administration, there is a less clear change in action policy. (120) As long as the Soviets' nuclear arsenal remained insignificant, the US government was willing to consider use of its own strategic arsenal as retaliation against events in Europe or Asia. To the extent that reliance on nuclear weapons increased in the early 1950s, it was a result primarily of the development of tactical atomic weapons and their deployment throughout the US armed forces, rather than because of clear shifts in US plans for the conduct of war.

'Massive retaliation', therefore, was, on the one hand, an option which both Truman and Eisenhower believed should not be used in any circumstances as if it was simply an extension of conventional warfare. On the other hand, it was an option which neither would forego. While it
would not be used to win a pre-emptive victory, the threat of its use was considered in order to avert potentially humiliating defeat. On at least two occasions the Eisenhower Administration authorised use of nuclear weapons: once to persuade China and North Korea to sign the armistice agreement in 1953, and once in the offer to France to help its beleaguered forces at Dien Bien Phu in 1954. (121)

4.4 Britain, the US and NATO's New Look

The immediate consequence for NATO of the shifts in British and American policy was abandonment of the over ambitious conventional force goals adopted in Lisbon in 1952, already widely seen as unrealistic. Such a development was widely welcomed in Europe where the drive to build 96 divisions for NATO was beyond their economic capabilities to reach.

As part of the New Look, and in order to rationalise the failure to meet the Lisbon goals, the next few years also saw the rapid introduction of tactical nuclear weapons into Western Europe. Presented as an alternative means of combating the Soviets' supposed conventional superiority, reliance on the use of nuclear weapons on the battlefield rapidly increased. In November 1954 Field Marshal Montgomery, the Deputy Supreme Allied Commander, said:

"I want to make it absolutely clear that we at SHAPE are basing all our operational planning on using atomic and thermonuclear weapons in our defence. With us it is no longer: 'They may possibly be used.' It is very definitely: 'They will be used, if we are attacked'." (122)

Paradoxically, perhaps, the reliance on nuclear weapons to counter Soviet conventional forces appeared to increase even as the threat decreased. After the death of Stalin in 1953, and the ceasefire in Korea, fears of war had diminished. With the 1956 announcement by Khruschev of
reductions in their armed forces by 1,300,000 men, the thaw gathered momentum. In response Western reliance on nuclear weapons appeared to increase further.

Such a development had a certain logic to it. For as long as it was believed that war was most unlikely and that, therefore, nuclear deterrence 'worked', it was unnecessary (for shortsighted political leaders at least) to consider the consequences should war break out. Only when the threat of war was thought to be growing, as in 1950-2, did serious consideration have to be given to the best means of defence in such a war. As the NSC-68 plans made clear, strong conventional forces were still believed essential for actual conflict.

The increased reliance on tactical nuclear weapons in Europe may have had some doctrinal logic, therefore, particularly while the Soviets remained well behind in this area. Probably more importantly, however, such reliance reflected increasing technological and service pressures. The US Army and Navy, assisted by particular weapons laboratories, pushed for a doctrine which would give them a share of the nuclear weapons role previously the monopoly of the Air Force. Doctrine was developed to reflect those institutional requirements, as much as vice versa. And despite growing Soviet nuclear arsenals through the 1950's, the reliance on battlefield nuclear weapons increased steadily. (123)

4.5 Contradictions

By 1955 events seemed to have vindicated the efforts of successive governments, Labour and Conservative, to fulfil Churchill's wartime vision of Pax Anglo-Americana, backed by atomic air power. American nuclear weapons - atomic and thermonuclear - were now in large scale production; and after a long delay Britain itself was about to acquire its own nuclear
stockpile. Britain had forged a strong anti-Soviet alliance in Europe which had contained the Soviets within the Eastern half. The recent thaw, symbolised by the Austrian State Treaty and resumed summit meetings, suggested that Soviet expansion had run its course. Britain retained a Great Power's seat at the conference table on topics as diverse as the future of Indo-China and the organisation of NATO. After the loss of India, its Empire had, in large part, been preserved and indeed encouraged by the US. (124) Britain, in short, had, it seemed, retained its status as a Great Power.

Such confidence proved to be remarkably shortsighted. For weaknesses in Britain's policies already inherent in the trends of the early 1950's would intensify and become more obvious in the second half of the decade. The Suez debacle in 1956 would be the greatest single shock, but the root of the crises to come would lie in longer term, and more fundamental, factors.

The primary contradiction in British policy lay in the reliance on the threat of first use of nuclear weapons to deter or coerce a potential opponent, both in general war and in more limited conflicts. Yet in successive crises, and one medium scale war, the US had never used its nuclear weapons, even during a period during which the Soviet Union had no nuclear arsenal of its own. With the growth of the Soviet Union's arsenal, and its development of missiles capable of reaching US cities, the credibility of 'massive retaliation' was called even more into doubt. The search for 'limited nuclear options' would begin, and the requirements for conventional forces would grow.

In practice, British actions in the early 1950's indicated that they were never convinced by the extreme formulation of the New Look
favoured by Foster Dulles and some other Americans. As Eisenhower records in his memoirs, when use of nuclear weapons in Korea was considered in 1953:

"In this respect American views have always differed somewhat from those of some of our allies. For the British, for example, the use of atomic weapons in war at that time would have been a decision of the gravest kind." (125)

Increased reliance on nuclear weapons, therefore, was unable to provide a solution to the economic problems created by high military spending. The nuclear force itself proved to be expensive, consuming up to 20 per cent of the total defence budget in the 1950's. (126) The commitment to colonies and bases throughout Africa and Asia had to be maintained through large, and expensive, conventional forces. Nuclear weapons could not be used against guerilla warfare even if at times the government believed, as its 1955 White Paper stated, that "the existence of the nuclear weapon may discourage overt armed intervention by the Communist powers such as occurred in Korea." (127) In Europe the government had felt obliged to commit four divisions to the British Army on the Rhine indefinitely in order to prevent a revival of Franco-German rivalry and provide a stable framework for German rearmament. (128) Such a pledge undoubtedly enhanced Britain's prestige in NATO. Combined with the UK's other commitments, however, it ensured that the defence budget remained a considerably greater burden on its economy than in its main competitors, despite an official review, prepared by both civilian and military officials, that concluded that "since the war the United Kingdom had attempted too much in too many spheres of defence, which had contributed to the economic crisis which ever administration had suffered since 1945". (129)

In addition to the strains involved in Britain's nuclear doctrine
and in the costs of its military effort as a whole, the policies pursued since 1945 had already had serious consequences for relations with the rest of Western Europe. Britain's emphasis on its special relationship with the United States, and on its role as a world power, prevented the development of closer links with Europe, where its long term economic and security interests lay. As a result, while Britain was forced to pay heavily for its military commitments to NATO, it remained outside the European Economic Community when it was formed in 1957, and lost many of the economic advantages which it could, at this time, have obtained.

Britain's commitment to a role as a world power, together with its special relationship with the US, was the primary explanation of its ambivalent attitude towards Europe in the first postwar decade. Over and above this fundamental tendency, however, the commitment to an independent nuclear force - itself clearly linked to Great Power aspirations - also created long term difficulties in relations with other European nations. Britain's insistence on its own nuclear force, and on an exclusive relationship with the US in nuclear affairs, was certain to create pressures for nuclear proliferation in Europe. Britain clearly believed that it derived considerable status, and some influence, from possession of the atomic bomb. Lord Cherwell, one of Churchill's leading advisors on nuclear matters, spoke for most of his government colleagues, and indeed for many Labour politicians too, when he expressed his disapproval of any prospect that Britain might "rank with other European nations who have to make do with conventional weapons". (130)

Once other major European states had tackled the immediate concerns of postwar reconstruction, they would face pressures to match the British effort. The "New Look" for NATO, enthusiastically espoused by the US and UK, encouraged the nuclear aspirations of non-nuclear members further.
The British nuclear programme had its most immediate proliferation effect on France. French scientists had been involved in the initial spate of discoveries in nuclear physics in the late 1930's, and had been involved, albeit peripherally, in the wartime Manhattan Project. Yet both the US and UK were determined to exclude the French from any participation in the nuclear programme after the war ended. This determination was strengthened by the presence of Juliot Curie, a committed Communist, in the French nuclear project. (131) The result, however, was to fuel French suspicions that they were to remain subordinate in an alliance dominated by the two English speaking nations, and help lead through the 1950's to France's determination to build a nuclear force of its own. As Andrew Pierre concludes:

"By their rhetoric and by their actions, British statesmen encouraged the French to follow suit. British atomic developments and justifications for the strategic force were seized upon by those in France who argued for a French nuclear force. The British and French nuclear forces had an unsettling effect in Germany and in the rest of Europe - and perhaps much further, for nuclearism is a contagious disease." (132)

5. Conclusions

During the period covered by this chapter, British foreign and defence policy was decisively shaped by the determination of successive governments to retain Britain's international status as a Great Power. The outcome of World War Two - Britain's participation in victory as one of the 'Big Three' - greatly strengthened this commitment. Indeed so strong was the assumption that Britain would remain a world power that it was not seriously questioned by leaders of either main political party.

Yet World War Two also starkly highlighted Britain's economic weakness. Only US economic aid prevented national bankruptcy. It became
increasingly clear during the early war years that Britain's aspirations for continued international influence would depend on its ability to form a permanent alliance with the United States which would outlast the war against Hitler. Only a United States willing to take a leading role in the postwar system could provide the economic and political stability necessary to protect perceived British interests in Asia, Africa and Europe. By taking on a role as junior partner in a Pax Anglo-Americana, Britain could recreate the international stability which, it was believed, the 19th century Pax Britannia had brought; and simultaneously ensure protection of Britain's particular interests.

Involvement in the early stages of development of nuclear weapons in 1940 and 1941, and the involvement in the Manhattan Project throughout the rest of the war, undoubtedly reinforced Britain's determination to retain a major world role after the war had ended. "Would Britain have come to terms sooner with her status in the post-war world", the official history of Britain's atomic project has asked, "if her own and her refugee atomic scientists had been less clear sighted in 1940 and 1941, if the Maud Report had never been written and if she had played no part in a wartime atomic project?" (133)

While early involvement in nuclear weapons development reinforced British leaders' commitment to a Great Power role, the converse also followed. Against the wishes of the US administration, Britain insisted on an independent nuclear weapons programme fearing that, if it did not, it would become a "third rate power". Instead it used its nuclear programme to retain its status as a privileged partner of the US and Number Two in the Western Alliance.

Throughout the period it was recognised that Britain's Great Power status ultimately depended on its relationship with the US. The
independent nuclear programme was used to encourage an Anglo-American condominium as the preferred form of world order. In the war years this conception led to the Quebec Agreement and the Roosevelt-Churchill aide memoire, which sought to cement nuclear cooperation between the two nations while excluding other major powers. After the war it was seen in the periodic attempts to renew cooperation after the set back of the 1946 McMahon Act and in the serious consideration given in 1949 by Britain to proposals for complete integration of nuclear programmes. The success of the policy of using independence to achieve interdependence bore partial fruit in the relaxation of information exchanges in 1954, and would lay ground for further intimacy in nuclear affairs in the years that followed.

In its own terms, British foreign policy achieved in large part the objectives which its leaders had set themselves during the war. Britain had persuaded the US to play an active part in the political and economic leadership of the postwar (non Communist) world. In Europe, it had been persuaded, after some hesitation, to cooperate with Britain’s primary aim - the containment of Soviet influence and the reconstruction of stable capitalist regimes in France, Italy and Germany. Economic aid - notably the 1946 loan - had enabled Britain to retain a considerable part of its Empire intact. The growing importance given to the Cold War in its foreign policy ensured that the US’s anti-colonialism gave way to support for Britain’s world military role as a contribution to its own policy objectives. By the mid 1950’s, under US leadership, the expansion of communist influence had ceased and the capitalist world economy was beginning a period of unprecedented expansion. British leaders had some reason to feel, therefore, that their policies had not been entirely unsuccessful.
Yet in seeking to assess the success of British policies during this period, one must also recognise the serious costs that were involved. Taken together they throw into question whether the ambitious objectives of the wartime consensus were attainable, and they lead one to doubt whether the policies followed were, in retrospect, in the long run interests of the British people.

Firstly it is at least arguable that, had Britain taken a more conciliatory line towards the Soviets in the 1940's, a less tense, and more secure, postwar relationship between the great powers could have been achieved. Only if one assumes that the Soviet Union at this time was irredeemably committed to European conquest did the policies followed make complete sense. If one takes a more balanced view, and recognises that Soviet intentions and actions were conditioned mainly by their own security requirements, then it is possible that a real opportunity was missed for a less militarised settlement, and a freer Eastern Europe, at a time when relative Western strength could have led to substantial Soviet concessions.

Yet Britain's central objectives throughout these years - retention of Great Power status and involvement of the US in an active world role - were in practice incompatible with a long term approachement between the two emerging superpowers. Britain's project for a 'special relationship' with the US and for a Pax Anglo-Americana depended for its existence on the exclusion, and indeed opposition, of the Soviet Union. It is clear that powerful factors within Soviet and American society, and deep underlying conflicts between the two systems they represented, always made the development of some form of postwar confrontation a probability. Yet there were also signs of flexibility in the policies of both countries in the mid 1940's which suggested that this confrontation could have taken a
less militarised, and more managed, form. It was the third of the three wartime Allies, Great Britain, which consistently argued for the adoption of an anti-Soviet position by the Western powers, taking the initiative in 1944 and 1945, 'holding the line' in 1945 and 1946, and launching a series of campaigns through these years to persuade the US to adopt a 'containment' policy. Britain did not create the Cold War by itself. It did play an important role in encouraging its development, and ensuring that alternative solutions to the problems of the postwar world were not attempted.

Secondly, an important component of Britain's plans for an Anglo-American dominated world order was the two countries' joint monopoly of nuclear weapons. The 'secrets' of the Manhattan Project were thought to give their owners considerable power. This illusion, for such it would turn out to be, encouraged the US into believing that its proposed world role could be discharged relatively cheaply. It thus enabled domestic opposition to containment policy in the late 1940's to be minimised.

Yet this approach was based on the mistaken beliefs that (i) the Soviets would take many years to acquire their own nuclear weapons and (ii) the Soviet regime would probably collapse before it could do so. Both ideas proved totally mistaken. The Soviet Union recovered rapidly from the devastation of war, and ruthlessly curbed dissent within its borders and in Eastern Europe: more ruthlessly, in all probability, because of the Western attempts to undermine their system from outside. In 1949, many years before Truman had expected, the Soviet state exploded its first nuclear device. The short age of nuclear monopoly had ended.

The special nuclear relationship between the US and UK, together with the belief that the monopoly of nuclear weapons would last for many years, played an important role in the processes leading to Cold War.
During the war years the Soviets, at that time supposed allies, had been excluded from knowledge even of the existence of the Manhattan Project. Churchill and Roosevelt repeatedly rejected advice from their most senior advisers which warned of the consequences of secrecy and argued for limited disclosure to the Soviets as a trust-building measure. Niels Bohr’s plan for international control had been given a sympathetic reception on both sides of the Atlantic by many of those most closely involved in the nuclear programme. The two political leaders, however, rejected such ideas as being incompatible with their plans for an atomic armed Anglo-American dominated postwar world, in which the Soviets would have to take a subordinate place. As the war drew to a close, the atomic bomb was used as an instrument of coercive diplomacy - first at Potsdam, and then at Hiroshima and Nagasaki. The suspicions these actions aroused in the Soviet Union in turn helped reduce any future prospects for international control.

Such prospects may in any case have been slender, given the intrusive inspection that such a regime would have required and the closed nature of Soviet society under Stalin. The policy followed by the UK and US ensured, however, that the world would never find out whether or not the Soviets could have made the necessary concessions. The chance to use the West’s nuclear monopoly was squandered in favour of what turned out to be a short-lived military advantage. Instead the policies formulated by Churchill and Roosevelt propelled the world inevitably on the dangerous path of an unrestrained arms race, the end of which is not yet in sight.

Thirdly the emphasis placed on the role of nuclear weapons in 'defence' had a profound effect on the West’s strategy long after its nuclear monopoly had ended. In the late 1940’s it took the form of a build up of strategic atomic bombers as a counter to perceived Soviet
conventional superiority. Instead of stepping back from the moral depravity of World War Two - as seen in Dresden, Auschwitz and Hiroshima - the leaders of the 'free world' descended yet further with plans to kill millions of civilians and destroy whole cities in the name of 'defending liberty'. When their own citizens became subject to such threats, after the Soviet test in 1949, the response of the West seemed to be to rely yet more heavily on massive retaliation, such was the addiction to nuclear weapons that had been created. The British Global Strategy Paper, and the American New Look, now envisaged nuclear retaliation in response to perceived Soviet, non-nuclear, aggression in Europe and Asia. Britain may, in the early 1950's, have been more cautious than its ally about use of the Bomb in Asia. Yet the adoption of the Global Strategy Paper, and support for the rapid nuclearisation of NATO in the 1950's, suggests that the morality of nuclear weapons was at best a minor element in British policy.

In parallel with the growing emphasis on nuclear weapons in NATO's military preparations, and largely as a result of it, the postwar decade saw a persistent and damaging underestimation of the West's relative strength in non-nuclear defences compared with the Soviets. This disparity between public presentation and reality 'on the ground' was recognised by some senior intelligence and military experts. It was also, however, an idea that took on a life of its own, leading Winston Churchill, for example, to argue in 1949:

"I must not conceal from you the truth as I see it. It is certain that Europe would have been communised and London under bombardment some time ago but for the deterrent of the atomic bomb in the hands of the United States." (135)

The myth of conventional weakness meant that, even after the Soviet bomb test, and even after the rearmament of the early 1950's, the NATO
powers continued to rely for their 'defence' on the early first-use of nuclear weapons. Britain must bear a major responsibility for this development.

Fourthly, Britain's foreign policy during these fifteen years, and its nuclear policies in particular, gave top priority to maintenance of a world role and to the development of a permanent special relationship with the United States. As a consequence relations with its West European neighbours, weakened by the war, were given a relatively low priority. During the first postwar decade Britain excluded itself from plans for European union. In the crucial discussions in the early 1950's on the European Defence Community, Britain refused to take part because of its world role, its relationship with the US and its nuclear Great Power status. In doing so it not only excluded itself from European cooperation, it also ensured the demise of the scheme as a whole. Once it was clear that the UK had excluded itself, France's fears of German dominance, combined with its own yearning for a continued imperial role, led that country to oppose military union too. Thus Britain's foreign policy excluded participation in a West European federal state, and indeed prevented such a development taking place. With the benefit of hindsight, it can be argued that this policy may not have been entirely in line with the country's long term economic and political interests.

Britain's nuclear policy also had important consequences in Europe, most directly in France. The emphasis given to an Anglo-American world police force excluded France - as Churchill had made clear in 1945 in discussions with Roosevelt. Yet France's leaders still saw their nation as a Great Power entitled to equal status with their traditional rival Britain. The increased emphasis on nuclear weapons in NATO planning, therefore, encouraged the idea that possession of the Bomb was a
prerequisite for national status and indeed for national security. By refusing to share nuclear information with France, developing its own nuclear weapons, and keeping its distance from discussions of European union, Britain encouraged those forces pressing for a force de frappe for France. The best opportunity for limiting nuclear club 'membership' to the two superpowers occurred during this period: before France's programme had developed a momentum of its own, and while there was still a possibility of Britain merging its efforts with the US. (136) An important consequence of the failure of attempts at such a merger, therefore, was encouragement of nuclear proliferation in Europe and, indirectly, elsewhere. As the first medium-scale power to acquire nuclear weapons, Britain was an example for others to follow. Most directly it encouraged those in France and West Germany who argued for national nuclear forces. Indirectly it started the long and tangled process of proliferation worldwide. It is questionable whether such consequences have been, or will be, beneficial to British security.

Finally, there is considerable evidence that the long run economic costs of the foreign policies of this period have been severe. Immediately after the war, Britain's ambitious objectives required the maintenance of substantial overseas military commitments: firstly to 'hold the fort' while the US was persuaded to take an active world role, and then to maintain a British role as a world power. Only after 1950, however, did the full costs of these commitments become apparent. The rearmament programme of the early 1950's, in particular its demands on scarce resources in the industrial sector of the economy, imposed severe costs on the British economy. Britain's growth rate fell, and its levels of investment and exports stagnated, while its recently defeated, and therefore disarmed, rivals - Germany, Japan, Italy - experienced a
remarkable economic 'miracle'. A precipitate relative economic decline, which was to continue for the next three decades, had begun. It was clear evidence that British governments, whether Labour or Conservative, consistently put the requirements of international status above those of domestic economic development.

The direct contribution of the British nuclear programme to this process was not insignificant. Throughout this period some of the most inventive British scientists and engineers were used in the nuclear and aerospace industries in the effort to develop Britain's 'independent deterrent.' Not only were scarce resources therefore not available for civilian purposes. The structure of civilian investment was itself distorted, with, for example, excess investment in civil nuclear power.

More crucially, however, Britain's possession of nuclear weapons encouraged its illusions of Great Power status and its commitment to a special relationship with the United States, both of which necessitated a high level of defence spending compared with other advanced capitalist states. This high defence burden, in turn, made a significant contribution to the decline of the domestic economy.

The first fifteen years of Britain's nuclear weapons programme, therefore, saw the success of many of the objectives of the wartime political consensus on foreign policy. The US had committed itself to a world role, the perceived Soviet threat to Western Europe had been contained, and Britain had preserved its Great Power status through its special relationship with the US. These achievements did, however, involve serious long term costs. The opportunities for rapprochement with the Soviet Union had not been sufficiently explored. The possibility of
international control of nuclear energy had been excluded by the nature of the arrangement between Britain and the US. Britain had ensured that plans for European union were unsuccessful and had encouraged proliferation of national nuclear forces. And the commitment to Great Power status had entailed substantial costs for the British economy.
Notes


38. Daniel Yergin *op. cit.*, p. 94.
44. *Ibid* pp. 230-1.
50. Ibid.


63. Quoted in B. Rychlowski, 'Goals and Determinants of Polish Foreign Policy', *International Relations, (Poland)*, 1/84, p. 59.


70. Margaret Gowing, *Independence and Deterrence*, *op. cit.*, pp. 64-5.

72. Ibid. pp. 79-81.
73. Ibid. p. 72.
74. Gregg Herken, op. cit., p. 147.
75. Quoted in Peter Pringle and James Spigelman, op. cit., p. 75.
76. Francis Williams, A Prime Minister Remembers, Heinemann, 1961, p. 119.
77. Ibid. p. 77.
80. Ibid., p. 204.
81. Ibid., p. 229.
84. Gregg Herken, op. cit., p. 238.
85. Ibid., p. 266.
86. Matthew Evangelista, op. cit., p. 133.
89. Margaret Gowing, op. cit., p. 251.
90. Quoted in John Baylis, op. cit., p. 35. Also see Duncan Campbell, The Unsinkable Aircraft Carrier: American Military Power in Britain, Michael Joseph, 1984, pp. 27-
92. Ibid., pp. 296-7, 318-20.


98. Ibid., p. 76.


102. The increase to a total of £4700 million over three years was announced in Defençe Programme - Statement made by the Prime Minister in the House of Commons on Monday, 29 January 1951, HMSO, 1951, Cmd 8146.

103. Quoted in Gregg Herken, op. cit., p. 332.


115. Andrew Pierre, op. cit., p. 139.


133. Margaret Gowing, op. cit., p. 4.
134. See R.B. Manderson-Jones, The Special Relationship, Weidenfeld and Nicolson, 1972, pp. 3-5 for development of this idea. Also see Peter Pringle and James Spigelman, op. cit., for Senator McMahon's views.
135. Andrew Brookes, op. cit., p. 36.
CHAPTER FOUR

RETREAT AND REAPPRAISAL: 1955-1968

1. The Shock of Suez

In 1955, Britain's leaders appeared to have achieved considerable success in their foreign and defence policies. Although the nation's poor economic performance was a growing source of concern, governments could take comfort from the belief that Britain remained one of the 'Big Three'. In Asia, the efforts of Foreign Secretary Eden were thought to have been instrumental in preventing American military involvement in Indo-China by supporting a compromise with the Vietnamese. In Europe, Britain's permanent commitment of four army divisions to NATO's Central Front had been crucial in avoiding rifts within the Western alliance, permitting German rearmament, and tying the United States closely to European defence. Finally, Britain's costly investment in its independent nuclear programme was now producing direct and indirect results. Directly it had led to the atom bomb test in 1952, and gave Britain the knowledge necessary to decide, in 1954, to proceed with development of an H-bomb. Indirectly British 'progress' in its nuclear weapons development had led to renewed American interest in collaboration between their two programmes, reflected in the 1954 amendments to the McMahon Act. Both reinforced the belief that Britain retained an important role as a Great Power, together with the belief that the independent nuclear force contributed to the maintenance of that role.

The failure of the Suez invasion in November 1956 therefore came as a considerable shock to the British establishment, dramatically showing the underlying weakness of Britain's economic and military position. Britain was forced to cease fighting, when the invasion was underway, by
intense pressure from the US. The Federal Reserve Bank in New York began selling sterling at a discount, forcing the British government to face the possibility of devaluation. The US Sixth Fleet continually harassed and obstructed the Anglo-French invasion fleet en route for Egypt. The British Cabinet felt it had no alternative available but to back down.

(1) The Suez debacle clearly showed the ultimate dependence of the UK's international position on US support. Britain no longer had the economic resources to withstand American pressure on the pound. Despite the rearmament programme of the early 1950's, the Suez expedition had shown that Britain lacked the conventional forces for effective and timely intervention outside Europe. It confirmed the lesson of the period since the war - that Britain's Great Power status depended on the 'special relationship'. At the same time, by showing that Britain's partner in that relationship - the US - could not be relied upon in time of crisis, it created widespread unease as to the viability of the policies followed since the 1940's.

In the trauma that followed Suez, politicians of all parties began a search for new ideas. Significant figures began to question the continuing commitment to Great Power status, or at least some important aspects of it. While Labour and Conservative had remained, more or less, united in their commitment to a world role and an independent nuclear force up to the mid 1950's, the divergence in views between and within the parties now increased dramatically.

2. **Still Yearning for Grandeur**

As a result of the Suez episode, Anthony Eden resigned as Prime Minister, and his successor, Harold MacMillan, ordered a major review of
defence policy. The result was announced, in April 1957, by Duncan Sandys, the Minister of Defence. The Sandys White Paper, as it became known, reflected the growing belief that the burden of defence on the economy was too high. It noted that:

"Over the last five years, defence has on average, absorbed 10 percent of Britain's gross national product ... it is impossible to escape the conclusion that Britain has been bearing a disproportionately large share of the total burden of Western defence." (2)

In an attempt to make economies in defence spending, the White Paper announced that conscription was to be phased out by 1962, and the size of the armed forces cut from 690,000 to 375,000. Increased emphasis was placed on the role of Britain's independent nuclear force, and it was argued that this would allow substantial economies in conventional forces, both in Europe and Asia. As a consequence, the White Paper argued:

"it can safely be assumed that the new plan, when it is fully implemented, will further appreciably reduce the burden on the economy. Above all, it will release skilled men, including many badly needed scientists and engineers, for employment in civilian industry. Both exports and capital investment will gain." (3)

The Sandys Review expressed its conclusions in stark language, which suggested to some that it represented a radical response to the Suez crisis in the previous year. In fact, what proved more remarkable was how little policy had changed. In reality, the policies set out in 1957, and reaffirmed in 1958, simply represented an implementation of the principles enunciated in the 1952 Global Strategy Paper. Now that British nuclear weapons were becoming available, the plans in that paper could be transformed from declaratory policy into deployments on the ground. The successful development of British H-bombs, and a long-range bomber force to deliver them, would enable Britain to retain its Great
Power role at a lower cost. The emphasis on the independence of the nuclear force would restore, it was argued, national prestige and military power, both seriously brought into question by Suez.

We now examine the main elements of nuclear defence policy during this period in turn. **Firstly**, the development of the independent nuclear force itself. **Secondly**, the role of the 'special relationship' in that development. **Third**, the moves towards nuclearisation of NATO, and Britain's role in these moves. **Fourth**, we look at evolving British defence policy outside Europe, and the role of nuclear weapons 'East of Suez'. **Finally**, we summarise why, as a consequence of the defence policies followed, the British government in the late 1950's and early 1960's proved unable to achieve the reduction in the economic burden of defence which the Sandys paper had promised.

2.1 The British bomb

The Global Strategy Paper, in 1952, had already foreseen an increased role for nuclear weapons in British military plans. Top priority had been given to the V-bombers in order to have a means of 'delivering' the weapon as soon as possible. Shortly afterwards, the government had agreed to construction of new atomic reactors, which would triple plutonium production and thus enable the target of 200 bombs by 1960 to be met. (4)

When the Global Strategy Paper was written, however, Britain was not yet a nuclear power. The first operational, and nationally owned, nuclear weapon - a 20 kiloton fission weapon - would not be in service until late 1953; and even in 1956 the stockpile would only be 14. (5) The first V-bombers only became operational in 1955, though their number grew rapidly thereafter. The Sandys review, therefore, took place just as
the capabilities necessary to put the Global Strategy Paper into practice were becoming available.

The most important new development in the British nuclear programme during the mid 1950's, however, had been the decision to build a hydrogen bomb. In 1952 and 1953 British efforts had been concentrated on producing a useable fission weapon, and little research had been done on the possibilities for a fusion bomb. In 1954, in the aftermath of the American test of a workable H-bomb at Bikini Atoll, it was decided that Britain could not remain in the 'atomic bow and arrow era." (6) A British crash programme to build its own H-bomb would now be given top priority.

Central to the 1954 decision appears to have been a belief that, unless Britain acted quickly, it would be left behind the two superpowers in the atomic arms race. Stalin's death the previous year had begun a thaw in East West relations. Increasing public awareness of the effects of the hydrogen bomb was generating demands for arms talks between the nuclear weapons states. In particular the government was worried by growing domestic demands for an international moratorium on tests. As one recent history of this period has recorded:

"it was felt to be imperative that the United Kingdom should develop a thermonuclear weapon but it was also realised that it might soon be faced with a US-USSR agreement to halt thermonuclear testing and irresistible domestic and international pressures upon them to accept it. Thus it became politically vital... to develop a thermonuclear weapon design concept in the shortest possible time..." (7).

In the event, Britain's intensive research effort between 1954 and 1958 paid off. The first H-bomb test took place on 15 May 1957 and by September 1958 a further eight tests had been conducted, enough to give
the government confidence in their ability to explode bombs with a yield of up to ten megatons. The effort proved to be well-timed. Only one month after the last test, on 31 October 1958, a US-USSR-UK moratorium on nuclear testing began.

The successful development of an H-bomb by these three countries led to a growing realisation that mutually assured destruction (M.A.D. for short) would soon be the inevitable outcome of full-scale war between East and West. The British bombs tested at Christmas Island in 1958 had yields of approximately ten megatons, and made the fission weapons used on Hiroshima and Nagasaki appear small by comparison. As the 1957 White Paper made clear:

"It must be frankly recognised that there is at present no means of providing adequate protection for the people of this country against the consequences of an attack with nuclear weapons. Though, in the event of war, the fighter aircraft of the Royal Air Force would unquestionably be able to take a heavy toll of enemy bombers, a proportion would inevitably get through. Even if it were only a dozen, they could with megaton bombs inflict widespread devastation." (8)

As a Soviet General put it more bluntly:

"There are optimists and pessimists in Britain. The pessimists think five H-bombs will wipe out everyone in Britain, the optimists think it will take eight. We have 200." (9)

With the humiliation of Suez the previous year, and the widespread belief in the futility of non-nuclear defences in the face of the H-bomb, British development of its own H-bomb could not have come at a more opportune moment for the governing elite. The prospect of an independent strategic nuclear force enabled Britain's rulers to regain their pride in their country's international status, and encouraged the
illusion that it could retain a world role. As Prime Minister Harold Macmillan claimed:

"The independent (nuclear force) ... gives us a better position in the world, it gives us a better position with respect to the United States. It puts us where we ought to be, in the position of a Great Power." (10)

Indeed for some the immense power of the H-bomb had at least one advantage: it would have a 'levelling' effect between all those who possessed it, thus allowing Britain to exist on equal terms with the two military giants. As Julian Amery, M.P. argued:

"It would seem that the hydrogen bomb, when we have it, will make us a world power again. The atom bomb rather put us out of the race because only big territorial expanses like the United States or the Soviet Union could stand up to atom-bombing and hope to survive. We should have been obliterated very quickly. But the hydrogen bomb is a great leveller. It cancels out the disparity between population and the big areas of territory and smaller ones. It would be just as dangerous for the Soviet Union or the United States to incur thermonuclear bombardment as it would be for us." (11)

It appears paradoxical, with the benefit of hindsight, that emphasis on nuclear weapons in Britain's military plans increased just as the suicidal nature of that policy became ever more apparent. It is partly explained by the trends in US policy, to which British thinking was closely attuned. More importantly, it demonstrates the extent to which Britain's nuclear force was designed to fulfil political rather than military objectives. In particular it was hoped that full membership of the nuclear 'club' would restore British prestige and put its relations with the US on a sound footing. As Denis Healey put it, the government had needed a "virility symbol" to compensate for "the shock of having their military impotence exposed at Suez". (12)
2.2 The nuclear relationship

Although 1957 saw increasing emphasis on the independence of the British nuclear 'deterrent', the government made it clear that the special relationship with the US remained central to British policy. Britain's nuclear force was not justified, in public at least, on the basis of lack of trust of the US - as French nuclear weapons would be under de Gaulle. Rather it was necessary, it was argued, to gain a privileged position of influence with US leaders, enabling the special nuclear relationship envisaged by Churchill and Roosevelt in 1943 to be revived and refreshed.

Because of his commitment to such a policy, Prime Minister Macmillan quickly moved to restore Anglo-American relations after Suez. In Bermuda in March 1957 and in Washington in October 1957, he and President Eisenhower reached a series of agreements which brought closer nuclear collaboration than at any time since 1945. First, in what Eisenhower described as "by far the most successful international conference that I had attended since the close of World War Two," the two leaders agreed at Bermuda to install sixty Thor intermediate range ballistic missile in Britain under a 'dual key' system. (13) Second, the RAF was given detailed information on weapon designs and weights to enable it, if necessary, to carry USAF bombs. Thirdly, at the October meeting, the two leaders agreed to seek amendments to the 1954 Atomic Energy Act which would give Britain access to information about Soviet nuclear capabilities. Transfer of enriched uranium and a nuclear submarine propulsion plant were also included in the Agreements eventually passed by Congress in July 1958 and May 1959. (14)

Both Macmillan and Eisenhower, who had worked closely together during the war, wished to improve nuclear cooperation between their two
countries as part of a 'healing' process after Suez. The crucial factor in the US acquiescence, however, appears to have been the realisation that Britain could, in critical areas, have something to offer. As a result of the latter's long years of independent research and development, Britain possessed information which the American scientists were anxious to acquire. (15) The exchange was assymetrical, but not entirely one-way.

The exclusive nature of the agreements made in 1957 and 1958 demonstrated, once again, the priority given by the British government to Atlantic links over European links. While Macmillan restored the 'special relationship', its continental neighbours - France, West Germany, Italy, Belgium, Holland and Luxembourg - were establishing the European Economic Community without UK participation (16). The resentment amongst European countries - particularly in France - at the preferential terms given to the UK in nuclear matters would continue to sour relations between Britain and Europe in the years to come.

Despite the agreements reached in 1957 and 1958, however, Britain found it increasingly difficult to keep up with the arms race between the United States and the Soviet Union. New developments in technology threatened the long term viability of Britain's V-bomber force even before it had fully come into service. The Soviet Union was now beginning to deploy medium-range ballistic missiles in large numbers, which might give Bomber Command as little as four minutes warning of a pre-emptive attack; and improved Soviet air defence, designed to counter the US Strategic Air Command, also threatened to render Britain's V-bombers much less effective. As early as 1955 research and development began to take place on possible successors to the V-bomber as Britain's strategic nuclear force. (17)
Central to Britain's difficulty in maintaining an independent nuclear force in the years that followed was the growing cost of the delivery systems required. The V-bomber force itself had proved to be a severe burden on the defence budget, consuming 10% of defence spending in 1958-9. If one also included spending on the fighter force and the control and warning system, necessary to protect bomber bases, the cost added up to between 15 and 20 percent of total defence spending. (18) With Britain's defence spending already higher as a proportion of national income than any other major Western country except the US itself, the government could not afford to allow the costs of the nuclear force to rise further. While the H bomb tests had, it was thought, allowed Britain to keep up with the superpowers in the development of nuclear weapons themselves, the beginning of the missile age now threatened to leave it behind in the systems necessary to deliver those weapons.

At first, two systems were considered as replacements for the V-bombers. The first, the Avro-730 supersonic bomber, soon came up against the same difficulties as the V bombers were beginning to face. As a result, it was cancelled at an early stage of development as part of the economies announced in the 1957 White Paper. (19) The second alternative was the Blue Streak intermediate-range ballistic missile. At the time this was thought to be a purely British development. After its cancellation as a military project, however, it was revealed that its rocket engine and internal guidance system were based on the US's Atlas rocket, and were being manufactured in Britain under licence. (20)

Blue Streak did not survive for long. By 1960 it was estimated that it would have cost between £500 and £600 million to complete. (21) This was equivalent to £3600-4300 million at 1983-4 prices, around twice
as much as the Polaris system eventually chosen. Even more damaging, it was clear that Blue Streak would be extremely vulnerable to pre-emptive strike. A liquid-fuelled missile, it required fifteen minutes warning before launching. Yet the newly installed early warning system (at Fylingdales, Yorkshire) could only guarantee four minutes. At first this problem was tackled by a decision to deploy the missile in hardened underground silos, thus forcing costs up. It was feared, however, that even this would not suffice in protecting Britain's strategic force against surprise attack by the megaton yield SS4 and SS5 weapons now being deployed by the Soviets.

As a result of these factors, the Defence Committee of the Cabinet decided, in February 1960, that Blue Streak must be cancelled. (22) Before making a public announcement, Macmillan discussed possible replacements with Eisenhower at their Washington meeting in March 1960.

The British were given two options - the Skybolt air-launched ballistic missile or the Polaris sea-launched ballistic missile. Each was being developed for the United States' own nuclear forces. Britain would, Eisenhower agreed, be allowed to purchase the system 'off the shelf', minus warhead, for its own use. Macmillan chose Skybolt in preference to Polaris, and the decision was announced to the House of Commons on 13 April 1960. Both the RAF and Royal Navy supported this decision, the former because it would prolong the role of the V-bomber force until around 1970, the Navy because it was more interested, at this time, in gaining the resources for its new aircraft carrier programme. The decision to remain with an air-based system was strongly influenced by this unanimity of military advice.

Simultaneously, and "more or less in return for Skybolt" according to Macmillan, (23) Britain agreed to allow the US to base its own Polaris
missile submarines at Holy Loch in Scotland. Combined with the decision to rely on a US-manufactured missile for Britain's own nuclear force, this sparked off widespread controversy over the wisdom of government policy. In a debate which would be echoed again in the early 1980's, opponents of the proposals were concerned at the lack of British control of US missiles based in the Holy Loch. The clear contrast with the land-based Thor missiles, which were operated by a 'dual key', increased the fears aroused. Yet it is clear that the US would not have allowed those weapons, or indeed its bombers based in Britain, to be subject to British veto. (24) If the UK wanted continued US assistance in maintaining an 'independent' nuclear force of its own, it would have to accept the risks involved in basing the US's own forces on its territory.

With these developments it now appeared to many that the careful tightrope between independence and interdependence which Britain's nuclear programme had walked since the 1940's was threatening to become dependence of a most unwelcome nature. As the policies of the US Administration that was to succeed to power in 1960 would soon make clear, it proved to be a vulnerable position for Britain to be in.

2.3 The nuclearisation of NATO

Since the Global Strategy Paper, British defence policy had sought to use nuclear weapons as a means by which to reduce the economic burden imposed by multiple military commitments without reducing the commitments themselves. As part of this policy, the biggest reductions announced in the 1957 White Paper were in forces for defence of Europe. The British Army of the Rhine was reduced from 77,000 to 64,000 in 1957-8 and further
cut to 55000 in 1958-9. The Second Tactical Air Force in Germany was to be reduced in size by half within one year, with a similar reduction in the light bomber force in England, which was assigned to NATO. Finally, the government abandoned plans for more advanced fighter aircraft and made deep cuts in Fighter Command, whose role was to be confined to defence of British and American nuclear bomber bases. Even in this limited function manned aircraft would, in due course, be replaced by missiles.

In order to justify these cuts the government argued that, in line with NATO's policy of 'massive retaliation', nuclear weapons would be used at an early stage of any major conflict. Soviet conventional superiority in any case made large armed forces redundant. It was better to concentrate efforts on arming NATO with tactical nuclear weapons in order to counter this superiority. Accordingly, the White Paper announced, "atomic rocket artillery will be introduced which will greatly augment the fire-power" of the British Army of the Rhine; and the reduction in the Second Tactical Air Force would be "off set by the fact that some of the squadrons will be provided by atomic bombs." (25)

The nuclearisation of British policy took place as part of, and encouraged, parallel developments in NATO as a whole. In the same way that the Sandys White Paper of 1957 can be seen as putting the Global Strategy Paper into practice, so NATO's decisions in 1957 and 1958 can be seen as reflecting the New Look decided upon in 1954. As battlefield nuclear weapons became available in large numbers, NATO came increasingly to assume that they would be used at the outset of any war in Europe. In 1956, Field Marshal Montgomery, speaking as NATO's Deputy Supreme Commander, reasserted that all plans were based on using nuclear weapons
with the sole proviso that "the politicians have to be asked first." 
"That might be a bit awkward, of course," he added, "and personally I 
would use the nuclear weapons first and ask afterwards." (26)

The British government's official justification for NATO's 
'tripwire' policy rested on the supposedly massive Eastern superiority in 
conventional forces. The 1958 White Paper explained this point in plain 
terms:

"(Russia's) basic strength lies in her overwhelming 
superiority in conventional armaments and military 
manpower... The West, on the other hand, relies for 
its defence primarily upon the deterrent effect of its 
vast stockpile of nuclear weapons and its capacity to 
deliver them... the strategy of NATO is based on the frank 
recognition that a full-scale Soviet attack could not be 
repelled without resort to a massive nuclear bombardment 
of the sources of power in Russia."

The White Paper went on to argue that the asymmetry between Eastern 
conventional superiority and Western nuclear superiority meant that 
multilateral nuclear disarmament was not possible "without fully 
compensating reductions in (the) conventional forces" of the Soviets. 
"Otherwise", it argued, "Russia would be left in a position to dominate 
the world." (27)

Although the perception of overwhelming Soviet conventional 
superiority played an important part in justifying NATO policy, however, 
other factors were probably of greater importance. Central was the 
belief that a war in Europe with the Soviet Union was most unlikely. 
Since Stalin's death in 1953, there had been a marked thaw in the 'Cold 
War'. The first summit meetings since the 1940's had been held and in 
May 1956 the Soviets had announced reductions in their armed forces by 
1,300,000 men. (28) British leaders believed that war was sufficiently
unlikely for it to be an acceptable risk to rely on nuclear weapons. As the government explained in 1958,

"There is thus no military reason why a world conflagration should not be prevented for another generation or more through the balancing fears of mutual annihilation. In fact, there is no reason why all this should not go on almost indefinitely." (29)

A reliance on nuclear weapons not only capitalised on what remained a Western 'advantage'. It also helped the British government reduce defence costs in Europe, releasing resources for other, military and civilian, uses. Finally, since the West's nuclear superiority was based entirely on American and British forces, the policy of massive retaliation emphasised the continuing leadership of the wartime triumvirate within NATO. By contrast, a reduction in reliance on nuclear weapons could have reopened debate about the structure of power within NATO, and on Germany's role in particular. As long as Soviet attack remained extremely unlikely, Western leaders saw no reason to jeopardise the considerable achievements of postwar economic and political reconstruction in Europe.

Nuclear weapons, therefore, increasingly came to dominate NATO planning as a means of offsetting Soviet conventional forces and enabling the costs of defence to be reduced. The corollary of this policy was, however, that all NATO forces - not only those of the US and UK - should be equipped with American-supplied battlefield nuclear weapons. Otherwise, it was argued, their armies and air forces would become ineffective and irrelevant or, more likely, pressure would grow for the production of costly national nuclear forces. The effect of the latter, particularly in the case of the Federal Republic of Germany, might well
destabilise the delicate political balance within NATO and exacerbate tensions with the Soviets.

In response to such considerations, American military planners gave serious consideration to providing European allies with both the delivery vehicles and the warheads necessary for tactical nuclear warfare. As a result of Congressional misgivings, however, a compromise was reached, in which nuclear delivery vehicles - aircraft, Honest John missiles, atomic artillery - would be supplied to the European allies. The warheads themselves would be held under US custody until "in time of emergency" authorisation to 'release' them to the allies would be given. (30) The first example of this 'dual key' control agreed was the 60 Thor missiles which Macmillan agreed, in March 1957, should be deployed in Britain. The December 1957 NATO Council meeting then cleared the way for a series of agreements with other member states, as a result of which, only 3 years later, there were 2500 American land-based tactical nuclear weapons in Europe. (31) By January 1961 Honest John missiles were deployed with the forces of Greece, Netherlands, West Germany, the UK and the US; and by 1965 US nuclear warheads were mounted on quick alert aircraft of nine NATO allies. (32) In such circumstances, war in Europe would almost inevitably go nuclear at an early stage. The United States had thus effectively devolved control of its nuclear weapons to NATO's military command and indeed to the constituent armies of the Alliance. Massive retaliation was now embodied in the very structure of NATO armed forces. (33)

As the next section of this thesis shows, these policies were implemented despite the reservations of both France and West Germany - still relatively weak members of the Alliance. But between 1957 and 1960, doubts as to the wisdom of total reliance on nuclear weapons also
grew in both Britain and the United States, the countries mainly responsible for the New Look. The fundamental reason for this unease was the evidence of growing Soviet nuclear capabilities. In particular the launch of the first artificial satellite - Sputnik - by the Soviets in 1957 indicated that the US itself would soon be vulnerable to attack with nuclear missiles. When that vulnerability became a reality, would the Soviets believe that the United States would contemplate national suicide in defence of Western Europe? It was an argument which had a profound effect in the US, which for the first time for over a century found itself faced with war affecting, not only US troops overseas, but the US homeland itself. At first Britain attempted to reaffirm that Sputnik had not upset the balance of power and that "it will take her several years to complete the development of an accurate inter-continental rocket." (34) Soon after, both governments began to recognise the arguments of those critics - political and military - who argued for a policy of 'graduated deterrence' and conventional forces able to force a pause in a European war before escalating to an all-out nuclear holocaust. This conversion was assisted by the realisation that, if NATO were to follow the logic of total reliance on nuclear weapons, even larger cuts in the size of armed forces could be made. Such a prospect was unacceptable to powerful elements in the armed forces, both because they were unwilling to rely entirely on a nuclear response and for reasons of self-preservation.

As a consequence of these factors, the retreat from the extremes of 'massive retaliation' began. When the British government attempted to cut the British Army on the Rhine by a further 10,000 to 45,000 in 1959, it met strong opposition from other NATO members who reminded it of its 1954 Treaty obligations. Despite a report of three independent experts
appointed by NATO's Secretary General which concluded that the cost of BAOR represented a heavy additional cost on the UK balance of payments, the government was forced to withdraw the proposal. (35) The British Army's strength in Germany has remained at 55,000 ever since.

Reflecting this shift in declaratory policy away from exclusive reliance on nuclear retaliation, the 1960 White Paper emphasised that Western nuclear power "is only one component of the deterrent. Because of the need to meet local emergencies which could develop into a major conflict, conventionally armed forces are a necessary complement to nuclear armaments." (36) It is a message that would become stronger as the pressure from the US increased.

Yet this shift in declaratory policy was not matched by a comparable shift in Army doctrine or in the deployment of battlefield nuclear weapons. "In Exercise Spearpoint, held in 1960, the BAOR exhibited "virtually complete reliance on nuclear weapons", and observers were told that "nuclear weapons would have been used from the commencement of any conflict if war had replaced war games." (37) As the attempt to introduce 'flexible response' into NATO planning in the next few years would show, it was much more difficult to reduce reliance on nuclear weapons than it had been to increase it. The close integration of nuclear weapons into NATO's ground and air forces, designed for a policy of massive retaliation in a situation of Western nuclear superiority, would continue even after neither of these conditions applied.

2.4 The nuclear contagion spreads

In 1954, during the discussions on the development of a British
H-bomb, a confidential paper was written by Nigel Birch, Parliamentary Secretary to Minister of Defence Harold Macmillan. Birch argued against the development of thermonuclear weapons by Britain on the grounds that it would complicate disarmament efforts and encourage other nations to develop their own nuclear weapons. His proposal did not, however, find other supporters in government. (38) Instead Britain, as we have already discussed, accelerated its own nuclear programme and supported moves by NATO to increase the reliance on nuclear weapons in European defence.

As a result of these two factors, irresistible pressures built up on other medium powers also to acquire nuclear weapons, pressures that might have been avoided had Birch's proposals been accepted.

The initial impact of this pressure was felt on the two other medium scale military powers in NATO - France and West Germany. The indirect effects were, however, more widespread as nations such as China and India felt that nuclear weapons and status were linked and responded accordingly. If Britain had renounced its commitment to an independent force before 1954, and if the super powers had restricted nuclear weapons to a second strike 'minimum deterrent' role after the Soviet test in 1949, proliferation may still have taken place. It would, however, it is suggested, have been both slower and easier to control. As events occurred, a dangerous process began which has not yet ended.

2.4.1 France and nuclear weapons

The French debate on whether or not to acquire a national nuclear force was not resolved until some time between 1954 and 1958. A number of factors contributed to the eventual decision to acquire an independent 'force de frappe'. As in Britain, the experience of Suez in 1956
strengthened the desire not to be entirely dependent on the US for nuclear protection, and also led to a desire for a symbol of continuing national grandeur. If Britain, the other major European colonial power, was developing its own nuclear weapons, then it was argued that France must do so in order to maintain its international status. If the French did not have a 'special relationship' which enabled it to do so, it would have to develop its force without American help. NATO's adoption of a 'massive retaliation' policy only strengthened French leaders' association of nuclear weapons with status.

Thus, when de Gaulle came to power in 1958, the clearly discriminatory nature of Britain's exclusive nuclear relationship with the US, as expressed in the amendment to the McMahon Act being passed by Congress, was seen as a clear incitement. One of de Gaulle's first decisions was to "open up the throttle on the French nuclear programme." (39) Henceforth there would be no turning back on a French bomb - and as a consequence, the task of any future British government wishing to renounce independent nuclear weapons would be considerably more difficult.

If the US would not provide assistance to the French nuclear programme, however, de Gaulle rapidly decided that there was no benefit to be gained from accepting the risks involved in allowing US nuclear weapons on French soil. In June 1959 he forced the removal of more than 200 NATO fighter bombers from France because they carried nuclear weapons outside French control. (40) Henceforth France would argue strongly against US efforts to reduce the reliance on early first use in NATO doctrine. Yet it would make it just as clear that it was unwilling to share the risks that such a policy involved by refusing any foreign nuclear bases on its own territory.
2.4.2 Germany and nuclear weapons

The West German political elite has always had a more ambivalent attitude towards nuclear weapons. The issue came dramatically into the public debate in 1955 when the result of Operation Carte Blanche - a NATO war game - showed that the use of 355 nuclear weapons in 'defence' of Germany resulted in 1.7 million deaths and 3.5 million wounded. (41) With their country clearly the potential battleground for a nuclear war, over which their government would have little control, fierce debates raged throughout the late 1950's. In August 1956 the German Chancellor Konrad Adenauer wrote in the Bonn government's official Bulletin:

"As to the debate which was started by Americans about the relationship between conventional and nuclear weapons, I would like to stress that I regard shifting the principal emphasis to atomic weapons at the present time as a mistake ... I am of the opinion that it is of special importance to localise small conflicts that may occur, and for this we need divisions with conventional weapons." (42)

At this time, however, the German government's influence over NATO policy - even when it concerned its own territory - was severely circumscribed. The Federal Republic's existence had been extremely short, with the revised German Treaty signed in Paris in October 1954. The treaty itself limited the new state's sovereignty by giving the three Western powers - the US, UK and France - the right to station armed forces in West Germany, and committing all its own armed forces to NATO, and therefore American, command. (43) The German government, faced with the joint determination of Britain and the United States to implement the 'New Look', felt that it had no alternative but to fall into line. As a consequence, Adenauer altered his position in 1956, appointed Franz Joseph Strauss, strong advocate of nuclearisation, as Defence Minister, and agreed to a request for access to US weapons on a 'dual key' basis. (44) And, in the following year, secret negotiations began with France
on a joint effort to develop and produce nuclear weapons which would be available to Germany in a crisis. Such an arrangement, the French argued, would either force American aid to European nuclear programmes or end what was perceived as Anglo-American domination of the alliance. (45) The discussions were not halted until de Gaulle, a convinced anti-German, came to power in June 1958.

The British development of an independent nuclear force, together with its support for the New Look, exerted strong pressures on the new German state to press for access to, and perhaps control over, its own nuclear arsenal. Developments in France strengthened this trend. Although the German signature of the Non Proliferation Treaty in 1970 effectively resolved the problem for the time being, the inequality of nuclear status between the three major European powers, and the potential for a German change of heart, would continue to be a danger in the minds of policymakers in West and East.

2.5 Nuclear weapons and Britain's world role

In the late 1950's the British government believed that the greatest threat to Western interests came from communist-inspired revolution and small-scale wars in the Third World. In Europe the nuclear stand-off and political stability made the likelihood of conflict small. Together with the US, however, the UK government was concerned that the decolonisation process in Asia, Africa and the Middle East, together with the stresses created by dependency relationships in Latin America, would allow the Soviet Union to make further advances at the expense of the West.

Such an argument reinforced Britain's commitment to a continuing world policing role, which itself was closely related to its imperial
status. In the years that followed Suez, the relative emphasis on extra-European military commitments actually increased. Britain was encouraged to play a world role by American leaders anxious to maintain a loyal ally in their global policy of containment. The British were pleased that, in this role, their special relationship with the US was reaffirmed, and the legitimacy of their remaining colonial possessions accepted.

By allowing cuts in the costs of the UK's NATO commitments, therefore, it was hoped that the policy of 'massive retaliation' would fulfil one of its primary functions: to release resources for Britain's 'East of Suez' role. As we have seen, such hopes proved to be shortlived. As Soviet nuclear power grew, the reluctance to rely entirely on nuclear weapons for defence of Western Europe also increased, and the savings made proved to be relatively limited. In addition to savings in NATO related military costs, the 1957 policy also sought to make savings in 'East of Suez' costs by increased reliance on nuclear weapons. Together with an increased capability for airlift of a 'strategic reserve' of troops, tactical nuclear weapons could, it was thought, substitute for expensive conventional forces in much the same way as they did in Europe. In particular, nuclear weapons would enable Britain to end conscription, which imposed a substantial burden on an economy critically short of manpower. As Macmillan argued in 1957: "the end of conscription must depend on the acceptance of nuclear weapons."

(46)

The possible use of nuclear weapons in conflicts outside Europe was part of US policy throughout the 1950's. On several occasions, their use had been actively considered, notably in Korea (1953), Indochina (1954) and the Quemoy/Matsu crises (1954-5 and 1958). As John Lewis Gaddis argued in his study of containment strategies "the Eisenhower
administration's restraint in this regard (not using nuclear weapons - MC) had clearly been a function of circumstance, not any principled opposition to the use of nuclear weapons in limited wars." (47)

British thinking paralleled that in the United States on this point, just as the Global Strategy Paper paralleled the New Look. The 1955 White Paper had argued that "the existence of nuclear weapons may discourage overt armed intervention by the communist powers such as occurred in Korea." (48) Sandys himself, in defence of his White Paper, envisaged the possibility of limited nuclear war in the Third World:

"Limited and localized acts of aggression, for example, by a satellite Communist state, could, no doubt, be resisted with conventional arms, or at worst, with tactical atomic weapons, the use of which could be confined to the battle area." (49)

Lord Mancroft, Parliamentary Secretary to the Ministry of Defence, expanded on the possible use of nuclear weapons by arguing that Britain contributed to the security of its CENTO and South East Asia Treaty Organisation (SEATO) partners "by the very fact of our possession of nuclear deterrent forces which could intervene with great effect in those areas." The White Paper confirmed that bomber squadrons based in Cyprus, and capable of carrying nuclear weapons, would be available for CENTO purposes in the event of a Middle East emergency. Later that year, in Australia, Sandys confirmed that nuclear weapons would be available for defence of the SEATO area, and went on to say that Canberra bombers equipped to carry atomic weapons would be going to Malaya. Although he declined to say whether the nuclear bombs themselves would be based in Asia, he said that "when they are brought here, to the SEATO area, I don't think anything will be said about it." (50)
Fortunately no circumstances arose which were judged serious enough to warrant use of tactical nuclear weapons in those years—probably the height of British reliance on nuclear weapons. Nevertheless as late as July 1961, V-bombers were placed on readiness in Malta during the Kuwait crisis. (51) If another conflict on the scale of Korea had taken place in those years, the use of nuclear weapons by Britain and/or the US would have been a strong possibility.

Despite the emphasis on nuclear weapons in East of Suez roles, however, the economies achieved in the late 1950's proved to be less than the ambitious 1957 White Paper had envisaged. The costs of reliance on a strategic reserve—such as large equipment stockpiles and long-range transport aircraft—turned out to be considerable. The end of conscription meant that pay and conditions had to be considerably improved in order to attract volunteers. Service pressure for more sophisticated weapons systems for East of Suez operations had a firm basis in military reality; and capabilities thought to be unnecessary in 1957—such as manned aircraft—had to be reintroduced into the equipment programme. Nuclear weapons may have been envisaged for small-scale 'conventional' wars—such as Korea—but in the counter-insurgency and guerilla warfare in which Britain was involved they had no relevance. By 1960, therefore, the savings from the Sandys reforms had been exhausted. The cuts in the British Army and RAF units in Germany had been halted. The costs of maintaining an independent nuclear force were rising sharply. Reliance on nuclear weapons, together with an end to conscription, had produced only limited savings in East of Suez costs.

The policy of the Global Strategy Paper—using nuclear weapons to retain Great Power status at reduced cost—had proven to have definite limitations. Indeed, rather then helping to cut the level of military
spending, the independent nuclear force itself involved substantial direct costs. As importantly, perhaps, its existence reinforced illusions of world status that ensured that the savings made would remain severely limited. The failure to reduce the burden of military spending would, as a result, continue to contribute to the economic malaise which was to become a growing object of concern by the early 1960's.

3. The McNamara Strategy and the Nassau Agreement

By the late 1950's, the policies outlined in the New Look and Global Strategy Paper were coming under increasing criticism. It was increasingly believed that 'massive retaliation' was no longer a credible option, now that the Soviets were developing a capability for destroying American, as well as European, cities. It would be irrational, and indeed suicidal, to respond to Soviet military advances only by escalation to all-out war. Knowing this, the Soviets would no longer be deterred by a threat to do so. An alternative strategy, involving more limited military options, was therefore needed.

These criticisms were reinforced by the rapidly growing public awareness of the effects of nuclear war. The H-bomb atmospheric tests in particular alerted large numbers of people to their possible fate in a future conflict. With the intensity of the Cold War reduced after Stalin's death, greater political space was becoming available for critiques of defence policy that could not be labelled as pro-communist. The most radical manifestation of this change was the establishment of CND in 1957. It was also reflected, however, in growing criticism of NATO strategy from the leaders of the Labour and Liberal parties. In the armed forces, on the Conservative back benches, and amongst the new breed of 'strategic analysts', the support for new strategies was growing.
Common themes emerged in these criticisms. First, it was argued that NATO strategy was likely to become increasingly less able to deter Soviet attempts to make local gains. As one of the most influential articles of this period argued.

"Increasingly, therefore, our present policy is in danger of being interpreted as bluff - if indeed it does not prove to be one - for any aggression between an all-out war and a very minor one; and it leaves much room for misunderstanding and Communist exploitation."

Secondly, many commentators doubted whether there was any justification for an independent British nuclear force, and argued that Britain should make its commitment to NATO in conventional, and possibly tactical nuclear, forces only. This became the official policy of the Labour Party, and was supported by many who did not agree with the completely non-nuclear policy proposed by CND. These criticisms began to affect official policy as early as 1957; and by 1959 and 1960 had brought about a noticeable retreat from the extremes of 'massive retaliation' in both the US and the UK. Official statements now put more emphasis on the possibilities for limited wars and the cuts in the level of NATO conventional forces came to a halt.

3.1 The McNamara Strategy

The major impact of the discussions of the late 1950's was not seen, however, until the election of a new President, John F. Kennedy, in January 1961. Kennedy had become convinced that massive retaliation policy had been driving the United States "into a corner where the only choice is all or nothing at all, world devastation or submission - a choice that necessarily causes us to hesitate on the brink and leaves the initiative in the hands of our enemies." On taking office, he appointed a series of senior advisors with a mandate to undertake a major
review of US security policy. Robert McNamara became Secretary for Defence, and set about introducing central planning and systems analysis into a budget dominated by interservice rivalry. The leading figures in the 1950 review of policy, NSC-68, re-entered government convinced that policy must now accommodate to emerging Soviet nuclear strength. Paul Nitze became Assistant Secretary of Defence for International Security Affairs, and was directed to draft a revised version of the 'basic national security policy' of the Eisenhower administration. Former Secretary of State, Dean Acheson, was asked to undertake a study of NATO defence policy, which he completed in March 1961. (55)

A central theme in the new US policy developed through 1961 and 1962 was a critique of the implicit assumption in previous policy that a major war was extremely unlikely. Instead it was believed that, while not likely, war was possible. The government, therefore, must plan to fight these wars in a rational way if US national objectives were to be achieved. It was a belief reinforced by the 1961 Berlin crisis, which began to build up just as Kennedy was taking office. The 1962 Cuban missile crisis further increased the desire for a military strategy that depended less on all-out nuclear war as a deterrent to limited, non-nuclear threats to US interests. (56) At the same time, a strong presumption became established that there must be a rational, but limited, way to use military force in crises. This, in turn, created a strong tendency to focus solely on military solutions to the exclusion of political factors. It was an error which proved dangerous in Berlin and Cuba. It was to lead to failure and humiliation in the jungles of Indo-China in the years that followed.

Central to the US 'strategy' which Kennedy and McNamara inherited was the Single Integrated Operational Plan (SIOP) - the detailed plan for
conduct of a nuclear war. When briefed on SIOP two weeks after taking office, McNamara found that SIOP-62, then the current version, called for:

"an all-out pre-emptive first-strike against the USSR, Eastern Europe and Red China, in response to an actual or merely impending Soviet invasion of Western Europe that involved no nuclear weapons at all." (57)

McNamara was horrified. SIOP was so organised that there was no possibility for excluding Communist states - such as China or Albania - which were not closely allied to the Soviet Union. There was no planning for less-than-total nuclear options. SIOP-62 involved launching the entire US nuclear force of 3423 nuclear weapons, totalling 7847 megatons. Even on extremely optimistic assumptions on the effects of these explosions, 285 million Russians and Chinese would be killed, and many more would die, in East and West, as fallout spread worldwide. (58)

In reaction to this policy, which embodied massive retaliation in its most extreme form, the new rulers in the Pentagon introduced a series of radical changes. Flexibility was to be introduced into nuclear targetting, allowing a choice between military and civilian targets, between strategic and other military targets, and between targets in the Soviet Union and those in other communist countries. The possibility of limited use of nuclear weapons to 'signal' determination to escalate, rather than initiating large-scale nuclear war, was envisaged. The need for an option which allowed enemy leaders to be spared from nuclear attack, so as to make intra-war bargaining possible, was emphasised. Studies were set in motion on the feasibility of large-scale civil defence preparations which would make US use of nuclear weapons more 'credible'. The funds for command, communications and control were greatly increased, in an effort to improve central Presidential control of the progress of nuclear war.
In addition to these steps to introduce more flexibility into US plans for the use of strategic nuclear weapons, the new Administration also began to re-examine the commitment to the use of tactical nuclear weapons to offset Soviet conventional forces in Europe. With the nuclearisation of Allies' forces through the supply of 'dual-key' delivery systems, American control of nuclear weapons had become extremely tenuous. In 1960, members of Congress's Joint Committee on Atomic Energy had visited Europe and found fighter aircraft loaded with US nuclear bombs sitting on the edge of runways with German pilots inside the cockpits and starter plugs inserted. The only US control apparent was an American officer nearby with a revolver. (59) It was clear that the European allies, the Supreme Allied Commander Europe (SACEUR), and indeed relatively low level military commanders, could initiate the use of US nuclear weapons without Presidential authority. Indeed once a major conflict had started it would be extremely difficult to stop nuclear weapons being used in large numbers.

As a result of such fears, the new Administration decided in 1961 to install Permissive Action Links (PAL) on nuclear weapons in Europe. It was hoped that these would prevent their being used without authorisation, though recent studies suggest that such a hope may have been misplaced. (60) Nevertheless it did indicate, as did the new strategic nuclear policy, that the Kennedy team was serious in its desire to have military options other than automatic nuclear retaliation.

Thirdly, McNamara and his colleagues put much greater emphasis on the role of conventional forces than had been apparent under Eisenhower. Close examination of the conventional forces of both NATO and the Warsaw Pact revealed that, far from Soviet superiority being overwhelming, there
was rough parity in the two alliances' ground forces. In both sea and air forces, furthermore, NATO had a considerable, and perhaps decisive, lead. The argument of the 1950's - that NATO had to rely on first use of nuclear weapons because of the relative weakness of its non-nuclear forces - did not stand up to scrutiny. As McNamara, Nitze and other top Pentagon officials confirmed publicly in 1963, the assumption which had governed NATO policy since the 1940's was now believed by the US government to be wrong. (61)

In a rather ironical twist, the higher estimate of Western conventional forces' strength led to greatly increased support for improvements in those forces. Now that eventual escalation to use of nuclear weapons, as an alternative to defeat, was no longer perceived as inevitable, the government was more inclined to devote resources to making such a choice less likely.

Within a short period, spurred on by the Berlin crisis in 1961, the US made considerable additions to its conventional forces. The active strength of the army rose from 11 to 16 divisions, and tactical fighter strength from 16 to 21 wings. Mobilisation, airlift and pre-positioning capability were enhanced. Between early 1961 and January 1962, SACEUR's ready division equivalents on the Central Front increased from about 16 to 25. The US urged further increases on its NATO allies to bring the division count up to 30 ready divisions plus 30 in reserve, a goal set by SACEUR General Norstad. (62)

3.2 The Athens speech

In May 1962, McNamara gave a major speech to the North Atlantic Council meeting in Athens. In unprecedented detail he described the new policy of 'flexible response' which the US wished NATO to adopt. He
argued cogently for a reduction in reliance on nuclear weapons, and sought the Allies' support for a build-up of conventional forces. The speech started the process which resulted in the formal NATO adoption of a 'flexible response' strategy in 1967, though not in a form entirely in line with McNamara's 1962 thinking.

In his speech, declassified in August 1979, McNamara began by presenting the case for flexibility in US strategic nuclear plans:

"the US has come to the conclusion that to the extent feasible military strategy in general nuclear war should be approached in much the same way that more conventional military operations have been regarded in the past. That is to say, our principal military objectives, in the event of a nuclear war stemming from a major attack on the Alliance, should be the destruction of the enemy's military forces while attempting to preserve the fabric as well as the integrity of allied society. Specifically, our studies indicate that a strategy which targets nuclear forces only against cities or a mixture of civil and military targets has serious limitations for the purpose of deterrence and for the conduct of general nuclear war."

The possibility of first use of tactical nuclear weapons was not dismissed. However, its prospects were not rated highly. McNamara argued that even a very limited use of such weapons, intended to demonstrate Western resolve, "could rapidly lead to general nuclear war." In a rejection of the previous policy of relying on nuclear weapons for battlefield use, he contended that "local nuclear war would be a transient but highly destructive phenomenon ... Any substantial nuclear operation in Europe inevitably would involve both forces and targets in the US and USSR".

Finally, McNamara drew the conclusion that NATO had to concentrate its efforts on improved conventional forces. "With improvements in ground force strength and staying power, improved non-nuclear air
capabilities, and better equipped and trained reserve forces", he argued,
"the Soviet Union can be assured that no gap exists in the NATO defence
of this vital region, and that no aggression small or large can succeed."

What did all this mean for the independent nuclear forces of
Britain and France, not under American Presidential control? On this
point, McNamara was blunt:

"There must not be competing and conflicting strategies
in the conduct of nuclear war ... if nuclear war should
occur, our best hope lies in conducting a centrally
controlled campaign against all the enemy's vital nuclear
capabilities. ... it is essential that we centralize the
decision to use our nuclear weapons to the greatest
extent possible. We would all find it intolerable to
contemplate having only a part of the strategic force
launched in isolation from our main striking power...

We would find it equally intolerable to have one segment
of the Alliance force attacking urban-industrial areas
while, with the bulk of our forces, we were succeeding in
destroying most of the enemies' nuclear capabilities.
Such a failure in co-ordination might lead to the
destruction of our hostages - the Soviet cities - just
at a time at which our strategy in coercing the Soviets
into stopping their aggression was on the verge of success.
Failure to achieve central control of NATO nuclear forces
would mean running the risk of bringing down on us the
catastrophe which we most urgently wish to avoid.

In this connection our analyses suggest rather strongly
that relatively weak nuclear forces with enemy cities
as their targets are not likely to be adequate to
perform the function of deterrence. In a world of
threats, crises, and possibly even accidents, such a
posture appears more likely to deter its owner from
standing firm under pressure than to inhibit a potential
aggressor....

In the event of war, the use of such a force against
the cities of a major nuclear power would be tantamount
to suicide, whereas its employment against significant
military targets would have a negligible effect on the
outcome of the conflict. In short, then, weak nuclear
capabilities, operating independently, are expensive,
prone to obsolescence, and lacking in credibility as a
deterrent." (63)
The European reaction to the new policy promulgated at Athens was not a sympathetic one. They had been convinced over the previous decade that nuclear weapons made European war extremely unlikely, and were concerned at US eagerness to consider how such a war should be fought. Given their much more painful experience of World War Two, European leaders were reluctant to consider the possibility of World War Three, be it conventional or nuclear. The addiction to nuclear defence had of course been reinforced by the US policy of 'massive retaliation', which had encouraged most NATO countries to acquire 'dual key' battlefield nuclear weapons.

The new US emphasis on conventional forces was viewed as both expensive and wasteful, given the continuing perception of overwhelming Soviet conventional superiority. It was feared that US talk of centralising control of nuclear weapons would mean a withdrawal of the nuclear 'guarantee' to Europe. If the tactical nuclear 'tripwire' was removed, and conventional forces improved, what was there to ensure that, if NATO was losing a non-nuclear war, the US would initiate nuclear hostilities? Or that the Soviets would believe that the US would do so? There was widespread opposition to the central thrust of US policy for NATO - a reduction in reliance on early first use. Indeed Kai-Uwe von Hassel, West Germany's defence minister, went so far as to argue that:

"as concerns the defence of Europe, in contrast to other parts of the world, ... the atomic threshold must be very low ... atomic demolition mines, nuclear air defence weapons and, if need be, nuclear battlefield weapons must be made ready for employment in an early phase of recognizable attack on Europe." (64)

The French were particularly critical. The US strategy threatened the very existence of their independent force, in which they had by this stage invested considerable finance and prestige. De Gaulle was in the process of cutting conventional forces in order to release resources for
economic growth — between 1962 and 1967 conventional defence spending was to fall by 43%. The French nuclear force was the crucial element in the Gaullist project to recover national prestige after the blows suffered in Indo-China, Suez and Algeria while, simultaneously, restoring the economy's international competitiveness. (65) These objectives, based on economic and political considerations rather than military ones, were incompatible with the McNamara strategy. The US's insistence on flexible response in the early 1960's was to be a key factor in France's decision in 1966 to withdraw from the military structure of NATO; and it reinforced the determination of French leaders to construct a nuclear force of their own.

In an attempt to address at least some of the concerns raised by its European allies, the US came up with its ill-fated Multilateral Force (MLF) proposals. (66) These sought, by offering shared control and 'mixed manning' of strategic nuclear systems, to tackle the problem that European leaders wanted independent forces for status reasons. In reality, however, far from discouraging proliferation, the MLF debate served only to accentuate it. The nuclear appetite of certain German politicians was whetted. While the US sought to have a veto over all European nuclear forces, most of their own strategic force would remain under sole US control. After a debate stretching over more than four years, it died an unlamented death. It had been all along, in Kennedy's own view, a fake.

3.3 Britain and the McNamara Strategy

As a result of the new policy, the US Administration's attitude to the British nuclear force changed dramatically. Under Eisenhower, particularly after the 1958 amendments to the Atomic Energy Act, the
independent force had been aided and encouraged as a contribution to the overall Western 'massive retaliation' force. Britain was a loyal ally, supporting the US world role and making a major contribution to NATO defences. It was also capable of, and apparently determined to, build its nuclear force by itself if necessary. Eisenhower clearly felt that the need to maintain sound political relations with the UK overrode any consideration of possible divergences between the two countries in a hypothetical future major war. The Kennedy administration, by contrast, was much more concerned that it retain escalation control. The more it emphasised conventional and limited nuclear options, the more it found it necessary to question whether the British force could be reconciled with such concepts. On 21 April 1961, Kennedy approved a National Security Council Policy which stated that "it would be desirable for the British, in the long run, to phase out of the nuclear deterrent business, since their activity in this field is a standing goad to the French." (67)

In addition to US concerns at the possible 'trigger' role of British nuclear forces, and the way in which it contributed to proliferation, a number of influential figures in the new Administration argued that there were wider, political, reasons why Britain should be urged to abandon its nuclear force. George Ball, one of Kennedy's most influential advisors in European matters, argued that US support for the independent nuclear force "encouraged Britain in the belief that she could by her own efforts - so long as she maintained a specially favoured postion with the United States - play an independent great power role, and thus it deflected her from coming to terms with her European destiny." (68) That 'destiny', Ball argued, lay in membership of the EEC, where she could contribute to Western Unity and reduce the tensions being created by Gaullism.
The most widely noted exponent of this view of Britain was Dean Acheson, who in a speech in late 1962 warned that:

"Great Britain has lost an empire and has not yet found a role. The attempt to play a separate power role - that is, a role apart from Europe, a role based on a "special relationship" with the United States, a role based on being the head of a "commonwealth" with no political structure, or unity, or strength and enjoys a fragile and precarious economic relationship by means of the Sterling area and preferences in the British market - this role is about to be played out." (69)

The British responded angrily to such suggestions. Prime Minister Macmillan was willing to recognise the need for gradual adjustment in policy towards the Commonwealth and Europe - as his 'Winds of Change' speech in 1960 and the EEC application demonstrated. Retreat on these fronts, however, only strengthened his government's determination to retain the independent nuclear force, a symbol of Britain's historic role and of its 'special relationship' with the US. The experience of Test Ban negotiations in these years reinforced the belief that nuclear weapons gave Britain a seat at the 'top table', and with it international status. As F.S. Northedge has argued:

"It was perhaps unfortunate ... that Britain played a leading part in the nuclear test ban negotiations of 1958 to 1963 ... [it] had the effect of fostering in Britain hallucinations of world power no longer justified by realities ... it entrenched the British illusion that, however much the country's physical strength had fallen, its moral influence remained pre-eminent." (70)

Britain's commitment to maintaining its own nuclear force was reinforced by the change in US strategy that the Kennedy administration appeared to be introducing. With 'massive retaliation' the US was committed to early first use of nuclear weapons in a major European war. Under the new policy, however, it was unlikely that the US
President would, after perhaps weeks of intense conventional war, be willing to 'risk New York to save London'. Defence Minister Peter Thorneycroft voiced these doubts, which paralleled, though more discreetly, criticisms heard from France:

"As an increasing number of more and more powerful missiles will be aimed at Washington and New York, can we be certain that a threat directed against our country would always be answered by an American counter threat? And should we admit this certitude, would the Russians be equally persuaded? Is a deterrent under the exclusive control of America absolutely reliable?" (71)

3.4 The Nassau Story

The divergence of views between Britain and the United States, and to some extent within the US Administration, came to a head in November 1962, only weeks after the Cuban missile crisis. US Defence Secretary McNamara decided that, as part of his drive for efficiency in the Pentagon, the Skybolt project was to be scrapped. Progress on Minuteman and Polaris had been so successful, he argued, that Skybolt was unnecessary. Moreover it had failed four successive tests, and was proving to be both expensive and unreliable.

This decision clearly created major problems for Britain which now had no system with which to replace the V-bombers in a strategic nuclear role. British leaders feared, with some justification, that some of Kennedy's officials would use the opportunity in an attempt to ease the UK out of an arms race which it could no longer afford. Macmillan's government was determined that this attempt should not succeed.

Matters came to a head at the summit meeting in Nassau on 18 December. By now, Skybolt's effectiveness had been "compromised" in public by both McNamara and Kennedy. Macmillan therefore turned down
an offer from Kennedy to continue Skybolt development, with costs shared 50-50, solely for British needs. (72) An offer of the Hound-Dog air-to-ground missile, less advanced than Skybolt, was rejected as providing no more than a temporary solution to Britain's replacement problem.

Macmillan made it clear that only a renewal of Eisenhower's 1960 offer of Polaris would now be acceptable to his government and party.

Macmillan set the problem in historical context, referring to the close wartime collaboration, the break between 1946 and 1958, and the re-establishment of full co-operation by President Eisenhower. Now, he feared, the US might be returning to its policies after the War in which it had been perceived to be depriving the UK of a nuclear role. If it did so, Macmillan warned, there would be a wave of anti-Americanism in Britain. He had just received a telegram signed by 137 Tory backbenchers urging him to insist on an 'independent deterrent'. If he failed to bring a satisfactory agreement back, his government could collapse and might be replaced by a leadership forced to exploit anti-Americanism to keep the Conservatives in power. (73)

Moreover, Macmillan made clear that US refusal to supply Polaris could force his government to co-operate with other nations, presumably France, on nuclear matters. Britain would allow the Holy Loch and other US nuclear bases to remain, but it would not permit previous information received from the US to stand in the way of a fresh attempt to stay in the nuclear business.

Faced with Macmillan's tough stance, Kennedy relented. He was unwilling to risk a major breach in the Alliance over the hypothetical possibility that there were circumstances in which Britain would wish, or be able, to use its nuclear missile without American approval. To
further reduce such a possibility, however, he insisted that Britain agree that its Polaris missiles would "be used for the purposes of international defence of the Western Alliance in all circumstances". Macmillan accepted this, but with the addition of the crucial, and contradictory, caveat "except where Her Majesty's Government may decide that supreme national interests are at stake". (74) Since it is impossible to imagine any circumstances in which the government would consider the use of Polaris when these interests are not at stake, this amounted to an American admission that the UK could retain its operational independence.

There would of course be doubts expressed as to the value of such an 'independent' force, given its dependence on US communication links, spares and technology. These doubts will be closely examined in Chapter 6. Nevertheless it is important to emphasise that Nassau represented a major political success for the supporters of a British nuclear force. Their major concern throughout the debate in 1957-62 had been with the international status, and special links with the US, which it was believed the nuclear force gave to Britain. The military scenarios that so excited McNamara's "whiz kids" were of little interest in Britain. What was important was that Britain's membership of an exclusive club had been renewed for many years to come at a remarkably low cost (compared, at least, with its predecessor the V-bomber force). Yet again Britain had been able to combine nuclear interdependence and independence, proved the correctness of the policies followed since 1940, and refuted the arguments of those - such as Dean Acheson - who believed that it needed to find a new role in the world.

An immediate consequence of Nassau was a strengthening of continental European views, especially in France, that a Britain in the
EEC could prove to be an American 'Trojan Horse', as committed to the special relationship and its Commonwealth links as to European co-operation. The perception that Britain had divided loyalties, and would seek to tie Europe too closely to American priorities, played a central part in de Gaulle's veto of UK membership on January 14, 1963. Although not the only factor in the decision, the Nassau agreement probably strengthened de Gaulle's determination to oppose what he perceived was Anglo-American domination of the Alliance. (75) Britain would find that its nuclear force may have been an 'admission ticket' to the test ban talks. It was met with closed doors when the much more vital European club was approached. (76)

The Nassau agreement, together with the McNamara strategy, also reinforced de Gaulle's determination to establish France's independence of action. Kennedy had made a belated offer of Polaris missiles to France in order to 'balance' the deal with Britain. He feared that acceptance would involve undue dependence on the US, particularly if the proposals for a multilateral force went ahead. And, though it would have recognised France's equality with Britain within NATO, it would have required a very different nuclear doctrine and position on Britain's EEC application. With some reluctance, de Gaulle rejected the offer. (77)

3.5 After Nassau

By 1963 it had become clear that the US was failing in crucial respects to fulfil the ambitions and objectives set by McNamara in 1961. The independent nuclear forces of Britain and France now looked less vulnerable to obsolescence than a year before and likely to be built up in the years to come. Despite the downgrading of tactical nuclear weapons in US declaratory policy, their deployment in Europe still
accorded with the requirements for 'massive retaliation'. Indeed between 1960, the end of the Eisenhower administration, and August 1963, the number of such weapons in Europe (excluding Strategic Air Command and sea-based warheads) rose from 2500 to 4000. By October 1968, there would be 7200 land-based tactical nuclear warheads in Europe—several times the number which flexible response would have required. (78)

By 1963, however, the urgency began to go out of the proposals energetically put forward in the Athens speech. The US and its allies had survived the Berlin and Cuba crises without war. The nuclear powers were about to sign the Partial Test Ban Treaty. There was a perception that the risks of global war were now diminishing. And, after Kennedy's death in November 1963, the focus of the strategists of 'flexible response' shifted to Vietnam, where the US was to commit 500,000 men to a limited war fought with conventional weapons. In Europe, the US was forced to accept a policy that was contradictory in military terms. The 'flexible response' strategy adopted in 1967 would be much less of a departure from massive retaliation than its supporters had intended. For the time being, however, it was all the US was going to get.

4. Labour and the bomb

By the early 1960's it was clear that the government had failed to achieve the major reduction in the economic burden of defence which had been one of the central aims of the 1957 White Paper. Between 1957/8 and 1963/4, defence spending in real terms had risen by almost 8 percent and, as a proportion of national income, fallen by only 0.7 percent. (79) The continuing priority given to Britain's world role, and the consequent spending on nuclear weapons and forces for East of Suez policing roles, ensured that Britain's defence burden remained well above those of its main European allies, and economic competitors.

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By the time the Labour Party came to power, in October 1964, the economic costs of this defence effort were again becoming a source of widespread concern. France and Germany had both overtaken the UK in national income per head for the first time in more than a century. In contrast to the continuing 'economic miracle' in continental Europe and Japan, Britain seemed caught in a 'Stop Go' cycle and the low levels of investment and growth which this entailed. (80)

The Labour government was elected on a promise to end this decline, introduce the 'white heat' of new technology and new ideas into industry, and lift the economy on to a long term growth rate of 4 percent per annum. The 1965 National Plan set out how the government hoped to achieve these ambitious targets. It argued that some of the resources necessary for industrial growth would have to be found from cuts in defence:

"The defence effort pre-empts a large part of the productive potential of some of the most important and technologically advanced industrial resources and is a large user of skilled and unskilled manpower ... As a nation we spend as much on defence as we do on investment in industrial plant and machinery ... The defence programme now uses some 35-40 percent of national research and development expenditure and about one-fifth of the qualified scientists and technologists engaged in it ... externally, the defence effort presses hard on our balance of payments. In 1964-5 £262 million of the defence provision was direct overseas expenditure; this is more than we can afford." (81)

As the years that followed would show, however, the Labour Party was to be only partially successful in reducing the considerable burden on the economy that military spending represented. Its leadership was still firmly attached to the world role to which Attlee and Bevin had committed Britain, including strong Commonwealth links, the special relationship with the United States, and the East of Suez military role.
When these commitments clashed with the requirements of domestic economic growth, the latter took second place. Wilson's personal decision in 1964 not to devalue the pound, despite an international consensus that it was 10-15 percent overvalued, was one of the most obvious, and damaging, consequences of this policy. (82) The eventual result would be the abandonment of Labour's ambitious social and economic goals, widespread public disillusionment, and an electoral defeat from which the Labour Party would never fully recover.

4.1 Renegotiating Nassau

As a result of the fierce debates of the late 1950s and early 1960s, the Labour Party leadership's commitment to maintaining Britain's independent nuclear force was by no means clear. The 1961 Party Conference had reversed the short-lived commitment to unilateralism, and by 1964 the Campaign for Nuclear Disarmament had lost much of its previous influence. In order to unify the Party after Gaitskill's abrasive leadership, however, his successor Harold Wilson had sought to finesse the issue by emphasising his belief that an 'independent' nuclear force was absurd. (83) Denis Healey, Labour's defence spokesperson, emphasised that they would:

"certainly not continue the programme in its capacity as an independent British force ... We do not believe that it is a necessary or sensible use of our resources to spend more money on retaining an independent nuclear capability. We have repeatedly said that we have no interest in the Polaris programme as a contribution to an independent British deterrent. Whether it is of any value as part of an Alliance effort we cannot make up our minds until we negotiate the question with the United States."

(84)

In the years leading up to the election, Labour's key politicians - Wilson, Healey and Gordon Walker - took a line in public that was
complementary to the McNamara strategy. The problem of overcommitment in the defence budget could be tackled by an application of the management techniques which, it was argued, McNamara had been introducing with considerable success in the Pentagon. The 'independent' nuclear force was seen as a status symbol which had no military credibility. The main requirement in NATO was for modern conventional defences and a strategy of 'flexible response'. As Labour's 1964 manifesto stated, with masterful ambiguity:

"... The Nassau agreement to buy Polaris know-how and Polaris missiles from the USA will add nothing to the deterrent strength of the Western Alliance ... We are not prepared any longer to waste the country's resources on endless duplication of strategic nuclear weapons. We shall propose the re-negotiation of the Nassau agreement. Our stress will be on the strengthening of our conventional regular forces so that we can contribute our share to NATO defence and also fulfil our peace-keeping commitments to the Commonwealth and the United Nations." (85)

The Labour Party's policy in 1964 seemed, therefore, to represent a continuation of the 1949 policy proposed by Tizard, and not unlike the ideas of many centrists in the politics of the 1980s. The attempt to maintain a fully independent strategic nuclear force would be abandoned. Instead Britain would rely on the US to provide the strategic nuclear component of NATO's military effort. Although the V-bombers and tactical nuclear weapons might be continued in service, they would do so as part of Britain's 'contribution to NATO', not as a force able to be used independently.

There was a widespread view in Britain, and elsewhere, that Labour's policy did indeed mean that Polaris would be cancelled. The Times predicted that a Labour government would "not maintain an independent nuclear striking force after the V-bomber force ceased to be
effective". (86) The Conservatives fought, and lost, the General Election on a platform that put the retention of the "independent deterrent" at its centre. In Gaullist tones, Alec Douglas Home argued that:

"the Socialists would propose to discard all control by a British government over Britain's nuclear arms ... I must be sure that each of you recognises the consequences of such a Socialist decision. It would mean that we should surrender all our authority in world affairs and hand over the decision about the life and future of Britain to another country. This I am quite sure you cannot allow." (87)

Despite Sir Alec's warnings, the British people elected the Labour Party to power in October 1964. On taking office, however, it soon became clear that the differences between the two parties on this issue were considerably less than their leaders, each for his own reasons, had tried to argue. Wilson publicly emphasised that the new government would 'renegotiate' Nassau, and, in an attempt to do so, offered to assign Britain's Polaris submarines and most of its V-bombers to an Atlantic Nuclear Force (A.N.F.). These would be "irrevocably committed to NATO as long as NATO lasted as an effective organisation. Only in the event of a break-up of NATO would they revert to British control". (88) It was, and still is, hard to see how this commitment differed in substance from the Nassau wording agreed between Kennedy and Macmillan. As events would transpire even this limited change was not made. Nassau remained operative, with no amendments, through the life of the Labour government.

The decision to proceed with the Polaris project was taken by Wilson, after discussions with Patrick Gordon Walker and Denis Healey, only days after Labour took office. This was endorsed by the Cabinet Defence Committee and later by Cabinet. According to Wilson's account, it was believed that the project was beyond the "point of no return;
there could be no question of cancelling them, except at inordinate cost." (89) The new Ministers did agree, however, to reduce the number of Polaris submarines on order from 5 to 4 as a contribution to the general economies being made in defence expenditure plans.

Several accounts of these years have suggested that the Polaris project was not irreversible in financial terms. Lawrence Freedman contends that the Treasury had held back on authorising new expenditure on Polaris until the election was over. He estimates that the net cost of foreclosing on the contract would only have been £35-40 million - around ten per cent of the total capital cost. (90) Indeed construction work on the Polaris project was virtually suspended for six months during 1964/65 pending a political decision. (91) Unless he was deliberately misled by officials, Wilson's later contention that "we kept the Polaris submarine programme because production was beyond the point of no return" cannot be the main reason why he decided on completion of the project. (92)

However, there are also clear signs that the new Labour government did envisage circumstances in which British nuclear forces might be used independently. The proviso that Britain's nuclear force would revert to British control should NATO break up suggested that, in this circumstance, it was believed that the force still had some value. Healey himself argued that, even within NATO, the force was of some use: "if you are inside an alliance you increase the deterrent to the other side enormously if there is more than one centre of decision for first use of nuclear weapons." (93) The decision to reduce the number of boats ordered from five to four, rather than the three suggested by some in the Treasury, itself reflected the desire to maintain a "credible" independent force, rather than simply a contribution to NATO's overall
nuclear strength. For four was the minimum total force size which enabled the Navy to maintain one boat on station at all times. A reduction to three boats would have meant that, for part of the year, Britain would have had no assured independent second-strike capability. (94)

Moreover the policy decisions taken at this time suggest that the new Labour government took the view, shared by previous Conservative administrations, that British nuclear weapons had a useful role in conflicts outside Europe. Its proposals for an Atlantic Nuclear Force, outlined to the House of Commons on 16 December 1964, pointedly excluded part of the V-bomber force earmarked for possible deployment outside the NATO area. (95) V-bombers and nuclear-equipped carrier forces continued to be deployed in support of the Anglo-Malaysian 'confrontation' with Indonesia. (96) Perhaps most remarkably, within two months of entering office, the government offered a nuclear 'guarantee' to India.

This offer was made in direct response to China's first nuclear explosion, which took place the same day as the General Election in Britain. The Labour government believed that British nuclear weapons could be used to deter either a Chinese nuclear attack on India or a large-scale Chinese conventional attack. Not only the V-bomber force would be made available for such a role. Consideration was also given to the stationing of Polaris submarines in the Indian Ocean. The policy was set out in the 1965 White Paper:

"The Chinese explosion must remind us that the stability so far achieved in relations between Soviet and Western alliances might rapidly be jeopardised by the spread of nuclear weapons to countries which do not now possess them ... our nuclear policy must help to provide some reassurance to non-nuclear powers."

(97)
These extra-European nuclear commitments reflected the Wilson government's strong commitment to the East of Suez role, which was, initially at least, perhaps even stronger than that of the Conservatives. There was a belief that Britain's nuclear force could be used to buttress the world role to which Wilson attached so much importance. It demonstrated the deep commitment of the Labour leaders to inherited imperial values, including a paternalistic view toward former colonial possessions (such as India).

Britain's offer of a nuclear guarantee was, however, quickly rejected by India, who had never, it appears, given any indication that they would be interested in such an idea. If they had thought the Chinese explosion required a nuclear countermove, it is probable that they would either have turned to one of the two superpowers for protection or accelerated their own nuclear weapons programme. The British offer, therefore, met with little enthusiasm in Delhi and was quickly rejected. (98)

4.2 Labour and the turn to Europe

Between 1964 and 1968 British defence policy was dominated by a series of cost-cutting defence reviews. In toto, they were intended to impose zero growth (in real terms) on the defence budget between 1964 and 1970. To achieve this, apparently modest, goal the government was forced to make major cuts in military commitments and capabilities.

At first, savings were focused in Europe. 'Offset' agreements were sought with the Federal Republic of Germany in an effort to reduce the balance of payments burden of the British Army on the Rhine. Wilson announced that:
"whatever we may do in the field of cost effectiveness, value for money and a stringent review of expenditure, we cannot afford to relinquish our world role - our role which, for shorthand purposes, is sometimes called our 'East of Suez' role." (99)

By 1966, however, the difficulties in making cuts in forces for NATO were becoming increasingly apparent. The government had decided to review Britain's application for EEC membership, and all political parties were becoming more sceptical of the rationale for East of Suez deployments. With the end of 'confrontation' in South East Asia, the focus of cuts shifted to commitments outside Europe. As economic difficulties grew further economies were made, culminating in the 1968 decision to withdraw all permanent forces from East of Suez by 1971. (100)

Despite this cost cutting Britain's nuclear weapons programme remained unscathed through these years. Rumours that the government would either cancel Polaris or withdraw from tactical nuclear roles proved to be incorrect. (101) Indeed it became clear that the new government's nuclear policy did not differ substantially from that of the Conservatives save in one major respect, that of public presentation. Rather than focus on the military rationale for Polaris, government ministers emphasised its low running costs and the importance of maintaining equivalence between French and British nuclear efforts.

The inconsistency between public pronouncement and actual policy affected not only the decision to continue with Polaris itself. It was also reflected in the government attitude to a possible replacement system for Polaris. In 1967, the government announced that it had rejected the Poisedon missile as a successor to Polaris, and a week later Wilson had given an assurance that the government was not interested in
the development of new generations of strategic nuclear weapons. According to John Simpson, this committed the government to "terminating British warhead and re-entry vehicle development". (102) If this were the intent, it was soon reversed for, in 1968, the Cabinet decided that nuclear weapons R & D should continue, subject to the proviso that no tests should be undertaken. (103) As a result, paper studies on possible improvements to Polaris commenced, which were eventually to crystallise in the Chevaline project. (104)

Nor did the Labour government make substantial efforts to reduce its reliance on tactical nuclear weapons. Production of a new tactical bomb for the RAF and Royal Navy began in 1964. Despite some reports to the contrary, the government decided not to 'conventionalise' the V-bomber force when Polaris began to enter service in 1968. Instead they were reallocated to a theatre nuclear role under Supreme Allied Commander Europe (SACEUR). Canberras and Buccaneers continued to carry British nuclear weapons, and Phantoms were equipped with US bombs as they came into service. (105) As for the Army, the decision was taken in 1966 to buy a Lance missile system dedicated to a battlefield nuclear role. (106)

This continuing process of improvement in Britain's tactical nuclear arsenal was in some part a reflection of the British view that the US had gone too far in its proposals for reducing reliance on nuclear weapons. In particular, Healey argued that it would be "days not weeks" after a major conventional attack that NATO would be forced to initiate the use of nuclear weapons or surrender. He believed that US officials, such as Alain Einthoven, had substantially exaggerated the West's ability to counter a Soviet offensive with conventional forces. (107) Like other Europeans, Healey feared that the US might withdraw its nuclear
guarantee. He warned that, were the US to reduce their nuclear commitment to Europe, the European reaction would be to start producing more nuclear weapons, not to build up the conventional forces which the Americans wanted them to do. (108) The British nuclear force would, it is clear, have been a major element in such a build up.

5. Conclusions

The successful development of its own atomic and thermonuclear weapons in the late 1950's played an important part in confirming the British state's commitment to a Great Power role at that time. It was believed, even after the humiliation of Suez, that nuclear weapons would enable Britain to retain the commitments of a world power at a reduced cost. This had been the basis of the proposals in the 1952 Global Strategy Paper. With the actual production of British nuclear weapons in the late 1950's, these proposals were put into practice by the 1957 White Paper.

The attempt to remain a Great Power 'on the cheap' proved to be a failure. In Europe significant cuts in land and air forces were made as NATO's defences came to rely increasingly on tactical nuclear weapons. The growing concern at Soviet nuclear capabilities, however, soon halted the move towards total reliance on these weapons, and Britain was obliged to retain a British Army of the Rhine of around 55,000 men. Outside Europe too, nuclear weapons proved to be less useful in deterring perceived threats than some had hoped. With the end of conscription, the costs of maintaining an East of Suez role grew. By 1960 the savings in defence spending had been exhausted, and the budget once more began to rise.

The independent nuclear force, therefore, had failed to solve the gap between Britain's military commitments and the limited resources
available to meet them. On the contrary, it encouraged politicians in their belief in the special relationship with the United States, and postponed the day when they would have to adjust to the realities of economic decline. Indeed this period was remarkable for its continuity with the aims pursued ever since the 1943 Quebec Agreement. Only with the defence cuts in 1966-8, and the consequent withdrawal from East of Suez, did the framework of British policy established at that time show a marked shift away from traditional concerns.

Given the economic constraints on defence spending, the nuclear force had always been vulnerable on cost grounds. The V-bomber programme had proved very expensive, and the Blue Streak had to rocket be cancelled when its cost threatened to get out of control. By the end of the 1950's, Britain was already well behind the US and the Soviets in size of its strategic nuclear arsenal. By 1962 there were also serious doubts as to whether Britain could maintain a strategic nuclear force which was qualitatively equal with the two superpowers. Only the Nassau agreement between Prime Minister Macmillan and President Kennedy ensured that the UK would remain in the nuclear arms race at a reasonable financial cost. The price, however, was a degree of dependence on US weapon systems which would continue to call into question the degree of 'independence' Britain in fact enjoyed.

Britain's support for increased reliance on nuclear weapons in defence policy also had important effects on NATO strategy. In the late 1950's it had allied with the Eisenhower Administration in pressing for the implementation of massive retaliation, despite doubts from both France and Germany. As a result, a rapid build up of tactical nuclear weapons was initiated, which encouraged proliferation in Europe and made
NATO very dependent on a doctrine that was believed by many to be potentially suicidal.

When, under the Kennedy administration, the US proposed a reduction in reliance on nuclear first use, Britain was distrustful. It had supported a nuclear emphasis - both because it enabled Britain to remain number two in NATO at a reduced cost and because of the assumption that deterrence would not fail. The US argument for war fighting capabilities (both conventional and nuclear) and for centralised control of nuclear weapons (and thus no independent British force) made Britain very uncomfortable. It threatened Britain's position in the alliance by emphasising that there should only be one centre of nuclear decision. Even more dangerously, it was based precisely on the belief that, despite the existence of nuclear weapons, war could take place.

By the 1960's the long term economic costs of Britain's defence policies were becoming even more apparent. Indeed, after a period of indecision, those costs would force the Labour government to decide in 1968 to abandon permanent bases East of Suez: a belated acceptance that Britain could no longer remain a world power.

This acceptance, however, was not complete. The retention of nuclear weapons and the continued belief in a special relationship demonstrated this. As East of Suez forces were transferred to NATO roles, rather than scrapped, defence spending as a proportion of national income remained considerably above European levels. The cuts, when they had come, were too little and too late.

Britain's commitment to policies developed in the 1940's had considerable costs. It contributed to economic decline by pre-empting scarce resources for military spending. It delayed entry into the EEC.

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because the UK was unwilling to subordinate its Atlantic and Commonwealth links to European obligations. Most of all, perhaps, British policy in this crucial decade helped ensure that the confrontation with the Soviet Union in Europe continued to be based on a theology of nuclear deterrence with no rationale as a defence. It would be a creed whose tenets would prove remarkably difficult to disavow.
Notes:


3. Ibid. p. 10.


5. Ibid. p. 92.


32. Ibid. p. 15.


40. SIPRI, op. cit., p. 18.


42. Quoted in ibid. p. 128.


50. Phillip Darby, *op. cit*, pp. 120-1.


60. Stockholm International Peace Research Institute, *op. cit*, p.18.

61. *Ibid*, pp. 22-3, Alain C. Enthoven and K. Wayne Smith, *op. cit*, is an insiders' account of the process by which these assumptions changed.


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66. The most comprehensive account of the MLF saga is in John D. Steinbruner, op. cit. See also David N. Schwartz, op. cit., pp. 82-135.


68. George Ball, op. cit., p. 107.

69. Quoted in Ibid, p. 69.


71. Quoted in David N. Schwartz, op. cit., p. 171.


73. Ibid. pp. 234-5.


76. John Baylis, op. cit., p. 80.


78. S.I.P.R.I., op. cit., p. 16.


85. Quoted in Ibid. p. 262.

86. Ibid. p. 265.

87. Ibid. p. 256.

89. Ibid. p. 69.


96. See Andrew Brookes, *op. cit.*, pp. 139-41.


101. For an example of such rumours, see Chapman Pincher 'Britain to Lose H-punch', *Daily Telegraph*, 12 February 1968.


CHAPTER FIVE

YEARNING FOR REDEMPTION: 1968 - 85

1. Introduction

By the late 1960's a period of relative stability in British and NATO defence policy had begun. The fierce controversy over the independent British nuclear force had been ended after it became clear that the Labour Party was committed to its retention; and the 1968 decision to withdraw permanent forces from East of Suez ended the other major area of debate.

At the same time, the fervent of controversy about NATO nuclear doctrine, begun in the late 1950s and intensified by the Kennedy Administration's policies, also receded in intensity. The Americans came to accept, albeit reluctantly in some cases, that European governments were unwilling either to abandon their own independent nuclear forces or accept a major reduction in reliance on the US nuclear 'umbrella'. There was relief that the development of a German atomic bomb now appeared much less likely than it had a decade before, and that this was now enshrined in the Non-Proliferation Treaty. As their attention turned increasingly to the conduct of the Vietnam war, top US officials accepted an interpretation of flexible response which was extremely ambiguous and had little influence on NATO nuclear force deployment or procurement.

In Europe, including the UK, there was some satisfaction that the US's original concept of flexible response, which was seen as a plan for fighting a limited war in Europe, had been abandoned. The continuing reliance on early first use of nuclear weapons was welcomed because of
the belief that such a posture would effectively prevent war from ever taking place. The disastrous results of the application of flexible response in South-East Asia, both in the 'theatre' of operations and in the USA, strengthened the conviction that Europe should not be 'Vietnamized'.

On both a national (UK) and alliance (NATO) level, however, the relative stability of the early 1970s proved to be only temporary. The process of detente failed to develop into a more fundamental resolution of the differences between the blocs in Europe. Britain's withdrawal from East of Suez did not lead to a full adjustment to a new role as a medium-sized European power, or to lower levels of defence spending. By the late 1970s it became clear that the stability of this period had been temporary, and that it contained within it elements which would undermine that stability. Europe as a whole would be plunged into a new period of Cold War; and Britain seemed to be reverting to policies and priorities in defence which the settlement of the late 1960s, it had been thought, had overcome.

This chapter will outline relevant developments in US and NATO policy in this period. It will look in particular at the rise and decline of detente in both its political and military dimensions. British nuclear weapons policy will then be examined within this general context, first for the 1970s and then for the 1980s. The chapter will conclude with a discussion of the decision to replace Polaris with Trident. Detailed discussion of some of the issues raised by this decision will, however, be reserved for later chapters.
2. Detente and the Arms Race

The late 1960s saw hopeful signs that the Cold War was coming to an end. Richard Nixon's assumption of office in January 1969 had brought a sustained effort to reach agreements on limiting nuclear arsenals. This change in US policy was, in large part, a consequence of the rapid Soviet buildup in nuclear arms in the years following their humiliation over the 1962 Cuban crisis. This buildup in turn reduced the nuclear superiority which the US had enjoyed during that crisis, and meant that, in the event of all-out nuclear war, the US itself would suffer damage as great as the countries of Europe and the Soviet Union. In recognition of these new circumstances, American incentives for nuclear arms agreement increased. In 1972 the first SALT treaty was signed, together with an agreement limiting the development of Anti-Ballistic Missile (A.B.M.) defences. In Europe, West Germany at last recognised the German Democratic Republic and the postwar frontiers of Europe. Trade between the Soviet Union and West Germany quadrupled between 1970 and 1975. Hopes were aroused that security could be based increasingly on economic and political, rather than military, means. In time, it was believed, peaceful evolution in Eastern Europe and the Soviet Union could further ease the fears that fuelled the Cold War.

Detente did not live up to its promise. On a political level, the two superpowers continued to pursue objectives that were antagonistic and incompatible. On a military level the limited arms control agreements reached at the height of detente failed to halt, or even significantly slow, the arms race. The continuing development of military potential on both sides exacerbated friction on a political level, while incompatible political objectives prevented effective measures being taken to halt that development.
On a broad political level, instability in the superpower relationship was a consequence of the continuing divergence in the strategic objectives of Soviet and American leaders. While the Soviets wanted a recognition of parity between the two states, the United States insisted that detente required recognition of the, US-dominated, status quo in the Third World. Throughout the period of detente, US leaders continued to seek to impose linkage between Soviet 'restraint' in the Third World and the relationship between the US and Soviet Union. Most conflicts, however marginal to US national interests, continued to be seen as tests of the 'credibility' of the Pax Americana. As a result of this perception, the series of revolutionary changes in the mid 1970s were seen by many American policy makers as breaches of detente. The victory of North Vietnam, the anti-colonial revolts in Angola and Mozambique, and the overthrow of authoritarian regimes in Grenada and Nicaragua: all these threatened US global hegemony. With the 'fall' of Iran, and direct Soviet military intervention in Ethiopia and Afghanistan, the view grew that the Soviets were taking unfair advantage of detente. Simultaneous Soviet 'losses', such as closer US-China links and their expulsion from Egypt, were not sufficiently weighed in the balance. As the trauma of Vietnam faded from public consciousness, opposition to detente within the US grew, and a powerful lobby began to press for a re-assertion of global military superiority. The consequence was Carter's shift to a hard-line posture from 1978 onwards, the Senate's refusal to ratify the SALT II agreement and the election of Ronald Reagan on a militantly anti-Soviet platform in 1980. The 'Evil Empire' rhetoric of the new President, together with a massive arms buildup, would soon return the world to levels of tension not seen since the early 1960s.
Continuing developments in the military field largely reflected these political trends. The Soviets were determined to achieve military parity with the United States, despite their much smaller level of economic resources. The 'lesson' of the Khruschev period had been that only military strength could safeguard Soviet security, and the desertion of China from their alliance with Moscow reinforced fears of encirclement. From the mid 1960s until the late 1970s, a sustained arms buildup was mounted in pursuit of these goals, with apparently little relation to the easing of tension in the late 1960s. The strategic nuclear arsenal was expanded in an effort to gain 'parity' with the United States, a goal that required forces considerably in excess of those needed for Khruschev's 'minimum deterrent' policy. The quality of conventional armed forces in Europe was increased, and after the 1968 invasion of Czechoslavakia, their forward deployment was increased. The Soviet Navy began a transformation from a purely coastal defence force to an instrument for intervention worldwide. In 1975, this increasing global role helped underpin Cuban support for the MPLAs resistance to South Africa's invasion of Angola. In 1977, the Soviets mounted a massive airlift of heavy weapons to support the Ethiopian regime in its conflict with Somalia. The 1979 invasion of Afghanistan further increased Western fears that Soviet leaders were now becoming more expansionist in their military objectives.

The US's response to these developments reflected a growing reluctance to accept the implications of superpower parity. Despite the recognition that neither country could win a nuclear war, new systems continued to be developed in order to give the US flexibility in conducting such a conflict. The 'improvements' in US nuclear arms were justified by the Soviets' own nuclear buildup, and by the latter's perceived 'gains' in the Third World. With the failure of arms talks to
limit effectively new developments in technology, these pressures were further fuelled by the considerable institutional momentum behind new, and potentially destabilising, technologies. Together these elements led, by the late 1970s, to a renewed US military buildup and a more assertive foreign policy. The US took a tough line in insisting on the deployment of new nuclear missiles in Western Europe. Prominent Administration advisers talked seriously about the possibilities for 'decapitation' nuclear attacks against Soviet leaders. (4) The Republican Party's 1980 election manifesto committed itself to restoring US military superiority. (5) In pursuit of this objective, new strategic nuclear programmes - Trident D5, MX, the stealth bomber, improved command and control - were accelerated. Massive efforts were devoted to making limited nuclear options - and/or a disarming first strike - a feasible option. As with the similar policy in the early 1960s, however, the Soviet reaction was predictable: a further build-up in their own forces in order to deny the US any possibility of exercising such options.

3. British nuclear weapons policy in the 1970s: the special relationship

Despite the 1968 decision to end a permanent East of Suez presence, British defence policy in the 1970s continued to be influenced by factors which had proved central in the 1950s and 1960s. The retreat from an extra-European military role proved to be incomplete and reluctant. The 'special relationship' with the US continued to exert a decisive counter-influence to closer links with Europe. And governments of both political parties continued to be committed to the maintenance of an independent strategic nuclear force.
Neither the shift of defence efforts from Asia to Europe, nor Britain's long-awaited admission to the EEC in 1973, led to an end to the special relationship with the United States in military matters. In political and diplomatic matters, there was a noticeable shift in policy away from the US and towards Europe, particularly under the premiership of Edward Heath. This shift was not, however, significantly reflected in new patterns of military co-operation, where the key relationship remained that with the United States. As had been the case since World War Two, this relationship was particularly close in the intelligence field, where it still constituted an effective Anglo-American diumvirate. (6) The primacy of the American connection is further illustrated by the fact that there are seventy-five 'front-line' staff attached to the British Defence Staff in Washington, compared with only seven in Bonn and ten in Paris, the capitals of Britain's two most powerful European NATO allies. (7)

As in the past, however, Britain's unique ties to the US have also bound its leaders closely to American policies and priorities, as events during the 1973 Arab-Israeli war demonstrated dramatically. In that conflict, Britain and other EEC members were unsympathetic to the Israeli offensive against Egypt, and the Heath government refused to allow the use of British bases in Cyprus and Britain for American spy flights over the combat zone. In retaliation, Kissinger charged that the Europeans were acting "as if the alliance does not exist", and the US cut off the secure communications line linking CIA headquarters in Langley, Virginia with Britain's Secret Intelligence Service (SIS) centre in London. (8) It was made very clear that Britain would have to 'stay in line' in future if it wished to retain its special relationship. Given the dependence of Britain's strategic nuclear forces on access to American intelligence sources, such a demonstration of the fragility of these
links must have been most unwelcome in London. For, as we shall
explore further in Chapter 6, this dependence inevitably casts some doubt
on the 'independence' of Britain's own nuclear force. (9)

The events of the late 1960s and early 1970s suggest, however, that
the success of Britain's application for entry to the EEC actually
revitalised the Anglo-American nuclear relationship. (10) In the late
1960s, when Britain's application had not yet been accepted, its leaders
were careful to avoid a repetition of the events of late 1962 when, it
was argued, the Nassau agreement had helped to convince de Gaulle that
he should veto Britain's entry. Thus, in 1967, Prime Minister Harold
Wilson had taken great pains to reassure de Gaulle that Britain was
becoming less dependent on the US for military supplies, and that the
decision not to ask for Poseidon was a "Nassau in reverse", as part of
his campaign for EEC entry. (11) As leader of the Opposition, Edward
Heath suggested that, at least in the long run, Britain and France should
consider pooling their nuclear forces "in trusteeship for Europe as a
whole". (12) These movements in British political concerns were
serious enough to provoke considerable American concern that the UK would
supply France with nuclear information, obtained from the US, as part of
its 'admission fee' to the European Community.

Yet, despite these worries, the eventual success of Britain's EEC
entry campaign actually made nuclear collaboration with France less,
rather than more, likely. For Britain's priority in military policy had
always been to preserve the close relationship with the US. That
priority might, at times, be temporarily modified in order to achieve
political or economic objectives in Europe. Such changes did not,
however, change the basic commitment to the primacy of the Atlantic tie.
A further indication of the continued vitality of the 'special relationship' was the willingness of both countries to renew Britain's role as the US's "Airstrip One" in Europe. From the beginning of the Cold War in the late 1940s, Britain had been used as the main forward base for US nuclear bombers with strategic capability - i.e. designed to attack targets deep inside the Soviet Union itself. Other European NATO countries had, for the most part, only allowed shorter range aircraft on their soil, regarding the presence of strategic bombers as too provocative. In addition, while most other European nations rejected similar American proposals, Britain was one of the three countries - together with Italy and Turkey - to agree to the stationing of ballistic missiles on its territory in the late 1950s. (13) Finally, the US 'triad' of land, sea and air-based nuclear weapons in Britain had been completed with the 1960 agreement permitting Polaris missile submarines to be based at the Holy Loch in Scotland in return for the supply to Britain of Skybolt missiles.

By the mid 1960s, however, partly as a result of the rethink in US policy, the importance of Britain as a forward base appeared to be in decline. The increased range of the US's new strategic nuclear systems, in particular its Minuteman intercontinental ballistic missiles (ICBMs), meant that increasing emphasis was being placed on systems based in the continental United States. The role of more vulnerable forward bases was consequently reduced, as they were held to be less easy to control effectively and more prone to pre-emptive attack. As a consequence of such factors, the Thor missiles were withdrawn from Britain in 1963 (14); and, in 1965, Strategic Air Command withdrew its remaining bombers, some B-47's, from Britain. (15) Even the submarine bases at the Holy Loch appeared to many to have only a short life ahead. The first Polaris
missiles had needed forward bases because their short range - about 1,400 miles - required them to patrol in areas relatively near to Soviet targets. The range of Polaris submarine launched ballistic missiles (SLBMs), however, increased to 2,500 miles with the A3 missile, deployed from 1964 onwards. (16) And the Poseidon SLBM, which became operational in 1971, had a range of 2,900 miles, even when carrying 10 warheads. (17) These rapid increments in capability suggested that, in the 1970s, the US would decide that forward bases for its ballistic missile submarines were no longer necessary. If such a decision were made, Britain would then be left with no American strategic nuclear bases on its soil.

Such a prognosis, however, would have been decidedly premature. The continuing political requirement for US nuclear bases in Britain overrode the lack of any military rationale. Between 1970 and 1979, a series of decisions was taken which reversed the trend towards US withdrawal, and re-established the UK as a major nuclear base.

In the first of these developments, US strategic bombers returned to Britain in Spring 1970 in the shape of 72 F-III aircraft based at Upper Heyford. (18) In 1976, the Labour government approved the deployment of a further 80 F-III's at Lakenheath. (19) As of 1984, there were still between 144 and 160 F-III nuclear bombers based at these two airfields, together with 12 EF-III electronic jamming aircraft to ensure the bombers' continued penetrability to Soviet targets. (20)

Although formally assigned to NATO, it was clear from the time of their initial deployment that the F-III's role was virtually indistinguishable from that of the F-III's based in the United States - i.e. attack against the Soviet Union as part of central US targeting plans. (21)
Throughout the 1970s, these F-III bombers, together with Britain's V-bombers, were the only US strategic nuclear forces based on land in Europe. As such, their retention was increasingly perceived as a symbol of the US's willingness to use these forces in 'defence' of Western Europe: a political role which seemed to increase even as their proportionate contribution to the US's total strategic forces became increasingly marginal.

Second, predictions of Holy Loch's impending redundancy also proved to be premature. Between 1971 and 1977, the US did withdraw Polaris missiles from the Holy Loch. They were replaced, however, by the more modern and longer-range Poseidon missiles, each of which carried between 6 and 14 independently targetable warheads. An announcement to the House of Commons was not thought to be necessary despite this very considerable increase in US firepower based in Britain. (22)

During this same period, the US enlarged its submarine base at Charleston, South Carolina and announced that some Poseidon submarines would be withdrawn from overseas bases. The two other forward submarine bases - Guam in the Pacific and Rota in Spain - both closed, the latter as a result of Spanish government pressure in 1979. According to Duncan Campbell, the withdrawal of Poseidon from Scotland was considered in the US Navy at this time. (23) The political symbolism of the base, however, ensured its survival.

Indeed left-wing opposition to the US base served to strengthen the determination to retain it. In February, 1974 the Labour Party had been elected on a Manifesto that promised:

"We shall participate in the multilateral disarmament negotiations and as a first step will seek the removal of American Polaris bases from Great Britain." (24)
Shortly after that election, however, NATO's Supreme Commander Atlantic had attacked the government position, arguing that it would create "real dangers" leading to a "serious weakening of our deterrent position". The Holy Loch base was now "absolutely vital" since there were "no credible alternatives". (25)

Such assertions were demonstrably incorrect. The value of the US bases in Britain was now clearly political; and it was as a result of political, rather than 'deterrent', considerations that the new Labour government moved swiftly to reverse its Manifesto commitment. By the time the Labour Party's manifesto for the October 1974 election was drawn up, the pledge had been reformulated, so that the removal of the Holy Loch base was postponed indefinitely:

"Starting from the basis of the multilateral disarmament negotiations we will seek the removal of American Polaris bases from Britain." (26)

By the late 1970s, however, the presence of US air and sea-based strategic forces in Britain was no longer believed by NATO leaders to be enough to ensure the credibility of the US's nuclear 'umbrella' over Europe. As a result of this, and other factors, the UK decided in 1979, together with other European countries, to accept the stationing of US controlled ground-launched missiles from 1983 onwards. (27)

This decision would mean that, for the first time since NATO was formed, US nuclear forces capable of destroying targets deep inside Soviet territory would be deployed in West Germany. It also meant that Britain would, once again, have a 'complete 'triad' of US strategic nuclear forces on its territory - the F-III bombers, the Poseidon submarines, and, from December 1983, the ground launched
cruise missiles (GLCMs) at Greenham Common. Britain's firm support of the 1979 decision, and its willingness to share in the deployments planned in that decision, despite the already large US nuclear presence, undoubtedly helped to further cement the ties between the UK and US. It thus helped foster a climate conducive to continuing to continuing US support for Britain's efforts to develop and maintain its own nuclear force. The UK's agreement to deploy F-III bombers and Poseidon missiles in the 1970s was accompanied by US assistance to Britain's Chevaline programme. The 1979 agreement to accept GLCM's would soon be followed by the 1980 request by the UK for the supply of Trident I missiles. There is no evidence that the two decisions were formally linked, as the Skybolt and Holy Loch decisions in 1960 undoubtedly were. What is clear is that a British decision to refuse participation in the deployment of US missiles would have made subsequent negotiations on its own requirements more difficult. It is symptomatic of the stability achieved in the nuclear special relationship between the two countries that such considerations could be understood without being stated publicly.

4. Britain's nuclear force in the 1970s

Throughout the 1970s, Britain's nuclear force had a relatively low profile in political debate. The nuclear disarmament movement was only a shadow of the campaign in the early 1960s. Those on the left who were critical of defence policy focused their concern on the high level of military expenditure rather than on nuclear issues. (28) Indeed, while Labour's 1974 manifesto committed the Party to "progressively reduce the burden of Britain's defence spending to bring our costs into line with those carried by our main European allies", it made no mention to all of the Party's policy on Britain's independent nuclear force. (29)
The lack of political controversy over the independent nuclear force was considerably helped by the practice of emphasising its role as a "contribution to NATO." This ambiguous formulation was used between 1964 and 1979 under both Labour and Conservative administrations. It was not until the Thatcher Government, which faced the need to make a decision on Polaris replacement, that the independent role of the force became increasingly emphasized.

The ambiguity surrounding the role of the nuclear force proved useful in securing broad acceptance for its continuing existence. Those who saw the force as a necessary attribute of an independent world power were satisfied that force with operational independence was being maintained. Those whose main concern was the preservation of the close links with the US, but were suspicious of 'top table' rhetoric, were satisfied with the declaratory emphasis on alliance, rather than national, purposes. Even those who were opposed to any British involvement with nuclear weapons took some comfort from the Labour Party's public commitment, reaffirmed in 1975 while in power, that:

"We do not intend to move to a new generation of strategic nuclear weapons". (30)

As long as the level of world tension was relatively low, and there was little active public concern on nuclear issues, the independent nuclear force seemed safe from any serious threat of cancellation. Like NATO's 'flexible response' doctrine, the government's declaratory policy on the independent nuclear force both facilitated wide political support and hid the contradictions and inconsistencies inherent in the doctrine. This inconsistency was made possible through the 1970s both by the degree of secrecy surrounding government nuclear weapons policy and by the relatively low, though still significant, costs of maintaining the force.
in the 1970s. Even the considerable concern within government over the escalating costs of the Chevaline programme was effectively shielded from public debate through the crucial decision-making period. Secrecy, therefore, proved invaluable in protecting the commitment to nuclear weapons from attack on cost grounds. As sections 5 and 6 of this chapter will show, however, secrecy and low cost would only protect the independent nuclear force temporarily. In 1980, as the government moved towards a decision to replace Polaris with Trident, nuclear weapons policy once again became a central political issue. Against the background of heightened international tension, and concern at the basic premises of 'deterrence' doctrine, it was no longer possible to keep the issue "under wraps". The dramatic cost escalation which Trident represented over its predecessor further helped to ensure that it could not escape political controversy as easily as Chevaline had done.

Such controversy was for the 1980s. Meanwhile, whatever public protestations were made, governments of both major parties in the 1970s were anxious to maintain indefinitely an effective independent nuclear force. Through these years substantial programmes were undertaken in order to keep Britain's arsenals of both strategic and tactical nuclear systems 'up to date'.

4.1 The Chevaline programme

The most important development in Britain's strategic nuclear force during this period was the Chevaline project. Its existence was one of the best kept secrets in government, and was only formally intimated to Parliament in January 1980 when Defence Secretary Francis Pym announced that it was nearing completion. (31) Until then, the only official
reference to the project had been in the 1975 Defence Review:

"The Polaris force... provides a unique European contribution to NATO's strategic nuclear capability out of all proportion to the small fraction of our defence budget which it costs to maintain. We shall maintain its effectiveness"

(32)

The development of the Chevaline programme can be traced back to 1968, shortly after work at Aldermaston on Polaris A3 warheads had been completed. (33) The purpose of early research was to identify missile design concepts which would enable the UK nuclear force to overcome the anti-ballistic missile (ABM) systems which, it was thought, the Soviets might develop in the 1970s and 1980s. Between 1968 and 1973 there were two main alternatives considered for such a system. Firstly, there was the US-developed Poseidon SLBM, which carried up to 14 MIRVed warheads, and which was to first enter service in the US Navy in 1971. By saturating Soviet defences with large numbers of independently targeted warheads, it was believed, such a system would make effective, and simultaneous, interception impossible. For the US, Poseidon had the additional advantage that it allowed greater accuracy and could threaten many more targets than the Polaris missile it replaced.

The second alternative, which Britain eventually decided to follow, was based on US ideas developed in the early 1960s. Known as Antelope, this approach concentrated on improving penetration of ABM defences by means other than increasing warhead numbers. Firstly, light penetration aids - ie decoy warheads - would be added in order to confuse enemy radar while the missile's re-entry systems remained outside the earth's atmosphere. Secondly, an ability to manoeuvre the missiles and/or the re-entry systems in space in order to complicate defences would be added.

(34)
This initial US concept was considerably developed by work in Britain. An ability to adjust the trajectories of individual missiles, so that sequentially fired missiles could arrive simultaneously, was added; and the internal electronics were hardened to protect the missiles from the effects of ABM nuclear explosions nearby.

Unlike Poseidon, the Chevaline system, which was based on Antelope, did not involve genuinely independently targetable warheads. According to most reports, it has three warheads which, like the Polaris A3 system deployed in the 1970s, are spread over a single target. (35) There is some ability to determine the targeting of individual warheads, but only within an area of up to 50 miles in diameter. (36) The generally accepted view is, however, that this does not amount to a MIRV capability. (37)

Through the early part of the 1970s, the government retained the option of buying the Poseidon system. It was not until January 1974 that the Heath government finally decided to reject this alternative and commit itself to full-scale development of Chevaline. (38) The decision was based on several factors, of which the most important appear to have been cost, the possible US reaction, and the domestic political situation.

Poseidon was opposed on cost grounds because it was believed to be unnecessarily sophisticated for Britain’s needs. Soviet ABM defences had developed at a slower rate than had been predicted in the late 1960s. (39) The ABM Treaty of 1972, as amended in 1974, had severely restricted the deployment of ABM defences by both superpowers. The Soviets retained only 64 Galosh ABM launchers round Moscow, and these were widely regarded as relatively primitive. In the light of this diminished threat, Poseidon was believed to be superfluous to Britain’s requirement for an
assured capability for destroying Moscow. Since Poseidon would require not only the purchase of new missiles, but also substantial spending on refitting submarines and new support facilities, it was believed that it would be considerably cheaper to opt for Chevaline.

In retrospect such an assessment must be open to doubt. Nevertheless it helped lead, it appears, to a fierce bureaucratic battle between the nuclear weapons establishment at Aldermaston and the Royal Navy. Eager to obtain funds for the surface fleet, the latter opposed Poseidon and argued that Aldermaston's arguments for a 'hedge' against Soviet developments were unconvincing. This concern at the costs of Britain's strategic nuclear force was a continuation of the Navy's opposition to Polaris in 1960, and its support for cancellation of the fifth Polaris submarine in 1964. (40) It would resurface yet again in the 1980s, when the plans for the Trident programme coincided with major cuts in the surface fleet.

A second factor in the government decision to reject Poseidon was uncertainty over the US response to a request from Britain to enter into a new missile sales agreement. It appears that Prime Minister Edward Heath was told that Britain would be supplied with Poseidon if it decided to make a request. At the same time, however, both President Nixon and his National Security Adviser Henry Kissinger expressed their wish that such a request should not be made. (41) They warned that congressional support for such an agreement might be difficult to obtain, given concerns about technology transfer. It was also thought that the possibility of a ban, or severe limit, on MIRVed missiles in the SALT talks between the US and the Soviet Union could affect Britain's hopes of obtaining Poseidon. The Soviets would be certain to insist on
counting a British Poseidon force of 64 missiles (up to 896 warheads) on the US side of any 'balance'. There would then, it was thought, be strong pressures in the US to abrogate the agreement with Britain if this was felt to be the only way to achieve a SALT treaty that allowed parity between the superpowers.

This case against Poseidon was strengthened because it did not apply to Chevaline. Since the latter would not be MIRVed, it would not present as much difficulty in the arms control talks as did Poseidon. Since Chevaline would not require a formal Sales Agreement, and could be developed in secret, it would be less vulnerable to criticism in the US Congress. (The same argument applied, of course, in the UK House of Commons).

Finally, the US Administration appears to have actively encouraged the Chevaline programme as a reaffirmation of the nuclear special relationship between the two countries. It provided substantial help in the development of the technology necessary. Seven underground nuclear tests were conducted in Nevada between 1976 and 1980 in order to provide Britain with information necessary to build the more compact warheads which Chevaline required. (42) Between 1977 and 1983, a large number of missile tests were performed using US facilities on land and off the Florida coast. (43) A large number of subcontracts on the Chevaline programme were placed in the US. In total, one third of Chevaline spending was in the United States. (44)

The US welcomed, and supported, Chevaline partly because it allowed the continued development of an area of technology which they had abandoned in favour of MIRV's, but which could be a useful source of ideas in future. More importantly, perhaps, Chevaline was seen as an
indication of the continued vitality of the special relationship which went a considerable way to altering the growing perception in the US, aroused especially in the late 1960s, that the British might allow their nuclear force to be gradually run down.

The third, and crucial, factor in the Heath government’s rejection of Poseidon was the domestic political situation at the time. Purchase of Poseidon would inevitably involve considerable publicity around the sales agreement. Given the Labour leadership’s public opposition to a 'new generation' of strategic nuclear weapons, it would be forced into an open rejection of the deal; and, if the Labour Party should come to power before the project were complete, it would then be likely to cancel Poseidon without reviving Chevaline. (45) For this reason, as well as on grounds of cost and the possible US reaction, the Heath government decided that the maintenance of Britain’s independent nuclear force would be better served by choosing Chevaline.

This decision proved to be a prudent one. Only weeks after the government’s decision, a General Election was held in which the Labour Party was returned to power, albeit without a parliamentary majority. The Ministers directly involved with defence matters, while committed to maintaining Britain’s nuclear force, would have found it difficult not to cancel Poseidon. The Chevaline programme, on the other hand, could be concealed from the Cabinet and the Party as a whole. Even if it were revealed, it could plausibly be represented as only an 'improvement' to Polaris, not a 'new generation'.

At first the decision to proceed with Chevaline under the new government was a provisional one. The government had announced a major review into defence spending as a whole in order to fulfil its manifesto
pledge to reduce Britain's defence burden to that of its main European allies. (46) Pending the results of the Review, a subcommittee of the Cabinet, consisting of Harold Wilson, Denis Healey, Roy Jenkins, James Callaghan and Roy Mason, decided in April 1974 to authorise a further year's expenditure on the project. This amounted to £46.5 million. (47) At this stage, approval of the project was still provisional, and it was effectively put on "trickle-feed" until a decision to go ahead to completion had been taken. (48)

Growing knowledge of the technical requirements for the project led to the estimated cost of the programme rising significantly. In 1973, the total cost had been estimated at £195 million at Autumn 1972 prices. By Autumn 1974, this had risen to £235 million at the same prices. (49) Nevertheless, in September 1975, it was agreed that the project should be taken to completion. At the same time a major re-organisation of the project's management was ordered in an effort to establish better financial control. (50)

Under the new management team, it soon became apparent that Chevaline costs had been grossly underestimated. More funds than had been foreseen would be necessary for missile tests. Warhead costs had been reasonably estimated. The costs of re-entry vehicle design, which was a field in which Britain had not been involved since Blue Streak's abandonment in 1960, had, however, been badly understated. Scacely six months after the Ministerial decision to proceed, the estimated cost increased from £235 million to £388 million (at Autumn 1972 prices). (51) Nor would this be the end to cost escalation. On the latest available estimate, Chevaline will cost £530 million at Autumn 1972 prices - equivalent to £2,200 million at Autumn 1984 prices. (52)
This is roughly equivalent to the capital cost of the original Polaris programme as a whole. (53)

Labour's decision in 1974 and 1975 to keep Chevaline going, despite its diminishing military rationale and rising costs, appears to have been motivated primarily by the desire to keep the momentum of the independent nuclear force going, and in particular to retain the option of a full scale Polaris replacement programme in the 1980s. There was concern that Chevaline cancellation would have led to the dispersal of weapons design teams and given the impression, both in the US and inside the MOD, that Polaris would not be replaced. (54) When Ministers reconsidered the project in 1977 both David Owen, the Foreign Secretary and Fred Mulley, the Defence Secretary, appear to have been less than enthusiastic about the project. According to Lawrence Freedman's account:

"Chevaline did not survive on its strategic merits ... Nor was it felt that it represented value for money ... Nevertheless, large sums of money had already been spent and future savings could only be made by scrapping the programme altogether. (and) perhaps most importantly, it was felt by the few ministers considering the matter that it would be politically dangerous for a Labour Government to cancel Chevaline ... Cancellation would be taken as a major turning point in British nuclear weapons policy, as an indication of being prepared to wind down the whole force." (55)

The decision to continue Chevaline was a clear sign that the Labour leadership, despite their public protestations, wanted to continue the independent nuclear force indefinitely, and were willing to pay a substantial price to do so. It is an interpretation that would be confirmed in 1978 and 1979 as the Labour government moved towards a decision to request Trident I SLBMs from the US as a replacement for Polaris in the 1990s.
In addition to investing large sums in Chevaline, the 1974-9 Labour government agreed to a number of other developments which underlined its commitment to continued independence in nuclear weapons, and reduced Britain's reliance on the US for the maintenance of that independence.

Firstly, in April 1976, the government decided to set up, at a cost of £10 million, a national production plant at Chapelcross for the production of tritium. Since 1961, tritium, a radioactive substance used in fusion weapons, had been supplied from the United States on the assumption that, were the US to refuse further supplies, the UK could set up production facilities before the decay of the material had seriously affected the weapons' capabilities. By the 1970s, however, new studies of the tritium ageing problem suggested that it could be retained in weapons for a much shorter period than had previously been assumed. In May 1974, the first British nuclear test for 9 years was performed, apparently in order to assess the effects of tritium aging on a weapon near the end of its shelf life. As a result of this test, and related studies, it was now thought that the effectiveness of Britain's nuclear force was dependent on continuing US tritum supplies. The decision to build the Chapel Cross plant was thus a clear indication that the government was determined to retain an independent nuclear capability, if necessary against US wishes. (56)

Secondly, the Carter Administration, which took office in the US in 1977, had taken a strong stance on nuclear non-proliferation. It decided that long-term agreements with the UK on the barter of nuclear materials were not compatible with this policy. As a result, the Callaghan government decided to build a plant at Capenhurst to produce the highly enriched uranium necessary for the fuel of both Polaris and
nuclear attack submarines. (57) In 1981, however, the Reagan administration agreed to renew the long-term barter contracts; and, as a result, the Capenhurst programme was slowed down and a policy of interdependence in fuel supplies readopted. (58) The episode had illustrated yet again the continued commitment to an independent nuclear weapons capability.

Thirdly, the 1970s saw a marked reduction in Britain's reliance on 'dual-key' American nuclear weapons for its tactical delivery systems. Substantial numbers of British advanced tactical warheads were produced once the requirements for Polaris had been fully met in 1972. Between 1972 and 1978, according to John Simpson's account, the number of tactical warheads held by the RAF and Royal Navy rose from 45 to 250. (59) This enabled Jaguar and Buccaneer aircraft to be equipped with the new British bombs; and it also allowed the deployment of UK-controlled nuclear depth charges on Navy ships, for use by nuclear-capable helicopters. (60) There were also reports that Britain was considering the construction of its own warheads for its nuclear artillery and Lance missiles, the main remaining area of dependence on US warheads. (61) Although such ideas were not implemented, perhaps because of the considerable load already imposed on Aldermaston by other programmes, it seems possible that such ideas may be revived in future, possibly giving Britain a neutron warhead capability. (62)

4.2 The RAF and nuclear weapons

The development of an enhanced independent capability in nuclear weapons themselves was accompanied, during the 1970s, by a number of programmes for maintaining, and updating, nuclear delivery systems. In particular, there was a wide ranging, and largely successful, attempt to retain for the RAF a major nuclear role, despite the formal hand-over of
the 'strategic deterrent' to the Navy in 1969. Suggestions that the V-bombers should be converted to a purely conventional role, as part of NATO's flexible response strategy, were rejected. (63) V-bombers were retained in a primarily nuclear role through the 1970s, armed with megaton-yield weapons. (64) They continued to be drilled in tactics for low-level strikes against targets in the Soviet Union, and were maintained on Quick Reaction Alert (QRA) status. The RAF believed that perhaps a third of the bombers would be able to penetrate Soviet defences and reach their targets even without American support. (65) This 'strategic' role, the RAF argued, gave Britain flexibility in its nuclear forces which Polaris alone could not provide. It also allowed a continuing British contribution to NATO's European-based strategic forces to complement the US F-IIIs that were being deployed in England: thus helping to cement the close co-operation between the RAF and USAF that had existed since the 1940s.

The RAF's biggest success in retaining a nuclear role, however, was the Tornado GR1 programme. In 1960s, it had experienced severe problems in getting government agreement for a major new bomber programme. The TSR2 project was cancelled on cost grounds in 1965. And in 1968 it was decided not to purchase the US-built F-III, which was to have been given the long-range nuclear strike role after the V-bombers had retired. Instead, after the failure of negotiations with the French, an agreement was reached, in early 1969, to produce the Multi-Role Combat Aircraft (MRCA) in collaboration with Italy and West Germany. (66) The total capital cost of the project - later renamed Tornado - for Britain would be at least £13,200 million at 1984/5 prices - more than 40% higher than total estimated Trident costs. (67) Of the 385 aircraft ordered by the RAF, 220 would be the GRI strike variant. The 220 GRI's would contribute to a marked increase in Britain's inventory of nuclear-capable
in the 1980s, when they eventually came into service.

5. British Defence policy 1977-85

By the late 1970s, British defence policy faced another of its periodic costs/commitments crisis. Continuing relative economic decline had limited the resources available for defence. Labour's 1975 Review, together with further cuts in 1975 and 1976, had meant that, in real terms, defence spending had grown by only 1.1% between 1973-4 and 1977-8 (68) Given the continued escalation in the costs of military equipment, this was not sufficient to adequately finance all of Britain's defence commitments. The Tornado programme, in particular, put a growing strain on the resources available during this period. (69) In addition, the government was committed, despite East of Suez withdrawal, to an expensive equipment programme for the surface fleet, involving new aircraft carriers and the sophisticated Type 22 frigate and Type 42 destroyer. (70) The size of the British Army on the Rhine was to be maintained at 55,000, the level set in the early 1960s. Finally, substantial amounts were to be spent, as we have already seen, on Britain's nuclear capabilities. All these commitments simply could not be met within a static overall defence budget.

At first the crisis was met by short-term economies in maintenance, training, stocks and the armed forces' pay levels. While equipment spending in real terms rose by 29.5% between 1974-75 and 1978-9, personnel spending fell by 8.0%, and that on other items -repairs, buildings, etc. - by 20.0%. (71) Such a policy could not last. The operational effectiveness of the services was being severely handicapped, and discontent amongst service personnel was increasing. By late 1976,
the Labour government had recognized that a major increase in total
defence spending would be needed in order to retain all Britain's planned
military capabilities.

As a consequence of this assessment, the government agreed to
increases in real defence spending which marked its final abandonment
of its manifesto pledge to reduce Britain's defence burden to the level
of its European NATO allies. In May 1977, the government agreed to
implement NATO's target of 3 percent annual real increases in its
defence budget. (72) With rising government revenues forecast as a
result of North Sea oil discoveries, and optimistic forecasts of economic
growth, it was believed that these increases could be financed without
undue additional strain on the economy. The decline in national income
in the early 1980s, and the consequent pressure for reduced public
spending, was not foreseen at this time.

Labour's decision to agree to implement the 3% target was
influenced to some extent by the general worsening of the international
climate in the late 1970s. Tension between the superpowers was
increasing, and the US was putting increased pressure on its allies to
make a greater contribution to its confrontation with the Soviet Union.
Having failed to cut its defence budget in the early 1970s, when East
of Suez withdrawal was in process and détente was at its height,
Britain now found itself being urged to increase its military effort.

It would be misleading, however, to see this changed
international situation as the main determinant of the decision to
increase defence spending. Other European NATO members, notably West
Germany, Belgium, Holland and the Scandinavian nations, were to increase
defence spending by far less than Britain. Yet all these countries
already had defence burdens considerably less heavy than that of the UK. Rather, the British 3% decision should be understood as related more to the government's concern at its place within the Western Alliance, and its commitment to Britain's perceived status as NATO's leading European military power. Indeed the increasing economic predominance of West Germany in Western Europe only served to strengthen the determination of British leaders to retain the UK's advantage in an area - military capability - in which it was still relatively strong. As a result, Labour politicians proved unwilling to cut any of the main components of the nation's 'balanced' defence effort. It was then inevitable, given the underfunding of existing commitments, that defence spending would have to be increased.

The Labour government in the late 1970s had attempted to retain Britain's international status, and preserve longstanding military commitments. The Conservative government that succeeded to office in May 1979 was also committed to these goals. For possibly the first time since the early 1950s, however, the new government also appeared to wish to use increased military effort to restore Britain to its past 'greatness'. In pursuit of this objective, the NATO 3% objective was extended to 1985-6. Despite a severe economic slump, and rapidly rising unemployment, the government has overachieved this goal. Between 1978-9 and 1985-6, defence spending in real terms rose by 29 percent, or 3.7% per annum. It is an increase that is even more remarkable given the cuts in other areas of public spending. While the defence budget rose by 29%, education spending fell by 2%, housing by 59%, and trade and industry by 56%. Of the major areas of expenditure, only social security spending, which had to bear the strain of over two million more unemployed, was given a comparable increase. (73)
Some of this high priority attached to defence spending was a consequence of the general pressures on NATO countries to increase military efforts as part of the developing New Cold War. (74) The greater part of an explanation must be sought, however, in domestic factors. In the first two years of the government, substantial sums were needed to restore temporary economies made in the late 1970s, given the continued unwillingness to review existing commitments. In addition and of increasing importance, the Thatcher administration presided over a series of shifts in foreign and defence policy, which together marked a reassertion of the principles on which Britain's international role had been based in the 1950s and early 1960s.

Firstly, an increased emphasis was placed on Britain's capability for intervention outside the NATO area. The Royal Navy was deployed in the Caribbean, Indian and Pacific Oceans in order to reassert Britain's continuing military interest in those areas. An Army brigade of 5,000 men was earmarked specifically as a small-scale Rapid Deployment Force for out-of-area operations. The 1982 Falklands War further increased the resources available for capabilities - such as long-range transport aircraft - which had been run down in the 1970s as part of withdrawal from East of Suez.

Secondly, an increased importance has been placed on Britain's 'special relationship' with the United States. Mrs. Thatcher has made it clear that she values her warm relations with Mr. Reagan. The government is willing, where necessary, to subordinate concerns about the direction of US defence policy to the interests of Allied unity - as the recent 'Star Wars' debate has illustrated. And Mrs. Thatcher has seemed ideologically sympathetic to the Reagan Administration's attempt to reassert the US's global superiority over the Soviet Union, even when other West European governments have urged a more conciliatory line.
Thirdly, as the next section of this chapter will discuss, the Conservative government has placed increased importance in its declaratory policy on the role of Britain's independent nuclear force. From being described simply as a "contribution to NATO" since 1964, the nuclear 'deterrent' has become one of the "main pillars" of the defence programme. (75) The government has placed top priority on gaining agreement to its plans for acquiring the Trident II system to replace Polaris, if necessary at the expense of its conventional contribution to NATO. Indeed the decision to acquire Trident, rather than less sophisticated alternatives, itself reflected this high priority.

In all three of these areas, the Thatcher government's policies, therefore, reflected its belief that it was possible, and desirable, to base Britain's defence policies on the same principles and priorities as in the 1950s, despite the decline in its economic fortunes in the intervening years.

It was a sentiment nowhere better expressed than in Mrs. Thatcher's Cheltenham speech shortly after the victory of the Falklands campaign:

"When we started out there were the waverers and the fainthearts .... Those who believed that our decline was irreversible ... that Britain was no longer the nation that had built an Empire and ruled a quarter of the world. Well they were wrong. The lesson of the Falklands is that Britain has not changed and that this nation still has those sterling qualities which shine through our history". (76)

6. The Polaris replacement debate: 1977-82

By the late 1970s, increasing attention was being given, by those involved in long-term military planning, to the problem of Polaris replacement. The four Polaris submarines had only commenced their service between 1968 and 1970. (77) The Chevaline programme for
updating the missile re-entry vehicles was still in a development stage, and would not be fully in service until the mid 1980s. Nevertheless it was believed that a decision on Polaris replacement would be needed in the early 1980s, preferably in 1980, given the extensive timelag that would exist between a decision and the actual deployment of new systems. In the case of Polaris, this time-lag had been relatively short - less than 8 years. It was generally believed, however, that to allow such a short period would be extremely imprudent, particularly since the co-operation of the US in the replacement programme could not be assumed. Furthermore there was only one shipyard available for SSBN construction, (Barrow), compared with the two available for Polaris. It was argued, therefore, that as long as thirteen years would be needed between decision and deployment. (78) Given the subsequent planned eighteen year lifetime of the Trident programme, even this apparently generous assumption appears to have been overoptimistic.

Several factors contributed to the assessment that Polaris would need to be replaced in the early or mid 1990s, and therefore that a decision would need to be made in 1980 or shortly after. First, it was believed that submarines had a lifetime of twenty, or at most twenty-five, years. As they approached this age, they would become more expensive to maintain, perhaps noisier, and probably less reliable. This fixed a deadline for replacing some, and preferably all, Polaris submarines by 1993. It has been argued by some naval sources that Polaris refits now being carried out are so extensive as to effectively solve this problem. By fitting expensive new sonar equipment and 'stealth' technology, Polaris will continue to have undiminished survivability against Soviet ASW. (79) However, while this argument may have considerable merit, it understates the problem that faces a government committed to maintaining the strategic force.
Given Polaris's extensive refit schedules, it would only need one submarine to be lost for it to be impossible to maintain a continuous patrol, and then several years might be needed for a replacement. It is not the inevitability of Polaris obsolescence, therefore, that is at stake, but its growing possibility.

Secondly, the Polaris missiles themselves would, by the mid 1990s, be amongst the oldest ballistic missiles in existence. The US Navy was due to, and indeed did, phase out its last Polaris missiles in the early 1980s. Thereafter Britain would have to finance maintenance facilities in the US for its own missiles completely by itself. In addition, even with Chevaline modernisation, there were some doubts as to whether Britain could rely on Polaris against the ballistic missile defences that might be deployed in the late 1990s.

Indeed problems with the performance of Polaris missiles have already been revealed with a series of test firings in 1980, which led to a decision to spend £400 million (at 1984/5 prices) on new motors for the missiles. (80) Production lines were re-opened, and Lockheed brought some of its experts out of retirement for the programme - a possibility that will clearly diminish as time passes. (81) Although it is the submarines, rather than the missiles, that seem to be the driving constraint in the replacement timetable, it is clear that, without major new investment, the missiles can also not be expected to last much beyond the turn of the century.

6.1 The choice of Trident

In 1977, the Royal Institute of International Affairs (R.I.I.A.) published a major study, written by Ian Smart, on the alternatives available for replacing Polaris, given the need to reach a decision in
the early 1980s. The study concluded that two main possibilities existed—submarine-based ballistic missiles and submarine-based cruise missiles. It further expressed the view that, between these two alternatives, a fleet of five ballistic missile submarines (SSBNs) would appear to be the optimum choice. (82) (The relative merits of alternative Polaris replacement systems are discussed in section 6.4)

At about the same time as the R.I.I.A. study was being undertaken, the Ministry of Defence itself came to the view that the issue required discussion at a political level. Accordingly, Prime Minister Callaghan convened a small ad hoc group of senior Ministers to examine the matter. In order to maintain secrecy, it did not even carry a Cabinet Office number in the 'Gen' series, and its existence was not reported to the Cabinet's Defence and Overseas Policy Committee, which included some who might have questioned whether such discussions were compatible with Manifesto commitments. The committee consisted of Prime Minister James Callaghan, Chancellor Denis Healey, Foreign Secretary David Owen, and Defence Secretary Fred Mulley. (83) As a first step towards a decision it ordered civil servants to prepare two studies, one on military and political implications of Polaris replacement, and a second on possible replacement systems. The second study, undertaken under the chairmanship of Chief Scientific Adviser Ronald Mason, was the more important of the two. It quickly came to the same conclusion as the R.I.I.A. study: that a submarine-based force was needed. and that, therefore, neither aircraft nor ground-based missiles were suitable. At this stage, however, the choice between cruise and ballistic missiles remained open. (84)
By commissioning these studies, the Ministers concerned appeared to be acting in clear breach of their pledge, in October 1974, that:

"We have renounced any intention of moving towards a new generation of strategic nuclear weapons". (85)

Even so, no consensus existed amongst the four Ministers concerned as to the best course of action. Mulley remained ambivalent on the need for replacement, and was under strong pressure from senior officers anxious that the costs would fall on conventional forces. (86) Owen had for some time argued that, while he supported a British 'contribution' to NATO's strategic force, it need not be capable of being used independently, nor of destroying Moscow without American assistance. In 1971, shortly after leaving his office as Navy Minister, he had written that the Labour government in 1964 could have cancelled the fourth Polaris submarine at minimal cost. "This would have left three submarines - a suitable number to ensure that the deterrent was never seen as independent but only as a contribution to NATO". By not doing so, Owen wrote, the Wilson government had "lost a unique opportunity to kill once and for all the whole concept of a separate British national deterrent". (87) In the late 1970s, Owen continued to hold these views, and argued that, while some Polaris replacement was required, it need not be designed to meet the 'Moscow criterion'. According to his own account, he "challenged Trident in government consistently from 1977 to 1979". (88)

Callaghan was clearly committed, however, to the concept of an independent British force, and it has been reported that he favoured Trident as the most appropriate Polaris replacement. (89) At the Guadeloupe summit meeting in January 1979, Callaghan raised the issue of
possible American help with President Carter. (90) One of the purposes of this meeting was to obtain the agreement of the UK, France and West Germany to deploy the new US medium-range missiles (codenamed LRTNF—Long Range Theatre Nuclear Forces) in Europe. (91) The coincidence of these two discussions may have been fortuitous. It is clear, however, that a parallel exists with the Skybolt-Holy Loch deal in 1960; and that the US might have been markedly less keen to help Britain with Trident had it refused to accept its share of Cruise missiles. President Carter's advisers must also have been aware that failure to help the UK's Polaris replacement programme could jeopardize British support for LRTNF modernisation, on which there was already some European disquiet. (92)

In early 1979, Callaghan moved to dilute his Party's commitment against Polaris replacement. As a consequence, in the General Election of May 1979, the Labour Party's manifesto was decidedly ambiguous:

> In 1974, we renounced any intentions of moving toward the production of a new generation of nuclear weapons or a successor to the Polaris nuclear force; we reiterate our belief that this is the best course for Britain. But many great issues affecting our allies and the world are involved, and a new round of strategic arms limitation negotiations will soon begin. We think it essential that there be full and informed debate about these issues in the country before any decision is taken". (93)

While the Labour government had not made a decision before the 1979 General Election, therefore, it appears likely that, had it been re-elected, it would have decided to replace Polaris. In all probability, that replacement would have been Trident.

Once the Conservatives came to power under Prime Minister Margaret Thatcher any remaining uncertainty on whether Polaris would be replaced soon ended. A formal Cabinet subcommittee (MISC 7) was set up, consisting of Prime Minister Thatcher, Chancellor Geoffrey Howe,
Home Secretary William Whitelaw, Defence Secretary Francis Pym, and Foreign Secretary Lord Carrington. It considered the results of the official studies carried out under the previous government; and by the end of the year, the cruise option appears to have been ruled out. (94)

In December 1979, Mrs. Thatcher obtained President Carter's general agreement to helping the UK programme, and the next six months were taken up with detailed negotiations on the acquisition of American Trident C4 missiles and associated services. In July 1980, the government announced to the House of Commons that it had decided to buy C4 missiles for four, or possibly five, SSBNs. The total cost of the programme was estimated at between £4,500 million and £5,000 million at September 1980 prices. (95)

As the British decision was being made, however, significant changes were being made in US strategic nuclear doctrine. Increasing emphasis was being placed on the need for counterforce capabilities, first in PD-59 under President Carter and then, after his November 1980 election, by President Reagan's administration. As part of this new emphasis, in October 1981, President Reagan announced his approval for the development of a completely new submarine-launched ballistic missile - Trident D5. (96) By the end of the century, it is planned, the US could have 5,000 D5 warheads, making it the largest single component of its strategic arsenal. Because of its pin-point accuracy, this force will give the US the theoretical capability of destroying all Soviet ICBMs in a 'disarming first strike', leading one US Congressman to describe it as "the most destabilising (to superpower relations) 'first strike' weapon ever built, far more than the MX". (97)
In response to the US decision, the UK government reconsidered its own position and, in March 1982, announced that it too would purchase the D5 missile. Because the new missile was considerably larger than the C4 missile, the size of Britain's planned submarines would also have to be increased, thus increasing the cost of Polaris replacement further. In addition, the government took the opportunity to announce that the force would be fitted with a new, and expensive, nuclear reactor (PWR-2), and advanced tactical weapon systems still under development. As a result of these changes in the programme, together with adverse exchange rate and price movements, the cost rose from £4,500-5,000 million (at September 1980 prices) to £7,500 million (at September 1981 prices). (98) As of the time of writing, largely as a result of further changes in prices and exchange rates, the government's estimate of cost had risen to £9,265 million (at 1986/7 prices). (99)

The decision to extend nuclear weapons co-operation with the United States was the natural one for the British government to take. As we have seen in the last three chapters, the 'special relationship' has been a key component of Britain's foreign and defence policies since the 1940s. The British government had bargained toughly to secure the 1962 Nassau agreement, on which the Trident deal would be modelled. It had provided the US with a unique overseas base for its strategic nuclear forces, and valuable access to its intelligence facilities, in order to maintain the close links between the two countries. The preference of the British government, under both Callaghan and Thatcher, was that Polaris's replacement should also be developed within this framework.

This preference was reinforced by the problems that possible alternatives would create. The Chevaline experience, and a fortiori the costs of France's independent nuclear programme, had demonstrated the
substantial costs involved in national development efforts. On the other hand, co-operation with France in nuclear weapons development would have required a major shift in a policy followed since the War, which neither Labour and Conservatives leaders saw any good reason to consider. These two alternatives would certainly have been seriously considered if the US had been unwilling to help Britain further, as indeed its hesitancy over Poseidon in the early 1970s had suggested might be possible. They were, however, only fallback solutions. The priority was the continuation of the Anglo-American nuclear entente which had been central to British policy since the days of Churchill and Roosevelt.

By the time of the January 1979 Guadeloupe discussions between Carter and Callaghan, it was clear that the US would be willing to help Britain. The opposition to independent nuclear forces, particularly strong under President Kennedy, had subsided. Familiarity with the UK's Polaris force, and the special relationship with its intelligence services, meant that the necessity for maintaining Britain as a staunch, and loyal, ally overrode remaining doctrinal reservations. Britain was one of the strongest supporters of both the 1977 3% spending growth decision and of LRTNF modernisation. After the embarrassment over the neutron bomb episode, Carter and his aides were not about to risk offending a key ally for theoretical arguments which, with the passage of time, seemed less than central.

The clinching argument for the US, however, was probably its perception that a refusal to help Britain would not lead it to abandon its commitment to an independent nuclear force. Instead, it would force Britain, in all probability, either on a path of independent development or towards collaboration with France. Not only would such policies reduce American influence on British nuclear planning and, perhaps,
operations. It could also lead to a drastic cooling in the bilateral political relationship. Most of all, these alternatives would probably cost a lot more than a deal with the US. As the French experience in the 1950s had illustrated, increased spending on independent strategic nuclear forces would probably be at the expense of conventional forces assigned to NATO forces which the US was, at this time, determined to build up. Robert Komer, who designed the US proposals for a NATO conventional buildup endorsed in 1977, and was Under Secretary of Defense for Policy in 1979-80, justified his support for Britain's Trident programme in these terms:

"Nor was the United States ever enthusiastic about the buildup of British and French nuclear forces. We regarded them as superfluous, potentially destabilising, (could we rely on de Gaulle not to pull the nuclear trigger?), and almost inevitably funded at the expense of UK and French conventional forces. Although we aided UK force modernisation - most recently in promising to provide Trident II missiles - this was essentially because we saw the British as determined to modernise anyway, hence calculated that we might as well help them do so less expensively in order to minimise the impact on their conventional NATO contribution". (100)

As a result of the US's concern to reduce the costs to Britain of its attempt to remain a nuclear power, it granted a number of significant concessions which lowered the final cost of the UK Trident programme. Firstly, apparently after some State Department opposition, it was agreed to sell Britain the complete MIRV systems for the Trident missiles. (101) This was actually an improvement on the Nassau agreement, under which Britain had to develop its own re-entry vehicles, albeit with American help. (102)

Secondly, the US agreed that Britain should pay only a small contribution to Trident R & D costs - a flat rate of $160 million at fiscal 1982 prices - thus avoiding any possible escalation in the R & D
costs of the US programme (though not escalation in missile production costs). (103) In return for these concessions, Britain agreed to provide RAF personnel to man US-owned Rapier air defence missiles guarding US bases in Britain. In 1985-6 the cost of this deal was an estimated £4.5 million in pay and allowances, though it is likely to rise in later years. (104)

6.2 Arguments for Trident

While the deal reached on Trident with the US was reasonably generous, given the weapon system on offer, it has been less clear, even to supporters of an independent nuclear force, whether the system chosen was not too sophisticated - and therefore expensive - for Britain's requirements. Such a perception has encouraged the advocacy of cheaper, and less sophisticated, Polaris replacements - as Section 6.4 will discuss. Supporters of the government decision, for their part, put forward at least three main arguments in favour of the Trident II programme.

Firstly, it is argued that there are considerable advantages for Britain in using the same weapons systems as the US. The use of American missiles, and provision of information for submarine and warhead design, will enable savings to be made in capital costs. The French experience, it is argued, demonstrates the considerable costs involved in independent development and production.

Similarly, the maintenance costs of the force will be reduced by the sharing of facilities with the US. The September, 1982 decision to service Britain's D5 missiles at the US facilities at Kings Bay, Georgia is a good example of this. This decision will save an estimated £500 million on the provision of capital facilities in the UK, in addition to
long term savings in running costs of around £700 million. (105) If Britain had opted for a system other than Trident D5, the use of such a shared facility would not have been possible, and more national facilities would have been needed. Even if Trident C4 had been chosen, maintenance costs would have been increased as a consequence of US Navy plans to phase out their own C4 missiles in the late 1990s - just as Britain's new SSBNs are due to enter service. (106)

In operational terms it is held by some advocates of Trident that there are advantages in possessing the same strategic system as the US. This 'commonality' will encourage the exchange of knowledge on operational improvements, such as methods of combating enemy ASW. In addition, it is argued, the use of a common system ensures that the Soviets will be unable to distinguish a British missile in flight from an American one. It will thus be more likely to respond to a British attack as if it were launched by the United States - thus enhancing its ability to 'trigger' an American nuclear strike. (107)

All these arguments have some merit. The converse of which 'commonality', however, is dependence, is examined in more detail in Chapter Six. To the extent to which it exists, it clearly throws into question the contention that Trident will be an independent nuclear force. Only if commonality does not also bring undue dependence can it plausibly be an advantage for those who favour an independent strategic nuclear force.

Even if operational independence were to exist, however, commonality imposes other costs for Britain. It requires that Britain buys a force geared, not to perceived national requirements for nuclear deterrence, but to the requirements on which the US bases its own nuclear
forces. In the case of Trident D5, this means that Britain has had to purchase a system which even some of its strongest supporters would argue is much more sophisticated than is required. The large D5 missile is both bigger and considerably more expensive than the C4 it replaces. It therefore requires larger, and much more expensive, submarines than would have been needed with Polaris or Trident I. The additional costs of buying a weapon system in excess of Britain's perceived deterrence requirements thus has to be balanced against the savings in production and maintenance costs which may be incurred by having the same system as the US.

The second main argument of Trident proponents is that Polaris needs to be replaced by a much more sophisticated system in order to preserve Britain's capability to launch a second strike despite improved enemy counter-measures. To assure a credible strategic nuclear deterrent, it is argued, Britain's force must be able to both survive any possible Soviet pre-emptive strike and, after doing so, be capable of penetrating any Soviet defences, including those round Moscow itself. These two criteria - penetrability and survivability - are then used to explain why Polaris must be replaced by a much more sophisticated weapon system such as Trident. Even if it is assumed that Polaris/Chevaline will remain fully effective until the mid 1990s, it is argued, its replacement must anticipate possible improvements to Soviet defences after that time, based on the supposedly prudent assumption that no significant arms control measures are introduced. Indeed if Polaris's successor is to last as long as Polaris itself - 25 years - it must anticipate developments in military technology between now and the year 2020. Technological developments in two areas in particular are of concern: anti-submarine warfare (ASW) and anti-ballistic missile (ABM) defences.
In the first area, ASW, Soviet capabilities do not at present pose a significant threat to Britain's SSBN forces. Indeed, according to government evidence, no British Polaris submarine has ever been found on patrol by the Soviet Navy. (108) Nevertheless it is argued that Soviet ASW capabilities are certain to increase considerably in the next 40 years, and it would therefore be prudent to make provision to counter them. The Trident system will do this in a number of ways. The increased range of the missiles will enable the submarines to patrol much further away from their potential targets in the Soviet Union than at present, thus greatly increasing the area over which Soviet ASW forces must search. In addition, the improved PWR2 reactors to be installed will allow more submarines to be on patrol at any one time. Of the four Polaris boats, it has been estimated, only two are on patrol for 73% of the time, whilst for 20% of the time only one boat is available. (109) Trident, by contrast, should be able to keep three submarines available for over 80 percent of the time. (110) This will mean that Soviet ASW forces will need to destroy more submarines at sea in a disarming first strike, and leave fewer boats as easy targets in port or in refit.

In the second area, ABM defences, current Soviet capabilities are also relatively primitive and, as we have already noted, could be overcome by Polaris even without the Chevaline up-date. However, the United States is now devoting large resources to research and development on Strategic Defence Initiative (SDI) systems which, if deployed, would breach the ABM Treaty. There is little doubt that, if the US continued this programme, the Soviets will attempt to follow suit. If these developments are then projected to the year 2020, on reasonable assumptions, the current Polaris re-entry vehicles are unlikely to be able to continue to guarantee the destruction of Moscow. The Soviets by that time are likely to be able to destroy a high proportion of incoming
British missiles. If only 16, or at most 32, single-target missiles have been launched, the UK forces' destructive power could be reduced below the level necessary to effectively destroy several Soviet cities.

Trident, it is argued, guards against such developments. By obtaining a MIRVed system, Britain will be presenting Soviet defences with a much larger number of targets which must simultaneously be destroyed. It therefore increases the chances that at least some will get through. The greater number of Trident submarines at sea, compared with Polaris, will also increase the number of warheads that can be launched simultaneously, posing further difficulties for possible 21st century ABM defences.

Given the premises that it must take into account possible developments in ABM and ASW defences in the next 35 years, and that these developments may not be restrained by arms control agreements, there is a plausible technical case for Trident. Unfortunately, however, such 'worst case' assumptions inevitably fuel the arms race in both East and West. As section 6.3 will show, it is precisely the escalation which the attempt to meet these worst case criteria necessitates which constitutes one of the main arguments against Trident.

Arguments of 'communality' and of the need to maintain a credible second strike capability are the two most commonly heard public justifications of the Trident decision. There is, however, a third argument for Trident which, although not often publicly aired, nevertheless appears to be important within military and specialist circles. It is the need for a Polaris replacement which provides additional 'flexibility' in the use of nuclear weapons, increasing the range of targets that can be hit and allowing the strategic force to be used in a limited nuclear conflict. Trident, it is argued, will help to provide this flexibility in a number of different ways. Firstly, its
Increased range will allow more targets to be covered, for example east of the Urals, and will also enhance its 'post-launch survivability'. (111) The latter is particularly necessary if the SSBN may be needed again for future strikes.

Secondly, by increasing boat availability and warhead numbers, Trident will also increase the capability to use a portion of the strategic arsenal in a limited nuclear war while still holding enough in reserve for destruction of Moscow and other major cities. Third, the greater accuracy of the D5 missile will allow Britain to threaten a greater range of Soviet targets, perhaps including Soviet silos and command bunkers. This flexibility, it is argued, will increase the ability to deter, and if necessary respond to, limited Soviet conventional or nuclear attack.

The UK government has been extremely reluctant to discuss the nature of its independent targeting policy. The 1980 Open Government Document stated only that:

"Successive UK Governments have always declined to make public their nuclear targeting policy and plans, or to define precisely what minimum level of destructive capability they judged necessary for deterrence. The Government however thinks it right now to make clear that their concept of deterrence is concerned essentially with posing a potential threat to key aspects of Soviet state power. There might with changing conditions be more than one way of doing this and some flexibility in contingency planning is appropriate". (112)

It is clear from semi-official sources that the ability to destroy Moscow is considered to be a necessary, though not a sufficient, part of these plans. What is unspecified is whether 'key aspects of state power' might, at some future date, also include military targets such as missile silos. This possibility was discussed in 1980 by Michael Quinlan, then the senior civil servant in charge of Britain's strategic
nuclear programmes, in evidence to the Commons Defence Committee:

Patrick Wall (Conservative MP)

"Is Trident going to be sufficiently accurate to switch from the softer to the harder targets? I am asking about Trident I. I will come on to Trident II afterwards".

Mr. Quinlan

"I hesitate to get deeply into the question of targeting ... Polaris, in its various forms, will not have the kind of accuracy that will make it any good at taking on silos at any reasonable rate of exchange, but there is a range of targets between hitting a large city and hitting a silo which may be of some relevance. The Trident memorandum ... does use a general term - Soviet state power - which may embrace a range of targets lying between these two". (113)

Unfortunately Mr. Quinlan was not pressed further on Trident II targeting. Nevertheless it is clear that even the present force is already targeted on a range of military and non-military targets in order to provide British leaders with a number of so-called 'limited nuclear options'. Once Trident II gives Britain a better 'rate of exchange' against missile silos and command bunkers there is little reason to suppose that these too will not be included in the government's options.

Nuclear strategists have argued for some years that greater 'flexibility' in targeting of British (and French) nuclear forces would increase their deterrent value. Graeme Auton has argued this point in some detail:

"Medium powers must escape the kind of logic asserting that the only effective targets for smaller deterrents are cities and civilian populations; ie: they must reject the contradictory notion that medium nuclear powers have a deterrent value but no war-fighting utility. Required is a range of options allowing for the measured and selective employment of nuclear
weapons against a wide array of targets, in order to avoid immediate escalation to a level of destruction that could not credibly be pursued".

In the event of a Warsaw Pact conventional assault on Western Europe, or some other limited provocation, the British and French governments would have an initial option ... of striking at vulnerable counterforce targets in the Soviet Union".

These targets would include:

"Non-military, industrial targets outside urban centres that would require only one or two nuclear warheads each. Air-defence sites .... military airfields, major army bases and submarine bases (in which perhaps half of all Soviet SSBNs would be docked or undergoing refit)....hard targets such as missile silos, nuclear weapons storage facilities and command posts".

Reassuringly, Mr. Auton tells us that:

"Of course the USSR might launch limited counterforce or otherwise 'selective' retaliatory strikes of its own .... to demoralise European populations without inviting condign destruction of Soviet cities. The assumption is, however, that at this point there would be powerful incentives on both sides for controlling conflict and preventing its escalation to mutual city targeting".

"Since the initial use of nuclear weapons (by the UK) would not have apocalyptic consequences, the threat to resort to it in the event of dire provocation would be more credible - much more credible, certainly, than the threat of massive countercity strikes". (114)

An influential study of the targeting requirements for Britain's nuclear forces, written by Geoffrey Kemp and published by the International Institute for Strategic Studies, gives some insight into this trend in thinking. It starts with a lengthy discussion on the most cost-effective way for Britain to destroy major Soviet cities which includes the chilling argument that:
"It can be argued that more chaos would result from a nuclear attack that only partially destroyed a city and left many injured to be cared for than from an attack that totally obliterated it, leaving few, if any, survivors".

Kemp concludes his study by contending that:

"Any decision by medium powers to develop forces capable of fairly sophisticated targeting options ... (would be expensive). However it can be argued that such an option would give a medium-power nuclear force greater political flexibility in event of a major conflict with the Soviet Union or (perhaps more important) in a pre-war crisis situation". (115)

More recently David Hobbs at Aberdeen University, in a study designed to investigate less expensive alternatives to Trident, discusses the minimum requirements for such an alternative.

"... the United Kingdom might be well advised to seek a more flexible retaliatory capability, allowing some scope for controlled or graduated escalation (for intra-war deterrence). That would imply a wider range of target options, taking advantage of the enhanced accuracy of new delivery vehicles; and, if practicable, a less discrete system than the existing one, so that use of a portion of it would not automatically jeopardise the remainder". (116)

As a result of this logic, Hobbs then argues that an alternative to Trident must be able to destroy both the 'area' targets for which Polaris is intended and, in addition, a number of counterforce targets. He concludes by defining the 'criterion for adequacy' for such an alternative as '100 assuredly arriving warheads' - more than three times the targeting capability of the current Polaris force, even with two boats on patrol.

An additional pressure for Polaris's replacement to have greater flexibility built into it appears to have come from the imminent obsolescence of Britain's V-bomber force which, as we have seen, provided Britain with a 'dyad' of strategic forces in the 1970s. According to one
account, a number of those most closely involved in the Trident decision - including Chief of the Defence Staff Air Marshall Sir Neil Cameron and Deputy Under-Secretary Michael Quinlan - believed that "retention of a sub-strategic capability to strike Soviet targets was important for the national deterrent mission". (117) The Tornado GRI aircraft due to replace the Vulcan bombers could not reach much of Soviet territory due to its restricted range, and the cost of developing air-launched cruise missiles in addition to a submarine-based strategic force was then thought to be prohibitive. As a result at least one possible system - Poseidon - was rejected as not giving sufficient capability for limited nuclear options. As Malone reports:

"Poseidon's prospects dimmed when account was taken of the distinct operational advantages of increased SLBM range. They declined even further when, in late 1979, the government concluded that it would not be possible to replace the Vulcan squadrons with a weapons system capable of engaging targets in the Soviet Union. Polaris's successor would, therefore, be the only element of the British force structure capable of undertaking selective strikes against the Soviet Union properly. It would, in this sense, be successor to both the Polaris and Vulcan forces. This development placed an even greater premium upon post-launch survivability and argued for an excess warhead capacity in third-generation strategic forces." (118)

It is difficult to assess the relative importance of these three arguments - communality, the need to ensure a credible second strike capability, and the desire for limited nuclear options. All appeared to have played some part in the decision to choose Trident D5. Overarching all three arguments, however, and therefore perhaps crucially important, appears to have been a concern to obtain the best system available. This concern was motivated partly by the reluctance to have a national force clearly 'inferior' in quality to that of France, or one several generations behind that of the superpowers. For such a perceived
inferiority might have damaged Britain's international standing. In addition there was an appreciation that the British nuclear force has, historically, been vulnerable to criticism on the grounds that it is ineffective. The experiences with Blue Streak and Skybolt in the late 1950s and early 1960s illustrated this clearly. By attempting to rely on systems which might become obsolescent within a few years, the government had allowed opponents of the independent nuclear force - in the US and UK - to attack it on ground of practicality rather than principle. Once Polaris had been chosen in 1962, such criticisms appeared less effective and the force's future was secured for two decades. By going again for the best system available, and perhaps overinsuring quite considerably in the process, the government sought to insulate the planned force from the charge that it would not be effective. A review of alternative Polaris replacements, and the problems involved with them (section 6.4), will demonstrate that this consideration in the choice of Trident may be well-founded.

6.3 Arguments against Trident

By emphasising the need for a Polaris replacement that is the most sophisticated available, capable of operating to the year 2020 and providing a range of limited nuclear options, the government has created a number of other problems. These have led to a series of arguments against Trident over and above those generally applicable to the concept of an independent nuclear force. Firstly, the massive escalation in warhead numbers is a subject of serious concern. Secondly, the increased accuracy of the D5 missile is seen as contributing to crisis instability and thus undermining mutual deterrence. Thirdly, and politically most damaging, the decision to buy a very advanced weapon system to replace
Polaris has meant that the financial costs incurred will be difficult to meet within overall constraints on defence spending.

Firstly, as a result of its MIRVed front-end, Trident will be able to destroy many more targets than the Polaris/Chevaline system it replaces. Polaris can at present hit a theoretical maximum of 64 targets with its 64 missiles. In practice, given the number of boats on patrol at any one time, only 32 or possibly even 16 targets could be destroyed at short notice. Each Trident D5 missile, however, is theoretically able to carry up to 17 warheads. The provisions of the unratified SALT II agreement provide, however, for a maximum of 14 warheads on each MIRVed SLBM, and the US is complying with this provision. Assuming that Britain follows the US lead, the maximum number of targets which Britain's four submarines could destroy is 896. (equal to four submarines, sixteen missiles, fourteen warheads.) After allowing for refits and submarines in port, the maximum number of targets that could be destroyed at short notice would be either 448 or 672, depending on whether two or three boats were on patrol. Trident, on these calculations, will represent between 21 and 28 times the targeting capability of Polaris.

In explaining the decision to switch from C4 to D5, however, the government stated that:

"We feel it right to make clear that the move to Trident D5 will not involve any significant change in the planned total number of warheads associated with our strategic deterrent force in comparison with the original intentions for a force based on the C4 missile system". (119)

Since the C4 missile has only 8 warheads on each missile, this implies that the government's plans for Trident D5 do not envisage more than 512 warheads in total. Given the low financial cost of deploying
additional warheads, however, it is possible that military planners will not adhere rigidly to the artificial ceiling of 512. As Secretary of State John Nott conceded in 1982:

"The system will not come into service until the mid-1990s but my successors and the Prime Minister at the time would have complete choice as to how many missiles were placed in the submarine, and similarly the Prime Minister at the time would have a choice as to the number of warheads that were placed on that missile'. (120)

Even if the government plans at present to have only 512 warheads on Trident, therefore, it could change its mind in the 1990s. Indeed, if Soviet ABM defences improve significantly in the next decade, or are perceived as likely to do so in the decade after that, the government has already made it clear that warhead numbers could be increased. In justifying the decision to build 16 missile tubes on each submarine, rather than the 12 that would be necessary for a 512-warhead force, the government argued that:

"the large number of tubes would provide flexibility to cope with any possible improvements in Soviet anti-ballistic missile defences throughout the life of the force ...this should not necessarily be taken to imply that we are currently planning to deploy the maximum number of missiles and warheads that will theoretically be possible as a result of this decision." (121)

As Admiral of the Fleet Lord Lewin has explained, "since we will not initially require the full capability represented by the Trident system - as the Government has repeatedly made clear - there is a margin for insurance should Soviet defensive systems be enhanced" (122) Given the worst-case planning used in nuclear policy, clearly illustrated with Chevaline development, together with the likelihood of a superpower 'Star Wars' arms race, it therefore seems probable that Britain's Trident force will eventually have as many as 896 warheads. Whether it has 512 or
896, however, it will clearly represent a massive quantitative escalation that it is difficult for the government to present as a "minimum deterrent" force.

One of the most serious consequences of this increase in warhead numbers may be its effects on the chances for arms control agreements between the Soviet Union and the United States. On SALT counting rules, a MIRVed missile is assumed to have the maximum number of warheads with which it has been tested. In Trident D5's case this will be 14. If these rules remain unchanged, therefore, the UK Trident D5 force will be considered to have 896 warheads even if the government sticks to its intention only to deploy the number previously planned for the C4. Together with the French nuclear force, there will then be as many as 2,000 strategic nuclear warheads in the possession of countries not included in the bilateral US-Soviet arms talks. These will constitute a significant proportion of the current Soviet strategic arsenal - now around 11,000 warheads. If 'deep cuts' in superpower arsenals were agreed, the difficulty would be further increased.

In practical terms, it is difficult to believe that future arms control agreements can be reached between the superpowers except on the basis of the principle of rough parity. Given the vast overkill that exists in current arsenals, the attachment to this principle may have little rational foundation. Nevertheless it exists. The Soviet Union appears to be unwilling to accept a situation where its nuclear forces are numerically clearly 'inferior' to those of its NATO rivals. In turn no US President could hope to win political support for an agreement that allowed the Soviets more strategic weapons than the US. These two, rather different, requirements proved to be compatible in the
negotiations for SALT I and SALT II, largely because of the relatively small British and French arsenals at the time. When 'third parties' have 2,000 warheads between them, however, it would make strategic 'deep cuts' agreement impossible unless one of the superpowers effectively abandoned the concept of 'parity'.

The second area of criticism of the acquisition of Trident D5 is its greatly increased accuracy. Highly accurate weapons enable one side to destroy the other's missile silos and command bunkers before they can be used in retaliation. Were one side then to believe that it had the capability to destroy all, or almost all, the opponent's nuclear forces in a 'disarming first strike', the incentives to use nuclear weapons as an instrument of political coercion would increase. Were it to be perceived that both sides had first strike capability, the incentives to use nuclear weapons first in a crisis could be overwhelming.

At present few, if any, of the missiles of the two superpowers have the 'hard target capability' necessary for an effective disarming first strike. With the planned development of MX, Trident D5 and Pershing II missiles, however, the US is likely to remedy this 'gap' in the next few years. There is every likelihood that the Soviet Union will follow the American lead with missiles such as the SS-X-24.

Trident D5 is the largest single programme in the US plans for acquiring a large-scale counter-silo, and therefore potentially first strike, capability. Using inertial guidance, stellar guidance, and inflight updating with Navstar satellites, the warheads are likely to attain a CEP of 300 feet. (123) This will give each Trident D5 warhead at least a 95% probability of destroying a hardened Soviet silo. Using
two Trident warheads per Soviet silo, it has been estimated that only a handful of the 1398 Soviet land-based missiles would survive an initial attack by the US.

In addition, it is possible that, in the early 1990s, the Trident D5 missile will be fitted with a terminal guidance capability, enabling its warheads to home in even more precisely onto their targets. Such a capability is already fitted to the Pershing II missiles now being deployed in West Germany. If used on Trident, it could reduce its CEP to as low as 150 feet.

According to the Sunday Times, Trident's counterforce capability has led one government minister to argue that:

"We've been lumbered with something that's totally inappropriate. Trident is a first strike weapon and totally unsuitable as a deterrent from our point of view". (124)

However, the government has officially denied that Trident's accuracy was considered in the decision to acquire it. In an 'Open Government Document' in 1982, it stated that:

"The Government wishes to make it absolutely clear that the increased accuracy of the Trident D5 system played no part in its decision to adopt the more modern system".

It points out that:

"even if a UK Government had any thoughts of a first strike capability, simple arithmetic demonstrates that it is totally beyond its grasp. The firepower of the British force with maximum D5 payloads would be sufficient to target only a very small proportion of the Soviet ICBM silos".
To forestall the observant reader who may be asking himself or herself whether this implies that the US is seeking a first strike capability by acquiring 5,000 D5 warheads, it continues:

"the reasons behind the UK and US decisions to deploy D5 are very different ... The purpose of the US ... is to make it clear that it has the ability to use its nuclear weapons ... against different numbers and types of targets including specifically military targets. This is made possible by the increased accuracy of the more modern missile. Their policy is not in any way to provide a 'first strike' capability or to make 'limited nuclear war' easier or more likely; neither the US, the UK nor NATO as a whole subscribes to either concept". (125)

The contention that Trident's increased accuracy is unrelated to US plans for a limited nuclear war and for a first strike capability, yet is designed for use against hardened military targets, will not convince many of its critics. The entire basis of recent American nuclear planning has been precisely to provide the President with a range of 'limited nuclear options' for the conduct of a 'protracted nuclear war'. The statement that British decision makers were entirely uninterested in Trident's increased accuracy has been greeted with some scepticism in Britain, and is clearly inconsistent with its integration into US strategic nuclear targeting plans.

Such scepticism is likely to be reinforced by the contention that the maximum payload on the British Trident force could target 'only a very small proportion of the Soviet ICBM silos'. The maximum payload which Britain could deploy in four 16-tube submarines will be 896 highly accurate D5 warheads. At present the Soviet Union has 1398 ICBMs (Intercontinental Ballistic Missiles) of which only 818 are MIRVed. (126) Were 50% cuts in these forces to be agreed by the superpowers, the Soviets could be left with as few as 410 MIRVed ICBMs. (127)
If Trident is as accurate as its manufacturers claim, therefore, a British first strike could hope to destroy a very substantial proportion of existing Soviet ICBMs, including most of its most powerful ones (the MIRVed ICBMs). Were the Soviets to agree to 50% cuts in those forces, Britain would be able to target independently two Trident warheads on most, if not all, silos of MIRVed ICBMs: virtually ensuring their destruction.

It is likely that, even if 50% cuts were implemented, Britain could not destroy each and every Soviet ICBM silo. In any event, there would still be other substantial nuclear forces available to retaliate against the UK, including medium range SS20 missiles, submarines, and bombers. But it is difficult to see how 896 Trident warheads can credibly be described as 'sufficient to target only a very small proportion of' 1398 ICBM silos.

The third criticism to which Trident is vulnerable, even from those who traditionally support nuclear programmes, is that it is simple too expensive. On government figures its estimated capital cost is now £9,300 million at 1986/7 prices. (128)

Moreover even this figure may be an underestimate. There are a number of items excluded from the cost estimate on the grounds that they are not solely attributed to the Trident programme. (129) It is this crippling cost, as much as any other factor, that has broken the previous consensus, within the armed forces and on the Centre and Right of the political spectrum, in favour of an independent nuclear force.

6.4 Alternatives to Trident

As the estimated cost of Trident has increased, and worries about the escalation it represents have grown, there has been some discussion
on alternative Polaris replacement systems. The options rejected by the
government between 1978 and 1982 are being re-examined. While the Labour
Party is clearly opposed to any Polaris replacement, many Trident
opponents in the SDP/Liberal Alliance, and some in the Conservative Party,
are anxious to find a cheap alternative. In this quest there is a strong
element of desperation. Many of those opposed to Trident because of its
cost, but committed to retaining an independent strategic force, do not
appear to have understood fully the difficulties of reconciling these
two views. (130) This section aims to outline these difficulties.

Proposals for alternatives to Trident may be divided into those
suggesting alternative 'launch platforms' and those proposing different
'delivery vehicles'. The former refers to the system on which the
nuclear weapon is normally kept, and from which it would be launched.
The latter is the system responsible for transporting the weapon to
the target, either by a gravity bomb or by some form of missile.

Since around half of the cost of Trident is incurred by the need
for expensive submarines, there have been a number of proposals for
alternative launch platforms. Amongst these have been ground-based
missile launchers, aircraft, and dual-capable attack submarines. We
consider these three alternatives in turn.

For an alternative launch platform to provide a credible
strategic force, it must not only be cheaper than Trident. It must also
be perceived to be capable of surviving a pre-emptive nuclear strike and
then retaliating in sufficient strength. For this reason, the first
alternative, ground-launched missiles, is not popular as a British
strategic system. As long ago as 1960, Britain abandoned the Blue
Streak missile mainly because of its vulnerability to attack. In the 1980s and 1990s, with much more accurate Soviet missiles available, a land-based force would provide a strong incentive for pre-emption and thus, in turn, encourage British leaders to use the force earlier than otherwise might be thought necessary.

There has been some discussion within government on the possibility of Britain acquiring its own force of ground-launched cruise missiles (GLCMs), able to move around the countryside to improve their chances of survival. Such a mobile force, however, could not ensure its survival in a large scale nuclear attack and would, in any case, require considerable traffic of cruise missiles on the roads. The latter prospect would present political problems even for a Conservative government. When mobile cruise missiles for Britain are proposed, therefore, they are generally seen as a complement to a last resort strategic system, and not as a substitute. In such a 'theatre nuclear' role, perhaps as a replacement for the V-bombers, GLCMs might be thought useful. Indeed in 1979 a strong lobby within the Ministry of Defence pressed for precisely this proposal as part of the NATO decision to introduce new US medium-range missiles into Western Europe. As Britain's only strategic force, however, land-based missiles are a non-starter.

The second alternative - aircraft-based systems - has more support, particularly in the Royal Air Force. It was such a system, after all, that provided Britain's strategic force in the 1950s and 1960s. Institutionally, the RAF has always been more committed to a nuclear role for itself than the Navy. Indeed, in the debates leading up to the Trident decision, the RAF appears to have lobbied vigorously for a
reinstatement of its role using air-launched cruise missiles. (134) The problems involved in using cruise missiles will be discussed shortly. There are also difficulties with an aircraft-based strategic force, however, which were instrumental in the shift to submarines in the 1960s and are no less important today.

The central problem is that it is difficult, and very expensive, to maintain a credible strategic air force that can survive a surprise attack 24 hours a day, 365 days a year. Much of such a force would have to be kept on 'strip alert', ready to take off with bombs loaded within three or four minutes, and an adequate number of aircraft would probably have to be constantly airborne. For, without assured survivability, the force would appear incredible to the general public, and probably to potential enemies. The need for airborne alerts, however, would make nuclear accidents more likely and create public apprehension, as the government pointed out in its rejection of this option:

"Maintaining launch aircraft permanently airborne might seem to solve the problem of airfield vulnerability. But this is very expensive. Moreover, no British Government would want to have numerous nuclear-weapon carriers constantly airborne, year in and year out, in crowded airspace over and around our small country" (135)

Moreover, even if such an option could ensure that the strategic force was protected from pre-emptive attack, it would still face enormous problems of survival during a prolonged conventional war. In such a war, communications facilities and airfields would be prime targets and the aircraft themselves would be bound to suffer heavy losses. To continue to keep one hundred or more strategic aircraft operational through a non-nuclear conflict would be extremely difficult. There would therefore be considerable pressure to use the force at an early stage of a conflict.
before its effectiveness had been diminished by aircraft losses and the
destruction of communications networks. A national nuclear force that
cannot be withheld from use in a prolonged conventional conflict is
not likely to be a politically acceptable one, given NATO's declared
policy of 'flexible response.'

Some of these problems could be alleviated by appropriate
measures, in particular more aircraft and better protected airfields.
The more that such extra investment is felt to be necessary, however,
the greater the capital cost of an aircraft-based Polaris replacement
becomes, and therefore the less its attraction as an alternative to
Trident. Even if the capital cost of such a force could be kept lower
than a submarine-based force, moreover, the need for large numbers of
personnel and aircraft to be on constant alert is certain to mean that
running costs will be several times higher. It therefore appears clear
that aircraft cannot offer a credible alternative to Trident at a lower
cost unless the government is willing to accept severe dilution of its
requirement that its strategic force should be able to survive
conventional or nuclear attack.

The third possible alternative launch platform is currently the
most popular amongst pro-nuclear Trident critics. It is the deployment
of strategic nuclear weapons - probably cruise missiles - abroad a large
number of British weapon platforms which are already used, or planned to
be used, for conventional roles. Such an arrangement - 'dual-capable'
weapon systems - is already used for Britain's theatre nuclear arsenal.
Tornado GRI, Buccaneer, Jaguar aircraft, Royal Navy helicopters, and
Army howitzers are all armed with both conventional and nuclear weapons.
The system could also be used, it is argued, for the strategic nuclear
role.
Some commentators have suggested that aircraft, and even surface ships, could be used as dual-capable strategic systems, but these would suffer from problems of survivability in a conventional conflict even greater than those of the dedicated strategic aircraft that we have already ruled out. Instead, the favourite candidate for the role of dual-capable strategic launch platform is undoubtedly the Royal Navy's fleet of nuclear-powered attack submarines. Britain, it is argued, could follow the US Navy's example by equipping all its attack submarines with twelve (or more) cruise missiles in addition to the normal conventional weapons. Britain currently has eighteen such submarines in service or on order. It is argued that, dispersed throughout this relatively large fleet, a nuclear capability would be less vulnerable to Soviet ASW than the small fleet of 4 missile submarines currently planned. It would also mean that the considerable expense involved in building a dedicated missile submarine fleet would be avoided. The cost of the cruise missiles needed would, by comparison, be relatively small.

The idea of a dual-capable SLCM force has clear attractions for politicians, such as the SDP leader Dr. David Owen, who on the one hand do not support an "independent deterrent" in principle but, on the other hand, believe that Britain should not be seen to be opposed to making some contribution to the US's strategic nuclear force. As he argued recently:

"If we take the Minister's view of a minimum deterrent having to have a super-sophisticated ballistic missile system capable of penetrating the Galosh defences around Moscow, I have no doubt that we come out with Trident."

Dr. Owen continued by emphasising his view that "Britain's nuclear force should be seen as part of NATO's overall deterrent, not as an
'independent' force." For such a 'minimum deterrent' force, he argued, there was a case for considering sea-launched cruise missiles. (136)

For those who believe that Britain does require a survivable second strike force for independent use, however, the attack submarine plan is not a satisfactory alternative to Trident. For it will detract considerably from the Royal Navy's capability for fighting a conventional war. While the war-time role of strategic nuclear submarines is to remain hidden and secure until 'needed', that of attack submarines is to destroy enemy forces, if necessary at considerable risk to themselves.

These roles are directly contradictory. To the extent that some dual-capable submarines were to behave as strategic forces, their contribution to the conventional battle would be zero, and therefore Britain's conventional capability would effectively be cut. If this is the plan for their deployment that advocates have in mind, then this is not a cheap alternative to Trident after all, and the capital costs of the attack submarines involved should be included in any cost comparison made. If this was done, however, any cost advantage over Trident would be small or non-existent.

On the other hand, if it is intended that none of the cruise missile-carrying attack submarines are to be withheld from battle, then there would be a danger that the nuclear arsenal could be depleted, during a non-nuclear war, below the level that would constitute a credible deterrent. At some stage, as the eighteen submarines were reduced in numbers - perhaps to 10, or 8, operational boats - the pressure would grow inexorably to withdraw the survivors from the battle in order to safeguard Britain's last-resort nuclear deterrent. Again this would suggest that the real costs to the UK's conventional military
strength of a strategic nuclear force would be as great as if a specially dedicated fleet of Trident submarines had been built.

If there appears to be no clearly adequate, yet cheaper, alternative to a dedicated submarine fleet as a launch platform, might there nevertheless be an acceptable alternative to the expensive Trident D5 missile as a delivery system? Two possibilities have been widely discussed. First, cruise missiles. Second, ballistic missiles other than Trident D5.

The main reason for favouring cruise missiles is their low cost: as low as £1.25 million each. (137) This advantage must, however, be balanced against a number of considerations which suggest that it is clearly inferior to ballistic missiles for the purpose in question. Most obviously, cruise missiles will be subject to considerable attrition from enemy air defences. Indeed, as the US is now expanding its capability in this area to several thousand missiles, on sea, land, and in the air, the Soviets are likely to devote considerable resources to defensive counter-measures. For a British cruise missile force of, at most, a few hundred weapons, the proportion able to penetrate Soviet defences in an independent, British only, attack is likely to decline. The exact percentage of missiles that could get through by the year 2000 is now a matter of considerable debate. No cautious planner would want to assume, however, that more than 50% would get through to their targets once launched, and some would argue for a more conservative figure.

In addition, if a fair comparison is to be made with Trident D5, if for many years after 2000 since Trident itself is planned to last until 2020. If this is done, penetrability is likely to decline even more dramatically if current technology is used. If, as is more likely, more sophisticated cruise missiles are developed in the 1990s, Britain could
find herself having to invest large amounts in attempting to keep pace with superpower technologies, with no guarantee that it would succeed.

Because of the lower penetrability of cruise missiles, together with the fact that they have only one warhead per missile, Britain would require far more cruise missiles than ballistic missiles to achieve the same effect. In his influential 1977 study, Ian Smart argues that 17 cruise missile carrying submarines (SSGNs), each carrying at least 24 SLCMs, would be equivalent to five ballistic missile submarines (SSBNs) each carrying 16 missiles with three warheads. (138) The government, in announcing the C4 decision in 1980, calculated that eleven SSGNs, each with 80 cruise missiles on board, would "give less assured deterrent capability than a force of five boats each with 16 Trident ballistic missiles." It would, moreover, cost a third as much again in capital costs and about twice as much to run. (139) Savings on buying cheaper missiles would thus be, at least in part, offset by the expense of building more submarines. Indeed even one sympathetic account of the SLCM option, which concedes that a fleet of 7 SSGNs would be needed as a minimum deterrent force, estimates its capital cost at £5,000 million at 1983 prices, and it is likely that the running costs (of such a force) would be higher than four Trident submarines. (140)

Because cruise missiles are both cheap and small, and the main cost of a SLCM capability would be in the boats themselves, most of those still advocating such an alternative suggest that the missiles should be deployed on dual capable attack submarines. As we have suggested already this proposal involves large hidden costs and operational difficulties. At least for those who believe that Britain requires a credible last resort nuclear force, cruise missiles do not appear to be a cheaper alternative to Trident.
Perhaps the most telling point against cruise missiles, however, is the extent to which they would make Britain much more operationally dependent on the United States than it is at present with ballistic missiles. Cruise missiles depend on terrain contour mapping (Tercom) to keep on the correct course for their targets and avoid enemy air defences. Britain has no such capability, and could only develop it at substantial cost. Yet the justification for an independent strategic nuclear force depends on the assumption that Britain may, in some circumstances, wish to use nuclear weapons when the US does not. In such circumstances, it is virtually inconceivable that the US would assist the UK. As a consequence, British cruise missiles would have to rely entirely on inertial guidance which, on one calculation, would produce a navigational error of around one mile in every hour of a three hour flight. (141) This would be an unacceptably high error even for counter-city missions, and would probably make the force more vulnerable to Soviet air defences. Even if a cruise missile force were thought to be significantly cheaper than Trident D5, therefore, a government committed to an independent nuclear force would be likely to reject it as effective only with American aid.

Were cruise missiles ruled out, we are still left with a number of ballistic missile systems which could, in theory, be chosen instead of Trident D5. The existing Polaris, Poseidon or Trident C4 missiles could be revamped or purchased. Britain might even risk an independent missile production programme of its own. Substantial savings in capital costs might thereby be made.

Such alternatives, too, would not be easy options. The acquisition of the cheapest of the missiles - updated Polaris or Poseidon - could produce severe problems of penetrability and survivability by the late 1990s. With the development of space-based
ballistic missile defences now under way at a pace faster than anticipated in 1980, the pressures are for more, rather than less, sophisticated missiles to counter these defences. (142) The adoption of a cheaper missile, such as Poseidon, would still incur considerable expense, and might only postpone further large expenditure on a further new system for a few years.

The main savings on alternative ballistic missile systems result from being able to use smaller submarines. This in turn, however, means that if developments in ABM technology then require an upgrading to a bigger missile - such as Trident D5 - it would be impossible to fit them into the small submarine. If, on the other hand, older missiles (such as the C4) were put in a large submarine capable of taking D5 later, then the savings would be negligible. Indeed, such a solution, because of the 'communality' argument already examined, might actually increase lifetime force costs. A cheaper ballistic missile force chosen today might lead to greater costs in the 1990s, and early 21st century, in a repetition of the Chevaline experience.

From the foregoing examination of alternatives to Trident, therefore, it appears that none of the possible options provides a cheaper and politically acceptable solution to the budgetary dilemmas which Trident has created. If options were chosen which appear to save large sums, the most popular of which is SLCMs on attack submarines, there would be substantial hidden costs and both the capability and operational independence of the force would be severely impaired. If options were chosen with a greater capability but less savings, the most discussed of which is Trident C4, reduced capital costs would be offset by higher running costs and an increased possibility of obsolescence in the first decade of its operational life. It is therefore understandable that the government believes that Trident II cancellation could be
the first step towards the abandonment of an independent strategic force altogether.

7. Conclusions

The period covered by this chapter has encompassed remarkable shifts in the debate on British defence policy. In 1968, British policy appeared to have stabilised round a series of agreed principles, inter alia a residual extra-European role, the primacy attached to the special relationship with the US, a continuing commitment to an independent strategic nuclear force, and a major role in NATO conventional and theatre nuclear plans. Through the 1970s this consensus lasted, helped both by the low level of public concern at superpower relations and by the secrecy with which successive governments treated nuclear weapons decision-making.

Only in the late 1970s did this consensus begin to crumble. As detente faltered and then failed, and the US adopted an increasingly belligerent posture internationally, fears of war increased in Europe. In Britain, this changing political climate coincided with the decision to replace Polaris with the much more expensive, and sophisticated, Trident D5 missile system. As a consequence of both the general climate and its high cost, Trident has proved very unpopular. Yet an examination of the decision to procure it suggests that, were a government to cancel it, it is unlikely to find a credible alternative strategic weapons system at a lower price. The choice is likely to be increasingly perceived to be between Trident and no independent nuclear force at all. It remains to be seen whether, as in the early 1960s, a political consensus around the retention of an independent nuclear force can be recreated.
NOTES


2. Ibid. p. 72.


9. Ibid. p.73.


18. Uwe Nerlich, op. cit. p. 22.


21. Uwe Nerlich, op. cit. p.23

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36. Interview.

37. Peter Malone, *op. cit.* p. 21, reports that senior British officials told him that "although the package had MIRV qualities, these arose 'quite as a by-product'." This account appears to confirm a report that the US Joint Chiefs of Staff classify Chevaline as a MIRV system (*Observer, 30 October, 1983.*).


39. Lawrence Freedman, *op. cit.* p. 37

41. Ibid. p. 68. See also Lawrence Freedman, *op. cit.* pp. 45-6.


46. For the results of the review, see *Statement on the Defence Estimates 1975*, *op. cit.*


48. Ibid. p. 12.


50. Ibid. p. 2.

51. Ibid. p.2.

51. In 1980, it was estimated that Chevaline would cost £1,000 million ('The Development of the Chevaline Improvement to the Polaris Missile System', Memorandum submitted by the Ministry of Defence, contained in *Ninth Report from the Committee of Public Accounts, op. cit.*, p. 1.). This has been interpreted wrongly by most commentators to mean £1,000 million at 1980 prices. In fact, the £1,000 million estimate was an amalgam of 'actual sunk costs' before 1980 (which are expressed in cash rather than 'real' terms) and 'projected costs' at September 1980 levels. The cost of Chevaline in today's prices can, however, be readily deduced. The same MoD memorandum estimates the cost in Autumn 1972 prices to be £530 million. Allowing for inflation, this is equal to £1,670 million in Autumn 1980 prices, and £2,200 million in Autumn 1984 prices.


55. Ibid. p. 54.


78. Ibid. pp. 15-16.


82. Ian Smart, op. cit. pp. 8-13.

83. Times, 4 December, 1979.


90. Lawrence Freedman, op. cit. p. 61.

91. David N. Schwarz, op. cit. p. 228.


102. Peter Malone, op. cit. p. 60.
106. 'The United Kingdom Trident Programme,' op. cit. p. 5.
107. This is discussed further in Chapter Six.
109. Ian Smart, op. cit. p. 28.
111. Peter Malone, op. cit. p. 115.
117. Peter Malone, op. cit. p. 123. It is not clear in what respect a capability to attack the Soviet Union can be described as "sub-strategic".
118. Ibid. p. 116.
119. 'The United Kingdom Trident Programme,' op. cit. p. 6.
120. First Special Report from the Defence Committee, op. cit., p. 3.
121. 'The United Kingdom Trident Programme,' op. cit. p.
123. CEP: Circular Error Probable. The radius of a circle around a target within which 50% of warheads aimed at that target are predicted to land. Paul Rogers, Guide to Nuclear Weapons 1984-85, Bradford Peace Studies, 1984, pp.18-19.


125. 'The United Kingdom Trident Programme,' op. cit. p.6.


127. As of the time of writing, however, the probability of such an agreement during President Reagan's term of office is fast receding.


130. Several good examples of this are found on the Conservative backbenches, for instance Piers Merchant, 'Trident: Speak now or forever pay a price', Guardian, 2 November, 1984.


134. Ibid. p. 107.

135. 'The Future United Kingdom Strategic Nuclear Deterrent Force,' op. cit. p. 11.


137. David Hobbs, op. cit., p. 46.


139. 'The Future United Kingdom Strategic Nuclear Deterrent Force', op. cit., p. 17.


CHAPTER SIX

BRITISH NUCLEAR DOCTRINE

1. Introduction

The purpose of this chapter is to examine the military rationales which have been proposed for Britain's national nuclear force. Those who believe that Britain's nuclear weapons are needed for, or at least contribute to, its security must logically believe that situations exist in which the use, or threat of use, of the nuclear force could protect the country's "interests", however defined.

Section 2 of the chapter therefore looks at possible scenarios in which, it has been suggested, Britain's nuclear weapons might have a justifiable role. Firstly, their possible role as a contribution to US/NATO nuclear strikes is discussed. Second the possibility of a major European war between NATO and the Warsaw Pact, in which the UK had an interest in using its own nuclear weapons even though the US declined to use its own forces, is considered. Third, the possibility of the national nuclear force being of use in a confrontation between the Soviet Union and a Britain 'standing alone' is examined. Finally, the possible role of the force in a conflict with other powers outside Europe is considered.

Section 3 of the chapter then analyses British nuclear doctrine and force requirements. The circumstances in which the national nuclear force might be used, outlined in Section 2, should, and to an extent do, determine the technical requirements for that force. This section therefore discusses what these requirements are, and how far current and proposed forces meet them. To the extent that these requirements cannot be met, the military justification for maintaining the force itself is thrown into question.
2. Rationales

2.1 A Contribution to NATO

As previous chapters have discussed, British governments have always maintained that the national nuclear force is a 'contribution' to NATO's nuclear deterrent, to be deployed in conjunction with, rather than independently of, the US force. This view of the role of the nuclear force was particularly popular with the Labour governments in 1964-70 and 1970-79, which contained a number of individuals opposed to the concept of an 'independent deterrent.'

To justify the maintenance of Britain's nuclear force as a 'contribution to NATO' may have had some logic in the early years of the nuclear age. During this period, and up to 1960 or so, the US possessed overwhelming nuclear superiority over the Soviet Union. As a consequence, NATO felt it could safely base its defence policy on a massive nuclear bombardment of the Soviet Union in the early stages of a war - a policy of 'massive retaliation.' Until the late 1950s, and Soviet acquisition of strategic nuclear systems, it appeared unlikely that the US would refrain from using its own nuclear force if Western Europe were attacked.

During this early period, Britain played an important role in American nuclear plans. It provided a crucial forward base for the bombers which would launch the nuclear assault on the Soviet Union. Without the use of British bases, the effectiveness of this assault would have been considerably diminished. In addition, in the years before H-bombs were produced in quantity, Britain’s own nuclear force provided useful additional firepower for the West. Both these commitments served
to increase British influence on US policy, and strengthen the Anglo-American alliance as the leading force in NATO.

In the period when the US did not yet have a massive overkill in nuclear capability, moreover, there could be important differences in the targeting priorities of the two allies. While the US would be most interested in destroying Soviet war potential in general, the UK's survival might depend on destroying Soviet medium-range bomber sites. As Winston Churchill argued in 1954:

"Unless we can make a contribution of our own. we cannot be sure that in an emergency the resources of other powers would be planned exactly as we would wish, or that the targets which would threaten us most would be given what we consider the necessary priority in the first few hours. These targets might be of such cardinal importance that it could really be a matter of life and death for us." (1)

By the mid-1960s, however, the increase in the size and sophistication of the US's nuclear force had given it a massive 'overkill' capability. The development of Minuteman and Polaris missiles reduced the military need for forward bases, and indeed the US nuclear presence in Britain was considerably reduced in those years. Whatever extra increment Britain's nuclear force still provided for the US's strategic force was now of negligible military importance.

Since the mid-1960s, the US strategic arsenal has continued to grow in size. In the mid 1960s it consisted of around 2,300 nuclear warheads. (2) By 1972, it had increased to 5,700. Today the US is estimated to have over 10,000 strategic nuclear warheads. (3) Britain's Polaris submarines, capable of attacking at most 64 targets, may be thought to have political significance. In terms of destructive power, however, they are now irrelevant to the US's total arsenal. There is, as a
consequence, no military justification for spending more than a minimal sum on such a capability if it is only designed to supplement the US's own forces.

The 'contribution to NATO' argument has continued to have important political and symbolic significance. Since the late 1950s, when the British nuclear force was first deployed, however, it has been its independent roles which have been the focus of the controversies on whether it has a military rationale. These independent roles have been given renewed emphasis in the 1980s as a major effort is made to sustain political support for the Trident programme.

In particular it is argued that the national nuclear force has a military value to Britain because an opponent might believe it could be used in circumstances in which, or on targets against which, the US itself was not prepared to use its own weapons. It is to the possibility of such circumstances that we now turn.

2.2 The 'second centre' argument

Since the late 1950s European governments, including that of the UK, have held two fears about the US's nuclear commitment. They have been concerned that the US government, in the event of a major war, might be unwilling to use its nuclear forces in the defence of Western Europe because, with the growth in the Soviets' arsenal, such a step might expose the US itself to destruction. Simultaneously, however, they have been concerned that the US might be too willing to use nuclear weapons in Europe if it believed that such a war could be so limited as to exclude its own cities from the holocaust. The 'second centre' argument for Britain's nuclear force addresses the first of these concerns.
The 'second centre' argument is based on the proposition that the Soviet Union is more likely to be deterred from aggression against Western Europe if there are two centres of nuclear decision-making within NATO than if there were only one. As Defence Secretary Francis Pym argued in justifying the decision to purchase Trident C4:

"In a crisis, Soviet leaders - perhaps beset by some pressures of turmoil in the Soviet empire, perhaps looking out upon a NATO Alliance passing through some temporary phase of internal difficulty - might conceivably misread American resolution... they might be tempted to gamble on United States hesitation.

The nuclear decision, whether as a matter of retaliatory response or in any other circumstance, would, of course, be no less agonising for the United Kingdom than for the United States. But it would be a decision of a separate and independent power and a power whose survival in freedom might be more directly and closely threatened by aggression in Europe than that of the United States. This is where the fact of having to face two decision-makers instead of one is of such significance". (4)

The fear that motivates supporters of the 'second centre' argument is that, when faced with the possibility of conventional defeat in Europe, the US might decide it was in its own interest not to escalate the conflict by using nuclear weapons. Since the McNamara Doctrine in the early 1960s, US leaders have repeated their desire to retain central control over when, and if, to use nuclear weapons. If it were thought that such a decision would quickly lead to the destruction of US cities, as indeed would be likely, the US's rational stance would be to hold back. To initiate a process of nuclear escalation would, in these circumstances, be totally contrary to its own national interests. As Henry Kissinger bluntly stated in 1979:
"The European allies should not keep asking us to multiply strategic assurances that we cannot possibly mean, or if we do mean, we should not want to execute because if we execute, we risk the destruction of civilization." (5)

Given the European fear that the US might be unwilling to risk global nuclear war in defence of Europe, and might have an effective policy of 'No First Use', the 'second centre' argument for British nuclear forces can also be seen as a 'recoupling' device. For the use of British, or French, nuclear weapons against the Soviet Union would be liable to precipitate an intercontinental nuclear exchange. The existence of such a possibility would be likely not only to increase Soviet caution. It would also, it is argued, increase US willingness to use its own nuclear forces if it believed that its European allies were ready to do so.

The 'second centre' argument is used to present the British nuclear force as a contribution to Western defence, rather than a diversion from it. Yet it is a justification that has few supporters outside government circles. For it requires the assumption that the UK might be willing - in some circumstances - to use its own nuclear weapons, when the US had refused to use its own, in defence of other European countries. In these, undefined, circumstances Britain's nuclear 'umbrella' over West Germany would deter the Soviet Union while that of the US did not. (6)

In justification of the 'second centre' role, it is argued that, should NATO's forces - including most of the UK's Army and Air Force - be losing in conventional war in Central Europe, Britain should - or at least could - use its own nuclear weapons to avert defeat. It might start with a 'demonstration shot' to indicate British willingness to raise the conflict to a nuclear level. If this proved unsuccessful,
the UK would then escalate to use of theatre nuclear weapons (such as Tornado) or to a limited counterforce attack on Soviet targets (with Trident). Finally, if all else failed, a selective attack on Soviet cities might persuade the Kremlin leaders to see the error of their ways and withdraw.

Such a ladder of nuclear escalation, it is argued, is credible because Britain has a more direct national interest in Europe than the US, whose territorial security would not be so immediately threatened. This interest, in turn, means that Britain might be more willing to risk nuclear destruction in defence of Europe than the US. This possibility, it is argued, will deter the Soviet Union from a conventional invasion more than the US nuclear 'deterrent' by itself. Indeed, the government argues, Trident would add more to deterrence of such an invasion than would a 50% increase in the British Army's conventional forces in Germany:

"The presence of an independent deterrent under the absolute control of the British Prime Minister greatly multiplies the risk to any potential aggressor of starting a war in Europe. Those who argue that the expenditure on Trident would be better devoted to strengthening our conventional forces must consider whether a future Soviet leadership are more likely to be deterred by an invulnerable second strike submarine-launched ballistic missile force or, for example, by two extra armoured divisions with 300 additional tanks." (7)

The 'second centre' argument may appeal to officials and politicians anxious to demonstrate Britain's loyalty to NATO. But is it really credible to suppose that a British government would order the first use of nuclear weapons, when the US had not done so, and in defence of other European countries? Or that the Soviets would believe that it would do so? Such a decision would have to be made in the knowledge that
a previously unscathed Britain would then, in all likelihood, face swift and appalling casualties in a Soviet counter-attack. As Lord Carver argued in 1980:

"Can you find a realistic scenario - I never have - in which a responsible British Prime Minister would say: 'Well I do not care what these chaps are going to do over there?' I mean, this is a major decision. The result of using ours would inevitably mean the end of this country. It only needs about 20 megaton weapons. I cannot conceive of any responsible Prime Minister taking that decision. So I totally reject the second centre decision. I can find no scenario, and I never have, in which it is realistic that we should employ our nuclear weapons in circumstances in which the United States has decided not to deploy theirs." (8)

2.3 The 'sanctuary' argument

The 'second centre' argument is designed to allay European concern that the US may be unwilling to use its nuclear force to 'defend' its allies. The sanctuary argument, in contrast, is motivated by the fear that the US will use its nuclear force, but will do so in a manner that gives priority to its own national concerns. It is feared that the US, far from being unwilling to use its nuclear weapons in a European war, might believe that it was able to fight a limited nuclear conflict in Europe from which its own homeland, and that of the Soviet Union, were excluded. Such a belief might increase the credibility of any threat to use nuclear weapons. It would, however, mean massive destruction in European countries, including Britain.

British fears of such a development are understandable given developments in US doctrine over the last three decades. Once the Soviets had acquired an assured second strike capability in the 1960s, US leaders were unwilling to pledge their readiness to "sacrifice New York to save
London. In order to protect their own national survival, they therefore sought means of limiting the scale of nuclear conflict through policies of 'flexible response' and 'limited nuclear options'. These policies were based on the assumption that a controllable 'ladder of escalation' existed in conflicts from local conventional war right up to full-scale nuclear war. American policy, it was argued, should involve the ability to escalate to whatever level was deemed necessary. (9) But it should also provide for the possibility of restricting conflict to a particular level of intensity through the mutual agreement, on a tacit basis, of the participants.

In the event of a war between the blocs in Europe, it was, and is, suggested that a series of 'thresholds' exist which would serve as mutually understood limits on escalation. The most commonly discussed, and clearly delineated, threshold is that between conventional war, of whatever intensity, and a war involving nuclear weapons. Because this threshold has such a powerful psychological significance, strengthened by the abstinence from use of nuclear weapons for 40 years, both sides would be under enormous pressure not to be the first to break this mutually self-imposed constraint during war. Indeed it is the European fear that US threats to be the first to use nuclear weapons are incredible that is the basis of the 'second centre' argument.

US attempts to make first use credible have created other fears. For these are bound to involve an assumption that nuclear weapons can be used in Europe's 'defence' without leading inevitably to global nuclear war. A further threshold in the escalation ladder must therefore be created, involving the use of nuclear weapons but not the wholesale
destruction of American cities. For, given the continued existence of a Soviet second strike capability, the latter would be the inevitable result of unrestrained warfare.

A large number of possibilities for such a threshold have been discussed. The most clearly defined, and the possibility most likely to accord with national objectives, would be abstinence by both superpowers from using nuclear weapons against each other's territory. Were such a mutually advantageous limit to be observed, nuclear war would not be rational. It would nevertheless have the advantage that it would be less self-evidently suicidal from the point of view of the two superpowers.

A nuclear war limited only by the exclusion of the territories of the US and the Soviet Union would be an unparalleled disaster for other combatant nations. But their governments recognize that such a possibility would be a strong factor in the minds of the leaders of the two superpowers in times of crisis or war. Supporters of the 'sanctuary' argument contend that, in such a situation, the possession of an independent nuclear force would help to exclude Britain from nuclear attack in a limited nuclear war. It would ensure immunity for its own territory in much the same way as the nuclear forces of the superpowers ensured the safety of their respective homelands. Although it could not deter conventional attacks on military targets, it would prevent a Soviet nuclear strike on the US nuclear bases in the UK. Without an independent nuclear force, it is argued, US bases in Britain would be high priority targets in a limited nuclear war in Europe. Possession of such a force, on the other hand, would both protect these bases from
nuclear attack in war and reduce the risk to the British people of allowing the bases on its territory. (10) As John Simpson has commented:

"A national nuclear weapon capability is seen as an indispensable adjunct to the existence of United States nuclear weapons bases in Britain."

(11)

The 'sanctuary' argument is particularly favoured by those (including a powerful lobby in the Conservative Party) who seek a more nationalist approach to defence policy. They resent Britain's dependence on the US, and are envious of France, with its independent nuclear force clearly devoted to national, rather than NATO, 'defence'. Some of its proponents would, in principle at least, prefer a 'Fortress Britain' policy, in which Britain withdrew its troops from Germany, expelled US bases, and concentrated its resources on a truly independent nuclear force and on a strong Navy. (12) Even if these steps are not possible, they support the possession of Polaris/Trident in British control in the belief that it will give the government in Whitehall increased influence in a crisis and will deter the Soviet Union - and the US - from including the British Isles in the nuclear battlefield.

It is an unconvincing argument for a number of reasons. Most fundamentally, it rests on the untenable assumption that a nuclear war could be geographically limited to Europe. Yet the weight of considered evidence suggests that, once such a war had started, and hundreds, perhaps thousands, of nuclear weapons had been detonated, it would be impossible to control. Politicians would rapidly lose communications with, and thus control over, the thousands of theatre nuclear weapons in
Europe. (13) Enormous incentives would be created, on both sides, to launch a disarming first strike against the other's strategic nuclear forces in order to minimise damage in an all-out holocaust.

Even if it were conceivably possible that a nuclear war could be limited to Europe the presence of US nuclear forces would probably ensure that Britain was not excluded from the battlefield. The British Isles contain a large number of bases whose main role in war would be to enable the US to fight a limited nuclear war: the cruise missiles being deployed at Greenham Common, the F-111 bombers at Upper Heyford and Lakenheath, the Poseidon submarines at Holy Loch, etc. It is implausible to suggest that the Soviet Union will not attack US bases in Britain were the US to attempt to fight a limited nuclear war in which these bases would play a key role. If it did launch selective nuclear strikes against these bases, it is difficult to see what advantage Britain would achieve from retaliation against the Soviet homeland. For this would be certain to provoke a further, more devastating, attack.

2.4 Britain Standing Alone

The scenarios for use of Britain's nuclear force in a war involving NATO as a whole appear unconvincing. Might there nevertheless be situations in which Britain could no longer rely on US forces to defend itself, and in which the national nuclear force might be of value in protecting the British Isles themselves?

In such circumstances, where Britain stood alone as it did in 1940, it is argued that Polaris/Trident could indeed deter an enemy considering
invasion or bombardment. As the Ministry of Defence argues:

"In the last resort, if the Alliance was to collapse, the possession of an independent strategic weapon provides the UK with the means of preserving national security by deterring large scale conventional or nuclear attack or of countering nuclear blackmail." (14)

Yet the threat to use nuclear weapons in such a 'scenario' would be neither desirable nor plausible. For it would be suicidal for the British government to carry out such a threat. As a result, a Soviet government would be unlikely to be deterred by it. For such a desperate situation to be reached in the first place, it must be assumed that the Red Army had successfully overrun Western Europe without the conflict escalating to nuclear war.

If the Soviet Union had already taken considerable risks - including that of nuclear conflict - in conquering Western Europe, an implausible British nuclear threat would carry little weight. It would be unnecessary for the Soviets to use their nuclear weapons in order to defeat Britain. It could launch a conventional invasion with a high probability of success - particularly if most of the British Army and Air Force had been destroyed in the continental campaign.

In these circumstances, would the British government be foolish enough to initiate a nuclear war with a superpower - even with tactical weapons against an invasion fleet? And, more importantly if we are concerned with 'deterrence', would a Soviet leadership reckless enough to invade Germany and France believe a British threat to do so? British use of nuclear weapons would, in these circumstances, be certain to bring swift nuclear retaliation. If such retaliation was limited -
perhaps against nuclear submarine bases - Britain would be no better
off than when it started in 'deterrence' terms, and with several hundred
thousand casualties as a warning against further nuclear strikes. If, on
the other hand, the Soviets responded with a comprehensive pre-emptive
attack against Britain's command and communication centres and its
military facilities then there would be little left to defend.

Some supporters of Britain's nuclear force see its role as confined
to deterring a nuclear attack on this country, and discount the
possibility of using it to deter invasion. Thus John Nott, when
Secretary of State for Defence, told the House of Commons Defence
Committee:

"(Trident) could not conceivably be a first strike
weapon. It is there as an ultimate defence of this
country against a nuclear strike, a pre-emptive
strike by a nuclear power." (15)

It is implausible, in the first place, why the Soviets would need
to threaten the first use of nuclear weapons against Britain were it left
to defend itself. The Soviets' overwhelming superiority in conventional
forces would be sufficient to ensure it 'victory. Moreover, this
'scenario' assumes that Britain would be 'standing alone' against a
continent dominated by the Soviet army. In such circumstances the Soviet
Union would already, it must be assumed, have conquered NATO's armies in
Western Europe without triggering a nuclear holocaust. Would it then be
likely to risk the latter by threatening the use of its nuclear weapons
against Britain? A conventional invasion would appear to be a much more
logical, and less risky, step to take.

Moreover, advocates of an 'independent deterrent' often fail to
take into account the considerable constraints that exist on the threat
to use nuclear weapons against non-nuclear powers. Despite the large
number of conflicts since 1945, there have been few such cases of
'nuclear blackmail'. Those that have occurred - such as Nixon's threat
against Vietnam - have failed when their bluff was called. (16) The
reason such threats fail is that the first use of nuclear weapons since
1945 - and against a non-nuclear nation - would have incalculable
political costs for the aggressor. It would lead to a massive shift in
world opinion against it, and would cause tremendous revulsion amongst
its own people. Any government contemplating such action would have to
consider the likely reaction - massive rearmament by non-occupied
countries, rebellions in satellite states, and mounting dissatisfaction
at home.

It is perhaps plausible that a superpower would be willing to bear
these costs if the gain to be achieved by nuclear blackmail were the
defeat of the other superpower and/or effective world domination. If it
were designed simply, however, to defeat a minor power - such as Britain
- the balance of advantage is likely to be quite different,
particularly if non-nuclear military alternatives (such as invasion)
existed. Calling a nuclear blackmailer's bluff might therefore actually
work - as the Vietnamese found in 1969. At the same time, if the
aggressor was believed to be ready to use nuclear weapons, there would
be no alternative whether or not Britain possessed its own. It would be
more rational to accede to the demands of the enemy, and continue the
struggle once Britain is occupied, than to allow the total annihilation
of the British people to take place.

Indeed in some respects immunity to nuclear blackmail is likely to
be greater for a non-nuclear power. For the use of nuclear weapons
against a nuclear power could be 'justified' - at least domestically -
as a pre-emptive and 'defensive' action to protect the 'aggressor's' own population against retaliation. Indeed this argument is still employed by some US officials as a rationale for a disarming first strike on the Soviet Union. With Britain retaining hundreds of weapons on its soil - British and American - the Soviet Union can justify an attack with nuclear weapons more easily than against, say, non-nuclear Sweden.

2.5 Using Britain's nuclear force outside Europe

There are strong grounds, therefore, for doubting the credibility of Britain's nuclear force in a confrontation with the Soviet Union, whether in a European war between NATO and the Warsaw Pact or if Britain were 'standing alone.' Such a confrontation, however, is not the only type of armed conflict which has, or could in future, face the British state. Since 1945 British troops have been involved in a large number of conflicts in the Third World, both as a contribution to the Anglo-American policy of 'containment', and in an effort to manage the slow process of decolonisation.

Many of these conflicts have been primarily between regular British and colonial troops, on the one hand, and guerilla movements on the other. In these cases nuclear weapons clearly had no role. In other cases, however, where confrontations were possible between Britain and hostile non-nuclear states, the use of nuclear weapons was considered to be an option. Since such a threat would not directly endanger the existence of the British Isles, it was considered, in military terms, to be credible. As earlier chapters have noted, British governments in the 1950s and 1960s announced their belief in the value of nuclear weapons in a series of conflicts, and potential conflicts, in Asia.
British planning for possible use of nuclear weapons in Asia paralleled similar thinking in the United States. Inter alia, the US Administration gave serious consideration to the threat to use nuclear weapons in Korea, Quemoy/Matsu, and Vietnam on several occasions in the 1950s and 1960s. (17) With the development of a large Soviet nuclear force by the late 1960s, and the consequent awareness of the dangers of escalation, however, US readiness to consider nuclear options against non-nuclear powers declined. Nevertheless it is probably still the case that the first deliberate decision to use nuclear weapons since 1945 is more likely to be made in a conflict in the Third World than in a European war.

Indeed, in the Falklands War of 1982, the British government appears to have decided that nuclear options could not be ruled out in the event of serious setbacks in its campaign to recapture the Islands. According to leaked government documents, tactical nuclear weapons were carried by the Task Force and a Polaris submarine was sent to the South Atlantic. The former would have been available for use against Argentine submarines. The latter, it was concluded, afforded the only reliable means of launching a nuclear attack on Argentina. A senior government source is reported to have said:

"Certainly, the nuclear option was one of the options studied on 2 April ... part of the work done that day involved examining the possibility of retargetting Polaris against Argentina." (18)

Fortunately the British government was not obliged to face the choice between a nuclear ultimatum to Argentina and an admission of military defeat. The fact that the nuclear option was considered in a conflict with a non-nuclear power, however, confirms that the use of Britain's nuclear force outside Europe cannot be ruled out as a
possibility. It would be quite disproportionate to any national economic or political advantage gained. It would generate enormous pressures for rapid acquisition of nuclear forces by non-nuclear states. It could lead to a considerable increase in international tension. And it might draw one, or both, superpowers into a wider conflict that could spread to the British Isles themselves. Neither the United States nor the Soviet Union could easily afford to allow the UK to undertake such a move unpunished without severe implications for their own interests. Although use of Britain's nuclear force in such circumstances might appear to be militarily credible, therefore, it would be both immoral and extremely damaging to its national interests. It cannot serve, therefore, as a reasonable justification for the nuclear force's existence.

3. Nuclear doctrine and force requirements

The circumstances in which the nuclear force might justifiably be used, or in which a threat to do so might deter a potential opponent, have now been outlined. As we have seen, there are considerable grounds for arguing that in none of the 'scenarios' discussed would it be rational, or credible, to threaten to use nuclear weapons. Nevertheless, such a view is not undisputed. Most proponents of Britain's nuclear force would argue that, in at least some of the 'scenarios', a threat to use nuclear weapons would be credible and justifiable. Indeed, if they are to sustain an argument in favour of maintaining the force as a contribution to Britain's defences, they must do so.

Logically, having defined in broad terms the circumstances in which Britain's nuclear force might be used, its supporters should then develop a doctrine for how it is to be used together with technical requirements for the force so that it is capable of being used in the particular scenarios favoured.
In practice it is doubtful how far the shape of nuclear forces is determined by a prior definition of their required military functions. Perhaps of equal importance, the technical possibilities available are crucial in determining the justifications developed for the weapons. In addition, considerations of prestige and political status have more importance in explaining the existence and shape of the force than the complexities of deterrence theory. The role of nuclear doctrine, though not insignificant, is nevertheless subordinate to these factors.

In the United States a relationship between scenarios for possible use of nuclear forces and the technical requirements for those forces can be more clearly discerned. The extensive modernisation of offensive strategic forces, together with the Strategic Defence Initiative (SDI), is clearly seen by some Administration officials as a means of restoring the nuclear superiority which the US enjoyed in the 1950s and early 1960s. The development of highly accurate counterforce systems and improved command and control mechanisms, together with an open espousal of decapitation doctrine, can be seen in this light. According to one recent estimate, assuming all missile submarines at sea survived, 3,600 Soviet strategic warheads would survive a US surprise attack given present forces. By 1995, as a result of the MX and Trident D5 programmes, this number could drop to 700. (19) With the US also likely to enjoy substantial capabilities for destroying Soviet submarines in their patrol areas, and with the beginnings of improved ABM defences, US leaders may then believe that they possess a superiority that can be used to achieve crisis dominance. As Caspar Weinberger is reported to have said in justifying the Strategic Defense Initiative:

"If we can get a system which is effective and which we know can render their weapons impotent, we could be back in a situation we were in, for example, when we were the only nation with a nuclear weapon". (20)
For Britain, there is clearly no economic possibility, or apparent desire, to achieve a national nuclear capability which is equivalent, far less superior, to that of either superpower. The scenarios on which its nuclear forces are based are less ambitious than those underlying US and Soviet deployments. Nevertheless, there still exists a relationship between the scenarios in which, it is believed, the nuclear force could be used and the technical requirements for that force. Four requirements have formed the main focus of this discussion: firstly, the ability to inflict 'unacceptable damage' on the Soviet Union in a second strike; secondly, the ability to use the nuclear force in a variety of 'limited nuclear options'; thirdly, the ability to 'trigger' the forces of the US into action; fourthly, the ability to be used without the agreement of the US. We now consider these four requirements in turn, relating them where appropriate to the scenarios in which, it is argued, Britain's nuclear force could be used.

3.1 Unacceptable damage

In three of the five scenarios discussed so far - the 'second centre', the 'sanctuary', and the 'last resort' - Britain would require a capability, even after a Soviet attack, of inflicting 'unacceptable damage' on the Soviet Union itself. Such a capability, it is argued, would deter Soviet leaders from actions which they might otherwise have taken.

Such an 'all out' nuclear capability may not be judged to be sufficient by itself. A 'second centre' capability for retaliation against Soviet conventional invasion of Germany, for example, may also require a capability for limited nuclear options. This possibility is
further discussed in Section 3.4. Nevertheless there is general agreement that no independent limited nuclear option would be credible if it were not complemented by the capability of inflicting unacceptable damage, however defined, on the Soviet Union itself. For the Soviets would not be deterred by the possibility of British nuclear use if Britain itself were under nuclear threat but the Soviet territory was not. As Marshal of the Royal Air Force Sir Neil Cameron has argued:

"The Russians simply would not be deterred by a threat of using British theatre nuclear weapons, for example on their second echelon forces, in circumstances where ex hypothesi the United States was holding off and Britain had no further option if the Russians raised the stakes. They would know in advance that such use would be simply an invitation to be over-trumped. The cold fact is that you can, at a stretch, make a case of sorts for an independent strategic capability without an independent non-strategic capability; but the converse is just not on." (21)

It should be noted that not all the scenarios examined in the previous section require that the British nuclear force be capable of inflicting unacceptable damage on the Soviet Union. If it were only required as a contribution to NATO, its function would be primarily political given the massive overkill capacity of the US arsenal. There would be no overriding requirement either for survivability or for an ability to destroy targets inside the Soviet Union.

Moreover, if the only independent role of Britain's nuclear force is in a possible conflict with a less powerful state, probably in the Third World, the technical requirements would clearly be much less than at present. It would not be required either to survive a Soviet attack or to penetrate sophisticated defences. Such a capability could be much
more modest, and less expensive, than the force currently planned. Even if it were believed that nuclear weapons were needed to deter the use of such weapons by expansionist powers such as Libya, only a minimum capability would be required for such a function in the foreseeable future.

Such justifications for Britain's nuclear force are held to be important by some very senior military and political figures. They are, however, essentially marginal to the basic case for the independent nuclear force as currently constituted. For that case rests squarely on the need to be able to impose unacceptable damage on the Soviet Union in an attack by a British nuclear force acting on its own, and possibly doing so after a pre-emptive strike on bases in the UK by the Soviets. As the 1981 Defence White Paper argued:

"To be a credible deterrent our strategic nuclear force must meet certain standards. It must clearly be under ultimate United Kingdom control. It must be capable of posing a convincing threat - of inflicting, on key aspects of Soviet state power, damage which any Soviet leadership would regard as out of all proportion to any likely gains from aggression against us." (22)

The British government has always been very reticent, however, in defining its interpretation of 'key aspects of Soviet state power', and thus elaborating the principles underly its targeting policies. Instead, we must work on the assumption that the informal discussions of, and papers written by, those close to the politico-military elite give us a good idea of trends within government. (23)

It is fairly clear that the British government does not define the required level of unacceptable damage to Soviet state power mainly in terms of numbers killed. It is felt that human life per se would have
a relatively low value for Soviet leaders in wartime. This view is reinforced by the knowledge that the Soviet Union suffered over twenty million casualties in World War Two, yet emerged with a greatly enhanced international position. This historical experience, it is argued, together with the nature of the Soviet regime, shows that it would not necessarily be deterred from aggression by the threat of massive civilian casualties if, at the same time, the Soviet state were to emerge intact and victorious.

Instead of seeking to maximise the number of deaths amongst Soviet citizens, therefore, British nuclear targeting seeks to degrade, to an unacceptable extent, the power of the Soviet state. Indeed this central aim is implicit in the use of the term 'key aspects of Soviet state power' to describe the main target of Britain's forces.

In a nuclear conflict, the distinction between attacking the Soviet state and the Soviet population may appear to be a marginal one. The 'collateral damage' suffered from attacks on industrial, military and political targets in cities will often approximate that caused by a strike designed to maximise civilian deaths. As in the strategic bombing campaigns of World War Two, there is a thin dividing line between attacks designed to demoralise civilian populations and those intended to destroy an opponent's war machine.

Moreover, as in both World War Two and the Vietnam war, policymakers usually feel more morally comfortable with a policy not designed directly for genocide, even if that is the ultimate effect. (24) This is demonstrated by a remarkable article, entitled 'Trident's Potential Targets', by Julian Critchley, MP, Vice-chairman of the Conservative Party Defence Committee. After a discussion of US targeting policy, he contends that:
"There is a more serious undercurrent of opinion of which democratic governments must take account. It is the anxiety of a great number, maybe a majority of thoughtful people, about the rational limits to the use of force and regard for the sanctity of human life, if nuclear weapons are employed. It is this which makes the targetting of nuclear missiles so important; for morally there is all the difference in the world, and one far deeper than the terms "counterforce" or "counter value" imply, between indiscriminate massacre of men, women and children and the aiming of a weapon at a particular military objective whatever collateral damage it may cause." (25)

In common with many other aspects of defence policy, British thinking in this field is clearly heavily influenced by the extensive US literature on strategic studies. It is clear from recently released documents that the US has never had a nuclear retaliatory policy designed simply for mutual assured destruction, as has been assumed by some people. Ever since the 1940s, the US strategic nuclear force has been targeted against military installations and against those facilities thought crucial for the Soviet state's industrial recovery. (26) This policy grew initially out of the perceived need, in the event of war, to cripple the Soviet Union's ability to sustain an invasion of Europe. It developed into a requirement to prevent Soviet retaliation with its own nuclear forces. Today, targetting policy is determined by the US official doctrine of seeking to 'prevail', if war becomes necessary, by attacks on leadership centres and military targets. Urban centres are not targetted per se in the 1980 war plan - codenamed S10P-5D - although it contains 40,000 potential targets. Indeed, since 1980, there has been a further shift away from industrial targets in favour of more directly military installations. (27)

The nearest the US came to a 'counter-city' doctrine was in the late 1960s, when Defence Secretary Robert McNamara used a declaratory policy of 'mutually assured destruction' (MAD) to curb the budgetary
appetites of the armed forces. Pentagon studies had demonstrated that 400 megaton-equivalent of nuclear weapons were sufficient to destroy over 70% of Soviet industry and over 25% of its population. (28) McNamara used this 'assured destruction' criterion as a means of fixing the required capability for each 'leg' of the USs strategic nuclear triad - its Polaris submarines, its Minuteman land-based missiles, and its B-52 bombers.

Britain has neither the resources, nor any apparent wish, to acquire a strategic force capable of fulfilling the same criteria of 'assured destruction' as had been applied to US forces. Indeed current nuclear policy is based on the assumption that only one missile submarine may be available for retaliation against Soviet aggression. As the 1985 Defence White Paper confirms:

"the United Kingdom’s deterrent force rests and will continue to rest on the ability to maintain only one submarine on patrol at all times." (29)

If this is so, one Polaris submarine with sixteen ballistic missiles must be considered the total strategic force immediately available. Each missile has multiple (MRV) warheads, and some limited flexibility is probably available in attacking more than one target within each city. In total, the force theoretically has the capability to deliver one megaton-equivalent of destructive power on each of 16 target areas. (30) Given reasonable assumptions on the reliability of both missiles and re-entry vehicles, however, planners would need to assume that only 13 or so would reach their designated targets. (31)
The capability to deliver one megaton-equivalent on each of thirteen separate targets might be thought sufficient to inflict unacceptable damage on the Soviet Union, even if Moscow itself were excluded. As McGeorge Bundy has argued:

"In the real world of real political thinkers - whether here or in the Soviet Union - a decision that would bring even one hydrogen bomb on one city of one's own country would be recognized in advance as a catastrophic blunder: ten bombs on ten cities would be a disaster beyond history: and a hundred bombs on a hundred cities are unthinkable." (32)

In circumstances where World War Three were already under way, however, things may be viewed rather differently. A small nuclear force may not be a credible deterrent if it is unable to cripple Soviet warfighting potential, even if it can inflict several million casualties. Those who believe that Soviet leaders are bent on world domination, and place a low value on individual human lives, may assume that they would be willing to undergo casualties comparable to those in World War Two in pursuit of their own goals. They could not rule out a Soviet communist leader who echoed Mao's boast: "let 400 million Chinese die; 300 million will be left." (33) If the Soviets were to gain control of Europe, then the destruction which Polaris could inflict might be seen as an acceptable price.

Indeed a perception of the relative impotence of Britain's force, as a consequence of its small size, is common amongst US politicians. Partly it is due to a 'numbers illusion' - a failure to understand that numbers of nuclear weapons are less important in an age of massive destructive power. Partly it is due to the incredibility and irrationality of the scenarios for British nuclear use, though it must be said that scenarios for US nuclear use are scarcely more credible.
To the extent that British nuclear targeting reflects these fears of Soviet ruthlessness, and responds to American perceptions of its weakness, therefore, it is likely that it will not simply be concerned with maximisation of civilian casualties. Indeed the small size of the force, in contrast to popular perception, makes a pure countercity strategy less likely. For it requires greater attention to the means by which a small number of weapons can be used most effectively. It is reasoning of this nature that explains the official requirement for a force that "must be capable of posing a convincing threat - of inflicting, on key aspects of Soviet state power, damage which any Soviet leadership would regard as out of all proportion to any likely gains from aggression against us." (33)

Three main types of targets have been discussed as suitable for British nuclear strikes against the Soviet Union - industrial, military and political. The location of targets in each of these categories often coincide, and in many cases are located in or near population centres. Nevertheless targeting based on these criteria, particularly for a small nuclear force, could have a significantly different result than a 'pure' counter population policy. It is therefore useful to outline the rationale for each category of targeting in turn.

**Industrial** targets would be judged important as providing a means of effectively crippling Soviet potential for fighting a conventional war, or indeed of continuing as a modern industrial society. Such a nuclear strike need not be designed to cripple the operation of the Soviet economy permanently. What is seen as an important deterrent is the effect on short run production levels, particularly in war industries.
For such damage might weaken Soviet ability to pursue its objectives in its larger struggle with the United States, even if the UK was, by this stage, too devastated to be involved. As the government’s discussion of the Trident decision argues:

"... one practical approach to judging how much deterrent power Britain needs is to consider what type and scale of damage Soviet leaders might think likely to leave them critically handicapped afterwards in continuing confrontation with a relatively unscathed United States." (34)

Major targets might therefore include, as in the bombing offensives against Germany in World War Two, power plants, gas and oil refineries, chemical factories, munition works, and so on. One recent discussion of British and French nuclear forces contended that:

"The real danger to the Soviet Union, however, is the vulnerability of its industries. The destruction of just 34 refineries would halt all gas production in the Soviet Union. Eight well-placed warheads would curtail Soviet copper production ... and the destruction of the city of Pavlodar would deny Moscow 65 per cent of its aluminium output. In the eyes of the Kremlin leaders, each British and French SLBM firing submarine will have, at a very minimum, the ability to destroy the Soviet copper, chemical, and gas-refining industries, as well as almost 70 per cent of Soviet aluminium and oil production, while having several warheads each left over to attack Moscow, Murmansk, Leningrad, Stalingrad, and the missile-testing centre at Tyuratam." (35)

Attacks on military targets would be likely to give high priority to destruction of facilities crucial to the Soviet Union's war fighting capability. These might include ABM radars and early warning systems, submarine bases and ports (particularly Murmansk where the Soviet Northern Fleet is based), army barracks and communications facilities. Each of these could be destroyed with a Polaris warhead with a CEP of 1,500 feet. As Ian Smart argues:
"even a relatively small British force could, in fact, launch a highly effective attack not only on 'soft' civilian targets (as is often assumed) but also on 'soft' military and 'semi-hard' military or civilian targets ... a particularly serious threat would be presented if it seemed that even a single SSBN would have a high probability of crippling the Soviet air and ABM defence systems by destroying most of the critical radar installations." (36)

Thirdly, the possibility of political targetting of Britain's nuclear force has been discussed. It is argued that the Soviet Union is a potentially unstable society held together by the coercive power of the Communist Party and secret police, and subject to growing tensions between Russians and the non-Slavic minorities. John Nott, while Britain's defence secretary, even warned:

"Can we disregard totally even the possibility in years to come of a disintegrating Soviet empire with, as an act of desperation, the dying giant lashing out across the central front?" (39)

Given the fragility of the Soviet political structure, it is argued, selective nuclear targetting could be used to precipitate its collapse without, necessarily, leading to all-out nuclear war. Such a line of thought gained ground in the US in the late 1970s during the Nuclear Targeting Policy Review ordered by President Carter. Emphasis was placed on targets believed to be of psychological importance to the Soviets. The possibility of regional insurrection during the war would be encouraged by selective targetting. National Security Adviser Brzezinski insisted on plans to attack specifically Russian, as opposed to Soviet, targets, arguing that only the Russians were the enemy. (40)

Even Paul Warnke, a leading American 'dove', commented that:
"their political system is infinitely more fragile than ours. If Moscow disappeared, there'd be dancing in the streets in the Ukraine, in Latvia, Estonia and Lithuania." (41)

Malone argues that industrial and political targeting could be used in combination by the UK:

"British doctrine (need not be confined) to a pre-programmed, and ultimately purposeless, slaughter ... It was possible to inflict significant urban - industrial damage in a targeting plan designed to threaten the political order of the Soviet Union ... a breakdown of central economic direction would paralyse economic life while disruption of government, party and military control might well threaten national unity.

... the British could not inflict enduring damage but, given the shadow of American power, they need not be concerned with the duration of damage. A critical period - weeks, perhaps months - would ensure when the very foundations of the Soviet state might be in jeopardy." (42)

3.2 The Moscow Criterion

The central problem of British nuclear targeting policy, therefore, is to decide, given the forces available, what combination of targets - industrial, political, military, etc. - would be most likely to constitute 'unacceptable damage' for the Soviet Union, and thus, it is argued, an effective deterrent against that country.

In Britain's discussions of targeting policy, it is clear that one of the main conclusions has been that the independent nuclear force must remain capable of destroying targets in the Moscow area - the so-called 'Moscow criterion'. Because of the centralized nature of the Soviet military and political system, and the concentration of industrial
and administrative resources there, destruction of Moscow could in itself constitute unacceptable damage to the Soviet system, perhaps precipitating its collapse. By contrast, a nuclear attack that did not include Moscow would, it is widely believed, be less clearly unacceptable to the Soviets.

Paradoxically, however, the acquisition of Trident may make the destruction of Moscow a less essential component of British targeting. One Polaris submarine could destroy 'only' five or six major Soviet metropolitan areas outside Moscow, allowing for technical failures. (43) While this would be a substantial blow to the Soviet Union, involving the immediate deaths of more than ten million of its citizens, it might not be sufficient to precipitate systemic breakdown. In a period of intense crisis or conventional war, Soviet leaders might be more willing to risk the possibility of such an attack, it is argued, than one also involving the nation's capital.

With Trident, however, one submarine would be able to destroy many more times the number of targets outside Moscow that Polaris can. Even if Moscow is not targeted, therefore, a British attack with Trident would cause, compared with Polaris, several times the number of casualties, and a more devastating setback to Soviet hopes for survival of their political system. Only if the Soviets develop extensive ABM defences for their cities in the 1990s and the first decade of the next century would the 'advantages' of Trident in a Moscow-avoidance strike begin to diminish.

At present, it is the existence, and possible improvement of, ABM defences that constitutes the main reason for British leaders to consider
excluding Moscow from an all-out retaliatory strike. The capital is, under the ABM Treaty, the only place where the Soviet Union is allowed to construct ballistic missile defences. Currently it has 64 Galosh interceptors available, and could increase this to 100 under the Treaty, and to a much higher number if the Treaty is abandoned. Chevaline should ensure that Polaris will continue to be able to destroy Moscow up to the mid 1990s. After that time, however, the prospect of more powerful defences for Moscow and other Soviet cities will create increasing problems for British 'worst-case' planners. (44)

Their problem would be increased by the knowledge that, in order to destroy most of the important targets in Moscow - industrial, military and political - several warheads would need to be used on the various parts of a city which is about as large as London. (45) According to Geoffrey Kemp's calculations, 8 one-megaton bombs would be needed to produce at least 5 pounds per square inch (psi) overpressure throughout the Moscow area. It has been estimated by the US Office of Technology Assessment that many brick houses would be demolished at this minimum overpressure, and that around half of those in an area with such a level would die. With most overpressures a great deal higher than 5 psi, however, the number of survivors from a 8 Megaton attack on Moscow would be relatively small. (46)

A one megaton weapons is equivalent, almost exactly, to three 200 kiloton MRVed Polaris A3 warheads. Polaris/Chevaline is likely to have a rather less destructive payload than this system, which it replaces, however, because of the space used to carry penetration aids. To destroy all the major 'soft' targets in the Moscow area, therefore, would require at least eight Polaris missiles. In addition, some of the most important military and industrial targets - radar installations, specialised
factories, etc. - are hardened to withstand at least 25 psi (the 'semi-hard' targets). Polaris missiles are probably accurate enough to destroy such targets if aimed directly at them. (47) If a large number of such targets were to be included, however, considerably more than 8 missile strikes might be required. On the other hand, if a large proportion of the important 'semi-hard' and 'hard' facilities in Moscow were to survive a British attack, the damage to the Soviet state's recovery capability might be reduced to the extent that it was no longer considered a credible deterrent.

If only one Polaris submarine is available, therefore, and it is assumed that two or three of the missiles fail to work, it can afford to lose only 5 or 6 missiles to Soviet ABM defences before its destructive capability falls below that necessary to cover all 'soft' (5 psi) targets. It does not therefore require an extreme 'worst case' analysis to realise that it might require only a modest upgrading of Soviet ABM defences to render one Polaris submarine incapable of destroying all the soft targets in Moscow, even if all its missiles were aimed at that city.

If nuclear war were preceded by a period of crisis or conventional conflict, it is likely that Britain could have two Polaris boats, and possibly three, available for use. Even in these circumstances, however, improvements in ABM defences might mean that most of the thirty-two missiles available would need to be used against Moscow to ensure the destruction of the capital's most important 'soft' and 'semi-hard' targets. Only if the effectiveness of ABM systems was assumed to be low—certainly less than 50%—would it be possible to reserve some missiles for limited nuclear warfare (see Section 3.3) or
for important targets outside Moscow. By the year 2,000, given the developing arms race between the superpowers in ballistic missile defences, it is possible that even two UK Polaris boats will be incapable of delivering as many as eight MRVed missiles on Moscow targets. In such circumstances it might then be thought that a 'Moscow only' option, especially one in which leadership bunkers would survive because of Polaris's lack of hard-target accuracy, would no longer be adequate. In a period of world war or intense crisis, such a force might no longer be judged to be a credible deterrent against, or satisfactory revenge for, a major nuclear attack on the British Isles.

These difficulties with the 'Moscow criterion' created by the small size of Britain's force and possible ABM developments, have led both strategic analysts and government ministers to consider the option of excluding Moscow from targetting plans, concentrating instead on the destruction of key regional cities. (48) According to one estimate, 14 or 15 missiles could destroy Leningrad and four other major industrial concentrations outside Moscow, with a combined population of thirteen million. (49) With the added effects of fallout, firestorms and so on, such an attack could inflict more casualties than an attack on Moscow. Although the symbolic and political value of destroying the capital would be lost, perhaps as much damage would be done to Soviet military and industrial potential.

Even this possibility would be severely curtailed, however, if the US and Soviet Union's missile defences begin to be developed in earnest and, as is widely thought possible, the ABM Treaty is abrogated by the early 1990's. By the year 2000 such developments would allow the Soviets to deploy Galosh-type ABM interceptors to protect several of its major military and industrial centres. (50) Such deployments, with a
potential 'kill rate' of 50-80% against attacks with small numbers of missiles, could reduce British capability very markedly.

The possibility that ABM developments could render Polaris less powerful is, as Chapter 5 discussed, one of the main arguments for Trident D5. The current Chevaline system is designed to penetrate Soviet exoatmospheric defences by the use of penetration aids. To counter the endoatmospheric systems which the Soviets are likely to deploy in future, however, such systems will not be sufficient. The acquisition of a MIRV system such as Trident D5 will allow many more warheads to be thrown simultaneously against Soviet defences, and should thus ensure that the required level of destruction is still caused. Moreover, the Trident D5 systems will be capable of incorporating, at a cost, a series of further counter-measures to Soviet defences: increases in warhead numbers, manoeuvrable re-entry vehicles, a depressed -trajectory firing mode, and anti-radar devices. (51)

3.3 Decapitation

Trident D5 is not only designed to ensure Britain's continued ability to penetrate the Soviet Union's defences and inflict 'unacceptable damage' on that country. It will also add a capability to destroy hardened targets against which the current Polaris force would be ineffective. Before the introduction of Chevaline, a 200 kiloton Polaris warhead had only an estimated 34% chance of destroying a 300 psi missile silo. (52) Chevaline may have improved accuracy to some extent. At the same time, however, the protection for missiles and command bunkers available is now as high as 5,000 psi (53)
The degree of accuracy which Britain's Trident D5 warheads will be capable of attaining is not yet known. The US has only just begun to conduct flight tests of the missile, and accuracy predictions must be therefore to some extent speculative. And the extent to which withdrawal of US assistance would reduce the accuracy of British weapons is even more uncertain. It is fairly clear, however, that Britain's D5 warheads will be considerably more accurate than Polaris. Recent estimates suggest that the US D5 warheads will have a CEP of 300 feet, using stellar/inertial guidance and NAVSTAR inflight updating. (54) And a 1985 newspaper report has quoted 400 feet as the planned CEP for Britain's independent force. (55) If such figures are then taken as reasonable indications of the assumptions which will form the basis of targetting policies, the acquisition of Trident will allow British planners to greatly expand their options for attacking hardened targets.

Of particular significance is the implication that Trident will give Britain a so-called 'decapitation' capability: the ability to destroy the hardened Soviet command and control bunkers in which, in the event of crisis, Soviet military and political leaders will seek protection. Such a form of targeting has been given an increased emphasis by the current US administration, and would form a key component of plans for a first strike attack on the Soviet Union. As General Holloway, former commander-in-chief of the Strategic Air Command (SAC), wrote in 1980:

"Degradation of the over-all political and military control apparatus must be the primary targetting objective. Irrespective of whether we strike first or respond to a Soviet strike (presumably counterforce), it assumes the importance of absolute priority planning. Striking first would offer a tremendous advantage,
and would emphasise degrading the highest political and military control to the greatest possible degree ... there is such centralised control that it would be possible to degrade very seriously their military effectiveness for nuclear or any other kind of war if the command control system were severely disrupted ... there is no other targeting strategy that can achieve the war aims that underwrite survival" (56)

Britain has no possibility of attaining an independent first strike capability. Even with Trident it will have far too few nuclear weapons to threaten all Soviet nuclear forces and their command centres. For Britain, a decapitation capability might be seen, instead, as a means of inflicting a more clearly unacceptable level of damage on the Soviet Union than an attack which was unable to destroy the political leadership. As Adam Ulam has argued:

"As to the possibility of a 'small' nuclear war, the USSR has to think in political terms: against a small nuclear power she would undoubtedly emerge victorious; but could a Communist regime survive such a war? What would be the consequences of even one nuclear missile falling on Moscow and destroying the top leadership of the Party and State?" (57)

According to some recent reports, decapitation is indeed one of the targeting options discussed for Trident. Farooq Hussain, Director of studies at the Royal United Services Institute, goes so far as to contend that: "The independent credibility of the nuclear force of medium powers depends on what has become known in strategic jargon as a "de-capitation strike." (58) And, in early 1985, unnamed Ministry of Defence officials were quoted as commending "the politburo option" which Trident would give them:
"This option is known as the "frighten the enemy the most" strategy, the theory being that Soviet leaders will think hard before launching an attack on Britain when they know that 30 or so minutes later, they themselves, will all be wiped out. As one senior official puts it: "We will be able to send the whole bloody lot down Gorbachev's throat". (59)

A decapitation attack would be an effective means of fulfilling the 'Moscow criterion' to the full, and destroying the important political and military targets that make Moscow of unique importance to the Soviet leaders. In addition, such an attack would be consistent with the government's own published requirement that a British deterrent should, in Soviet eyes, be "likely to leave them critically handicapped afterwards in continuing confrontation with a relatively unscathed United States." (60) Indeed, on the assumption that the Soviets did not launch their weapons upon warning of attack, a decapitation strike might prevent, or at least delay, a retaliatory strike. In such circumstances, as Section 3.5 will discuss, Britain's capability for precipitating US use of its nuclear force might be increased.

Perhaps the most crucial advantage for Britain in possessing decapitation options, however, is that they provide a means of inflicting a very crippling degree of damage on the Soviet state using a relatively modest number of warheads. According to Paul Bracken, about one hundred highly accurate weapons would allow four or five warheads to be exploded on major command posts and would further destroy telephone switching centres, satellite ground stations, radars, and early warning stations. In addition, as few as "ten high altitude high-yield nuclear bursts might be launched in conjunction with attacks on the national capital in order to generate strong EMP waves that could knock out communication and electrical power systems." Finally, for extra assurance: "Ground bursting of weapons would throw up radioactive dust, which could foul up airplane engines and disrupt reconstitution of the bombers" (61)
Such an attack with one hundred warheads would be well within the capability of only two British Trident submarines carrying a full payload of 400 or more warheads. Only when ballistic missile defences attain a capability to destroy over 75% of incoming warheads would Trident be unable to carry out a strike of this nature. Even then, it is likely to be argued, the threat of a limited decapitation attack might constitute a more effective sanction than a strike limited to an equivalent number of 'soft' targets.

3.4 Britain and limited nuclear war

Whatever array of targets Polaris or Trident were to attack in a bid to inflict unacceptable damage on the Soviet Union, however, the end result for the UK would be likely to be the same: total destruction. A recent detailed computer prediction has calculated the effects of a small scale Soviet retaliatory strike on Britain, consisting of only 117 warheads with a total yield of 38 megatons, and aimed at industrial and urban targets. Such an attack would result in 23.3 million immediate casualties, of which 18.3 million would be killed. Millions more would die in the months that followed.

Such a small attack, moreover, would only be likely if the vast majority of Soviet forces had already been destroyed by a US, or joint UK-US, first strike. Were Soviet forces to be used against Britain before, or launched on warning of, such a strike, the destruction would be even greater. An attack on military and industrial targets, using 342 warheads with a total yield of 219 megatons, would result in 42.5 million casualties, almost 80% of the total population. Subsequent deaths from radiation sickness, starvation and the possible effects of the nuclear
winter would then reduce the island's population even further. Only those in the most outlying areas - such as the Scottish Highlands - would have a significant chance of survival. (62)

It is difficult to envisage a British leader contemplating a nuclear attack on the Soviet Union when it was known that these would be the consequences of retaliation. In an attempt to increase the credibility of Britain's nuclear force, therefore, its advocates have searched for ways of fighting a nuclear war that did not necessarily lead to large scale slaughter of civilian populations. As in the United States, these discussions often appear to owe more to wishful thinking than to a sober analysis of the technical problems involved in nuclear war-fighting.

In particular a number of 'limited nuclear options' for Britain have been discussed as alternatives to the 'unacceptable damage' option which constitutes the central criterion for the strategic force. Such options, it has been argued, could be useful in all the main scenarios for independent use of Britain's nuclear weapons outlined in Section 2.

Firstly, it is argued that the capability for using nuclear weapons in a limited way would be of use in the 'second centre' scenario. This scenario implies that Britain should retain the possibility of using its nuclear weapons first in the event of a Soviet conventional invasion of Western Europe, even when the US is not willing to use its own. It is argued that, in the event of such an invasion, perhaps accompanied by guarantees on the limited nature of Soviet war aims, the US might not be willing to initiate the use of nuclear weapons to avert a major conventional defeat. Given its global military power and geographical position, the US would not be under immediate military threat from a
Soviet-controlled Germany. And, although such a development would clearly in itself be very damaging to its interests, the leaders of the United States would also take account of other factors - such as developments in Asia - when deciding whether to risk using nuclear weapons. In a situation where the US was perceived to be reluctant to use its nuclear weapons in response to Soviet attack, it is argued, a British threat to do so might be more credible, for the reasons outlined in Section 2. Since Britain itself was not under direct threat, however, some 'limited' nuclear option might be more appropriate than an all out strike against 'key aspects of Soviet state power'.

For a limited nuclear war role, Britain's submarine-based strategic force might be suitable, provided that it was able to withhold the bulk of its weapons in case it were felt necessary to escalate to a more comprehensive holocaust. Indeed it is clear that Trident has been supported in part because it will have a much greater capability in such scenarios than Polaris has at present, as Chapter 5 discussed.

Nevertheless even Trident may not be suitable for a limited use of nuclear weapons in Germany or in the North Atlantic. Such an action would reveal the position of one of the two or three submarine at sea, expose it to enemy attack, and thus substantially reduce strategic nuclear capability. The use of multiple warhead missiles might be perceived as too escalatory if the object is simply a demonstration of resolve. And the government might wish to retain the option of using the SSBN force in an intermediate stage between a localised nuclear war at sea or in Central Europe and an all out conflict, in order to deter Soviet escalation to a limited nuclear attack on the British Isles - the 'sanctuary' scenario we discuss shortly.
While the use of Polaris/Trident cannot be ruled out in a 'second centre' scenario, therefore, other independent nuclear forces, it is argued, are required. Indeed this provides one of the main military justifications for the tactical nuclear weapons currently owned by Britain - freefall nuclear bombs carried by Jaguar and Tornado aircraft on the Central Front and maritime strike Buccaneer aircraft, and nuclear depth charges carried by Royal Navy helicopters. The Army's nuclear systems, however, rely on nuclear weapons held by US forces on a 'dual key' basis. These could not be relied upon to be available for independent use.

The second scenario for which Britain's limited nuclear options might be appropriate would be the situation envisaged in the 'sanctuary' argument. In this situation, Britain's nuclear force, it is argued, would preserve the British Isles from nuclear attack in the event of a limited nuclear war in Europe between the US and the Soviets. Britain could preserve its own homeland as a 'sanctuary' in a theatre nuclear war by the threat to spread the war to the Soviet homeland.

Were the Soviet Union to extend a limited nuclear conflict to Britain, however, some analysts argue that it is unlikely that a fullscale attack on industrial and city targets will immediately follow. By hypothesis, the attack will be part of an attempt to prevail in a limited nuclear conflict, and therefore be confined to key British and American nuclear bases. (63) Targets in a counterforce attack on Britain would be likely to include US bases for cruise missiles, F-111 bombers, Poseidon submarines and naval nuclear weapons. They would include British nuclear forces - the Faslane and Coulport facilities, the re-fit yard at Rosyth, stores for theatre nuclear forces. In addition, command and control facilities -e.g. at Northwood and High Wycombe - might be attacked. (64)
It is argued that, in the past, such a counterforce attack would have used groundbursts from inaccurate, high-yield weapons - such as the one megaton SS4 and SS5 missiles. Fallout and blast damage would have been so great as to be virtually indistinguishable from the consequences of a counter-city attack. A British government would, therefore, feel justified in responding with an equivalent level of unacceptable damage on Soviet cities.

Recent developments in Soviet nuclear forces, paralleling those in the US, make such a scenario, it is argued, less probable. The more modern SS20 missiles that are now replacing the SS4 and SS5 missiles are more accurate and, with warheads rated at 150 kilotons, are less likely to cause massive 'collateral damage'. Increasingly, as the Soviets follow the US lead in the development of low-yield, high accuracy weapons, the likely casualties in a counterforce attack could fall even further. The SS20 missile, with an estimated CEP of 1,300 feet when launched from fixed sites, is not much more accurate than Britain's Polaris/Chevaline force. (65) By the mid 1990s, the Soviets will probably be able to match the accuracies of the US's Pershing II or Tomahawk cruise missiles, 150 feet CEP and 200 feet CEP respectively. If they are able to do so, they may also feel able to make substantial reductions in yield, while improving the capability to destroy hardened targets. If Soviet 'theatre' nuclear forces in the late 1990s have yields as low as the 5-50 kilotons reported for Pershing II and the Tomahawk cruise missile, the collateral damage arising from a limited nuclear attack on Britain would then be very substantially reduced. (66)
There is considerable controversy as to the effects of a Soviet counterforce attack on Britain. One proponent of Trident and of 'limited nuclear options', Peter Malone, recently estimated that such an attack with SS-4s and SS-5s might have resulted in between 5 and 7 million casualties. The SS-20, however, could, he argues, be used more effectively against the same set of targets and result in 'only' 600,000 casualties. Even if, as would be likely, "British and American forces had dispersed upon receipt of political warning, an SS-20 attack on long-range nuclear strike forces might result in less than 2 million casualties'. On the basis of these relatively optimistic calculations, Malone then argues that:

"The discriminatory attack capability represented by the SS-20 ... placed a premium on retention of a flexible nuclear posture, capable of responding proportionately to Soviet counterforce attacks" (67)

By contrast, the 'Doomsday' study, written by a group that included prominent opponents of Britain's nuclear force, estimated that a counterforce attack on nuclear bases and associated facilities in Britain, using the current Soviet arsenal, would result in 9 million casualties - more than the number which Malone has argued would be indistinguishable in its effects from a counter-city attack. (68)

The difference between calculations such as these rests mainly on the assumptions made. Many of the casualties in the 'Doomsday' scenario are a result of the assumption that a counterforce attack on Britain would include a 5 megaton groundburst on Northwood, 500 kilotons on Whitehall, and 500 kilotons on Grosvenor Square, the HQ of the US Navy's Sixth Fleet. (69) Those who argue that a more limited attack is possible would point to the incentives that the Soviet Union would have to exclude
the capital city and communication centres from a nuclear attack. For to include these targets might be perceived as increasing the probability of retaliatory attacks on Soviet cities, both because of the scale of damage and because 'decapitation' of British nuclear forces might lead missile submarine commanders to execute their orders on their own initiative.

On the other hand, a counterforce strike which attacked only front line nuclear bases, which Malone appears to have assumed, would involve far fewer casualties. Phil Steadman, one of the 'Doomsday' team, has calculated that such an attack, which excluded London and other command facilities, would result in 1,400,000 casualties. (70) Such a 'limited' attack, it is argued, would give the Soviets a major advantage in a European nuclear conflict, while still giving British leaders an incentive to limit the scale of their retaliation. For it would be incredible, according to this line of reasoning, for Britain to inflict unacceptable damage on Moscow in retaliation for the loss of one or two million Britons. For the result would be rapid destruction of most of its remaining 55 million citizens.

The development of more sophisticated Soviet nuclear systems, in the context of the 'sanctuary' argument, is thus used as a justification for the development of British limited nuclear options. In the case of a limited Soviet attack on bases in Britain, it is argued that the most appropriate British retaliation might be directed against targets in the Soviet Union, but excluding Moscow and major cities, holding the latter in 'reserve' to deter the destruction of British cities. (71) Trident's capability for more boats on patrol and for counterforce options, would, it is argued, enable such contingencies to be covered more adequately than Polaris does at present, as Chapter 5 has discussed.
The 'sanctuary' justification for limited nuclear options, however, like the 'second centre' justification, rests on a questionable assumption - that it is possible to envisage a limited nuclear war in Europe taking place without rapid escalation to a strategic nuclear exchange. Yet the incentives, in a limited conflict, for pre-emption and escalation would be overwhelming. Such would be the situation even in a major conventional war. In a limited nuclear conflict, the military advantages from striking first, combined with difficulty of reaching a common delineation of agreeable 'limits', would make limitation more unlikely.

Moreover the nature of nuclear weapons is such that even a limited nuclear conflict would create an unprecedented disruption of command and control arrangements. Political and military leaders would find themselves unable to determine what targets had been attacked, and with what results. Control over remaining nuclear weapons would rapidly devolve to low level commanders, some of whom would assume that they were authorised to retaliate. The possibility of excluding particular categories of targets, such as cities, would be neglibible. As Des Ball concludes, in his study 'Can Nuclear War Be Controlled?':

"The 'fog of war' makes it extremely unlikely that the situation to which NCA (the US leadership - MC) believe themselves to be reacting will in fact correspond very closely to the true situation, or that there will be a high degree of shared perception between the respective adversary leaderships. In these circumstances it would be most difficult to terminate a nuclear exchange through mutual agreement at some point short of all-out urban-industrial attacks." (72)

Because of such considerations, it is difficult to avoid the conclusion that limited nuclear options, for the US or UK, are in part a rationalisation of a 'deterrence' policy that rests firmly on the
irrational threat to totally destroy an enemy, and consequently oneself, given the probable retaliation in the event of aggression. The deterrent value of limited nuclear options, if any exists, rests on their ability to convince an opponent that one is crazy enough to believe such options do exist, and therefore more willing to initiate a nuclear war.

To the limited extent that counterforce weaponry can be seen as having a meaningful military role, it is not to be found in fanciful scenarios for limited nuclear wars played by Marquis of Queensbury rules. Rather, their role would be in a fullscale disarming first strike against an opponent's military and political system. Such an option has been central to US strategic targetting since the 1950s, and remains so today. (73) Even Britain's development of counterforce capabilities, to the extent that it has military significance, must be viewed primarily in the light of current US programmes for the development of a first strike capability, as Section 3.5 will discuss.

The third, and final, scenario in which limited nuclear options might be relevant for Britain would be in conflict with Third World countries. In such circumstances the use of the strategic nuclear force might be thought too drastic, or liable to weaken Britain's position if the conflict were to escalate to involve one or both superpowers. Particularly against a non-nuclear power, a threat to use tactical nuclear weapons might be enough to coerce an opponent, and might be thought likely to incur less international opprobrium. This possibility has been given some credence by the reports of deployment of low-yield tactical nuclear weapons on the Falklands Task Force, over and above the redirection of a Polaris submarine to the South Atlantic. (74)
Although limited nuclear options may be of relevance to conflicts in the Third World, however, it is unlikely that force requirements for the UK have been influenced by such scenarios. The capabilities required for a war in Central Europe and the North Atlantic are more than enough than is needed in conflicts elsewhere.

3.5 Whose finger on the trigger?

The possibilities for independent use of British nuclear weapons discussed so far all assume that the US is unwilling to use its own nuclear force on Britain's behalf, at least against the targets which the UK government believes it is in its own interests to threaten. Yet if the US does not want to escalate the conflict, it will be profoundly, and adversely, affected if Britain decides to do so independently. Only in the case of a British conflict with a non-aligned Third World country is it possible that the US would adopt a policy of non-intervention in such a situation. Even here, the political impact of nuclear conflict, together with the danger of escalation and the threat to US prestige if it failed to restrain Britain, would provide strong incentives for American action.

In the event of independent use of Britain's nuclear weapons against the Soviet Union, American interests would be immediately at risk. Such a move would be certain to change the whole nature of a conflict, whether it entailed an escalation to nuclear use in the Central European battlefield, or the extension of such a war to include Soviet territory. The Soviets would be extremely likely to respond to these moves by nuclear strikes against the UK. But it is also probable, given the perceived closeness of US-UK links, that the Soviets would also attack the US itself. Not only would the Soviets find it difficult to
distinguish a British attack from an American one, especially if it involved US-made Trident D5 missiles. Even if the Soviets were certain that US-owned weapons had not been used, they might suspect that American sanction had been given to an attack. It seems improbable that the Soviets would be willing to suffer massive damage to their homeland while the US was left unscathed.

Such an analysis, moreover, is likely to be shared by US leaders. In the event of a major war in Europe, US strategic nuclear forces would probably go on high alert - or 'hair trigger' - status at once. There would be considerable military pressure for pre-emptive action, particularly if the Soviets' nuclear forces were also being readied for action. A major conventional war could therefore become nuclear within days. A theatre nuclear war would be almost certain to escalate to an all-out strategic exchange. (75)

In such an unstable situation, any perceived possibility of independent British use would increase further the incentives for the US to strike first. US decision-makers would reason that, were Britain to attack the Soviet Union with nuclear weapons, it would be likely to precipitate Soviet attack on both the UK and the US. In these circumstances, the US might believe it could minimise its own losses by pre-empting such a British move.

US incentives for pre-emption are likely to increase as new programmes for the development of its own strategic forces come to fruition. New counterforce weaponry - such as MX, Trident D5 and cruise missiles - should provide a greatly increased capability to destroy Soviet command centres and military targets. Strategic Anti Submarine Warfare - directed against Soviet SSBN sanctuaries - is being given a
high priority by the US Navy. (76) The development of ballistic missile
defences, if successful, will help reduce still further the size of any
Soviet second strike. These technological moves towards a potential
first strike doctrine will make the 'trigger' capability of Britain's
force more, rather than less, important.

This 'trigger' role for Britain's nuclear force is not only the
probable consequence of independent use. It may also be an important
element of policy, though the government is anxious to avoid publicly
stating this in so many words. To the extent that Trident will have
a 'decapitation' capability, moreover, it is more likely that it can be
used to precipitate US action. For such an attack, aimed at Soviet
command structures, would not only inflict a level of damage that may be
judged more unacceptable than a limited countercity strike. It might also
lead to the disintegration of the command structures which control Soviet
nuclear forces. The possibility of delay and/or uncoordinated action in
a Soviet response would increase US incentives to destroy remaining
forces, particularly since command would have become decentralized.

The French government has been more explicit than that in the UK as
to the value of a capability for 'triggering' the US force. In 1983,
Valery Giscard d'Estaing stated that one of de Gaulle's motives in
building up French nuclear forces in the 1960s was "to be able ourselves
to decide on a nuclear action that would constrain the United States, if
they hesitated, to bring into play the superiority they had at the time
vis-a-vis the USSR in nuclear matters." (77)

In Britain, however, the nature of the 'special relationship'
requires that leaders can never openly avow a trigger rationale for the
nuclear force. In a curious paradox, the possibility of a trigger
mechanism acts to 'couple' the US to providing a nuclear umbrella for Britain, on the one hand; but public debate of such a mechanism would be likely to call into question the wisdom of US aid for Britain's force on the other.

Provided that Britain's force is seen to be able to inflict 'unacceptable damage' on the Soviet Union, the only situation where a trigger policy might not work is where the US had made it clear that it was opposed to the British action, and that it would actively collaborate with the Soviets to punish the culprit. There is unlikely to be a middle way, in which the US professes a lack of knowledge or interest in British nuclear preparations. Particularly if the US is already at war, the Soviet Union is unlikely to take such protestations seriously.

By the same reasoning, therefore, a situation in which Britain wanted to use its nuclear force when the US was unwilling to use its own would almost certainly involve the withdrawal of any support for Britain's force. Indeed active obstruction by the US of British preparations would be extremely likely.

Most discussions of the independent capability of Britain's nuclear force have focussed exclusively on possible Soviet countermeasures. To judge the technical viability of independent use, however, it is also necessary to take account of possible US countermeasures. For a force that could overcome Soviet ABM and ASW defences, but would succumb to US resistance, could not reasonably be described as 'independent'. If US disruption of this sort were potentially effective, it would undermine the technical foundation of all the scenarios and doctrine for independent use, including the possibility of 'triggering' a US strike.
The rest of this section, therefore, examines whether the US might in fact possess a counter-UK capability of this nature.

As we have already discussed, Britain is heavily dependent on the US in the long run for the supply of nuclear systems and facilities. This long run dependence imposes severe constraints on independent action in peacetime defence and foreign policy as a whole, making a 'Gaullist' policy of expelling US nuclear bases inconceivable. Of greatest concern to the discussion in this chapter, however, is not this long run dependence. It is whether Britain retains operational independence - whether it could use its nuclear force, in the face of US opposition, in scenarios where, its proponents argue, it would be of deterrent value.

In normal peacetime conditions, it is unlikely that, without prior warning, the US could physically prevent British use of its nuclear weapons. Despite some suggestions to the contrary at the time of the Nassau agreement, it seems highly improbable that the US has any 'safety catch' on the UK's Polaris missiles. With the agreement of at least one member of the Chiefs of Staff, the Prime Minister could order the launch of those missiles; and within 15 minutes the submarine commander would be ready to fire. (78).

Such an event, however, is really only of marginal interest. For it is virtually inconceivable that a British Prime Minister would consider firing nuclear weapons at a time of peace and without provocation. Only during wartime, or perhaps of intense crisis, is it possible that nuclear weapons might be used deliberately.

In circumstances of intense crisis or war, however, if the US government believed that Britain might consider using its nuclear force on its own, it would have a number of capabilities at its disposal to frustrate such action.

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The US's ability to deny British use of its nuclear force would be greatly facilitated by the interpenetration of the intelligence and communications networks of the two countries, an element of the 'special relationship' at least as important as nuclear weapons collaboration. Facilities in Britain, or in British overseas bases such as Cyprus, Diego Garcia and Hong Kong, would be of considerable importance in US war plans. It is highly probable that the British secret services, and perhaps other parts of the British state machinery, would have some members also involved with US intelligence. It might prove difficult for a British government to discuss the possible use of nuclear weapons without US knowledge. Once the US government had gained such information, it might then feel it had a strong incentive to intervene forcibly to prevent its ally taking such action.

One possibility would be for the US to launch a pre-emptive attack on British nuclear bases and communication centres, using sabotage, conventional weapons and, possibly, nuclear weapons. Such a step would be a difficult one for the US to take, particularly since it would risk the loss of a vital base for prosecution of the conventional battle in Europe. The large American troop presence in the UK might also reduce the probability that a nuclear strike would be used. In a situation where the US perceived British use of nuclear weapons was imminent, however, a nuclear pre-emptive attack could not be ruled out.

In isolation an attack on the land-based British nuclear forces would be extremely risky for the United States. For it is almost certain that British missile submarines have pre-delegated authority to launch their nuclear weapons if they believe that their country is under nuclear attack and no-one is available to give the order for retaliation.
(79) A nuclear attack by the US on the UK command structure could therefore trigger precisely the event it would be designed to prevent.

In such circumstances, therefore, the US would also have to consider means by which it could destroy the UK's strategic force using its ASW and ABM capabilities. Indeed, provided that British missile submarines in port could also be disarmed, such means might even be a possible substitute for a large scale attack on the British mainland with all the dangerous consequences that this would entail.

The main US threat to Britain's strategic nuclear force would be from its considerable ASW capabilities in the North Atlantic. It has been estimated that the US Navy usually knows the location of the Soviet Union's missile submarines to within 50 or 60 miles of their precise location. (80) Since the US co-operates with the UK on deployment of their submarines - to avoid inadvertent confrontations - it is likely to know the location of the two or three British submarines at sea as well, if not better, than this. If all other ASW methods failed, it would be technically feasible to 'take out' Britain's strategic force by barrages of nuclear missiles - from sea and land - against the area in question. (81)

In addition to this ASW threat to British submarines, which will grow with US Navy modernisation, the US Strategic Defense Initiative may also threaten the viability of the UK's force in the long run. The development of US boost-phase defences, in particular, might be sufficient to allow the destruction of most of Britain's Trident missiles before their re-entry vehicles could separate. The few warheads that did get through this stage might then be insufficient for the penetration of quantity of Soviet ground-based defences.
It is generally thought extremely improbable that either the US or
the Soviet Union will ever be able to develop 'leakproof' defences
against a fullscale first strike by the other. A combination of likely
countermeasures - anti-satellite warfare, sophisticated decoys, jamming
and increased warhead numbers - will ensure that some proportion of
weapons is always likely to get through.

In the case of smaller nuclear forces - such as those of Britain,
France and China - the consequences of ABM developments may be more
revolutionary. The first effect is likely to be to considerably reduce
the potential of these forces to exercise limited nuclear options. In
the long run, it may render the UK SSBN force technically obsolete even
in an all out attack. In this latter situation, the maximum number of
missiles that could be fired simultaneously would be 32, or perhaps 48.
A US boost boost phase ABM defence that was designed to achieve a success
rate of, say, 50% against several hundred Soviet ICBMs might expect to
achieve a success rate of as much as 90% against a much smaller force.
This in turn would leave only 3 or 4 British missiles to attempt to
penetrate mid-phase and terminal phase defences. Such a minimum
capability is unlikely to be a credible deterrent to a Soviet leadership
already engaged in a major war. The possibility of such developments
will, therefore, throw further into question the operational independence
of Britain's strategic nuclear force.

4. Conclusion

The case for the current government's policy of retaining and
modernising the UK nuclear force rests, inter alia, on two assumptions.
First, it assumes that there are situations in which Britain's security
will be enhanced by the use, or threat of use, of such a force.
Secondly, it assumes that the British nuclear force can, and will, be able to meet the technical requirements that these hypothetical situations impose. This chapter has sought to examine whether these assumptions are justified.

The possible scenarios for independent use of Britain's nuclear weapons can be broadly divided into two categories - those in which the US is seen as too reluctant to use its nuclear weapons in a European conflict, and those in which the US is seen as too willing to fight a limited nuclear war which excludes its own territory but includes that of the UK. In the first situation, it is argued, the nuclear force could provide an additional deterrent to Soviet aggression, over and above that which the US provides. In the second situation, it is argued, it could help make its territory a 'sanctuary' in a limited conflict because of the ability to bestow on the UK the means of escalating the conflict to involve the homelands of the two superpowers.

In order for British nuclear threats in these scenarios to be credible, it is a necessary condition that its nuclear force is independently capable, despite any likely countermeasures, of inflicting a level of damage on the Soviet Union that would deter it from hostile action that it might otherwise have taken. This requirement is the basis of UK nuclear targetting policy, which seeks to deter by threatening the destruction of 'key aspects of Soviet state power.' It is also the basic technical criterion for the national nuclear force.

The discussion in this chapter has shown that there are strong grounds for arguing that both the assumptions on which the case for the British nuclear force is based may be flawed. In none of the scenarios examined does it appear to be rational for Britain to use its nuclear
weapons when the US is unwilling to use its own. Nor is it credible that Britain could remain a 'sanctuary' in a limited nuclear war, particularly while it is a major base for US nuclear forces.

Even more damaging, there are doubts as to whether Britain's nuclear force is capable of fulfilling its technical requirements. The development of anti-missile defences in the future may considerably reduce its destruction potential. Its capability of being used against US wishes is in some doubt. Any possibility that its use might 'trigger' an intercontinental nuclear war is likely to strengthen the US's incentive to prevent independent action.
CHAPTER SIX

Notes


12. See, for example, Alan Clarke MP, 'Founding Fortress Britain', Guardian, 15 February 1982.


23. These unofficial sources include papers written for the Royal Institute for International Affairs and the International Institute for Strategic Studies. Evidence presented to the Commons Defence Committee, together with unattributable reporting of government plans, provide some confirmation that the open discussion of these subjects parallels official trends.


30. The Polaris A3 MRV system contained 3 warheads each of 200 kilotons. The total destructive power of the missile is calculated as approximately one megaton equivalent by the formula: MTE = NY 2/3, where MTE is 'megaton equivalents', N is number of warheads, and Y is yield of each warhead. It is possible that the Chevaline update to the Polaris front-end may have reduced total destructive power.


37. *Sunday Times*, 7 April 1985 gives this estimate of accuracy. See also, however, discussion later in this chapter on the independence of the British force.


42. Peter Malone, *op.cit.*, p.100.


49. Graeme Auton, op.cit., p.386.


52. Ian Smart, op.cit., p.41.


54. Paul Rogers, op.cit., p.18.


56. 'The Button', New Yorker, 8 April 1985.


60. 'The Future United Kingdom Strategic Nuclear Deterrent Force', op.cit. p.5.


62. See Stan Openshaw et.al., op.cit., pp.77,140.

63. Peter Malone, op.cit., p.89.

64. See Stan Openshaw et.al., op.cit., pp.243-55.

65. Paul Rogers, op.cit., p.59; Ian Smart, op.cit., p.41.

66. Figures on yields and accuracies from Paul Rogers, op.cit., pp.27,32.


68. Stan Openshaw et.al., op.cit., p.140.

69. Ibid., p.254.


1. Introduction

This chapter looks at those policy options available to the British government which involve the retention of a national nuclear force. In Section 2 we examine the cost pressures now building up on the defence budget, and attempt to quantify how important Trident spending will be in intensifying these pressures. In Section 3 the difficulties involved in attempting to continue current plans into the 1990's, despite these pressures, are discussed. In Section 4 the feasibility of a 'Gaullist' option, in which increasing emphasis is given to national and nuclear commitments at the expense of contributions to NATO conventional defences, is examined. And, in Sections 5 and 6, we examine the implications of Trident being cancelled by an administration which was still committed to the possession of a British nuclear force.

The Chapter concludes by arguing that all the options discussed are variants based on continuing acceptance of the fundamental tenets of UK and NATO defence policy. Which particular policy is adopted, therefore, will be a result mainly of economic pressure and the electoral fortune of the various parties.

2. The Costs of Trident

The political consensus in support of Britain's nuclear force has been less than absolute since the early 1960's. The lack of credible scenarios for its use has meant that, for many on the centre and left of the political spectrum, it has been regarded primarily as a contribution to NATO's nuclear force, rather than a fully independent 'deterrent'.
The continuing decline in Britain's economy, together with the partial withdrawal from Great Power pretensions, has further eroded the belief that the country requires the place at the 'top table' which, it had been believed, nuclear weapons secured. A significant, and growing, section of the political elite has regarded the nuclear force as a marginal commitment. It has supported the possession of a strategic force because of the way it has reinforced the 'special relationship' with the U.S., and because of straightforward inertia. But it has recognized that it must be balanced against other spending commitments - military and civilian. As Brigadier Kenneth Hunt recently made clear, support for an independent nuclear force, in his view, must be contingent upon its cost remaining relatively low:

"The need for a British independent nuclear deterrent has never seemed to me to be self-evident. If it did not exist, I doubt if it would now be invented. However, I have slowly and reluctantly come to the conclusion that in this changing and imperfect world a force should be kept. The present cost is small and the insurance worth having. But what if the cost turns out not to be small? If the opportunity cost of Trident meant that the conventional forces were significantly weakened? Then I think alternative forces would have to be looked at ... No strategic system would be cheap and none would be as good as Trident, and in the climate of an agonizing re-appraisal there would obviously be the alternative course of giving up the strategic nuclear deterrent altogether". (1)

Although the national nuclear force has survived past threats to its existence largely because of its low cost, these costs are, nevertheless, substantial. In 1983-84, according to the annual Defence White Paper, £382 million was budgeted for the strategic nuclear force. (2) In addition, according to independent estimates, a further £736 million was spent on related support costs - R & D, training, administration and
repairs. In total £1100 million, or 7% of the total defence budget, was devoted to the **strategic nuclear force**, - £1,000 million excluding Trident. (3)

In addition to the direct cost of the strategic nuclear force, there are substantial resources devoted to the procurement and operation of **tactical nuclear systems**. Nuclear strike is one of the main missions of the Tornado GR1 aircraft, which has taken up a large proportion of the RAF's procurement spending over the past decade. Other fixed wing aircraft also have a nuclear role, including Jaguars, Buccaneers, Nimrods, and, in the near future, Harrier GR5's. The Royal Navy's ASW helicopters are designed to carry nuclear depth charges, and its Sea Harriers are capable of delivering free-fall nuclear bombs. Finally, the British Army on the Rhine has one regiment of Lance missiles, which have a nuclear-only role, and five regiments of nuclear-capable artillery. (4) Because nearly all of these systems are 'dual-capable', i.e. they can deliver either nuclear or conventional explosives, it is impossible to allocate most of the expenditure on them into conventional and nuclear categories.

In common with other areas of public spending, however, the rate of change in the cost of an item stimulates political comment or concern much more readily than its absolute level. Nuclear weapons spending, as a proportion of defence spending, is much lower than in the 1950's, when the V-bomber force took as much as 20% of the total. (5) The political controversy attached to nuclear weapons has also been restricted as a result of the exceptional secrecy surrounding some of the major projects involved, notably the Chevaline development in the 1970's.

In contrast to that project, the costs of the Trident programme have been a focus of public controversy since the initial government decision
was announced in 1980. The marked rise in nuclear weapons spending which Trident will require is likely to create major problems for the defence budget as a whole. It will ensure that the existence of an independent nuclear force will be a matter of political controversy at least until the next General Election.

2.1 Defence Commitments and Resources 1975-85

Since the 1950's, successive governments have faced tensions between Britain's extensive military commitments and the limited resources available for defence. As a consequence of the aspiration to remain a Great Power, it has spent a greater proportion of its national income on the military than any of its major European NATO allies. At the same time, and partly as a result of this heavy military burden, it has had an economic growth rate that has been consistently poorer than that of most other advanced capitalist countries. Although Britain has continued to spend more on defence proportionately compared with its allies, therefore, it has still had to curtail its military commitments to remain within the constraints imposed by a laggard economy. (6)

In the 1960's and early 1970's, substantial reductions in defence commitments were made by the withdrawal from East of Suez. Between 1964-5 and 1974-5, defence spending in real terms only rose from £12,412 million to £13,327 million (at 1984/85 prices), an increase of 7.4%. (7) This enabled the proportion of G.D.P. used for the military to decline from 5.9% to 4.9%. This remained, however, considerably higher than the military burdens in West Germany (3.6% of G.D.P.), France (3.8%), the Netherlands (3.4%) and Italy (2.5%). (8)

By the mid 1970's there were few additional savings that could be made by further East of Suez withdrawals. At the same time, pressures for
reductions in Britain's defence budget were intensifying. The country's poor relative economic performance combined with an international economic crisis to produce a squeeze on government spending as a whole, and on defence spending in particular. Between 1974/5 and 1978/9, defence spending rose from £13,327 million to £13,370 million (at 1984/5 prices) - an increase of only 0.3%. (9)

As a result of the intensifying technological contest between the superpowers, the 1970's also saw a rapid rise in the sophistication of conventional weapon systems, and consequently in their unit cost. Ministries of Defence found that in order to maintain the numerical strength of their arsenals of major weapons, they had to spend an increasing amount each year in real terms. British procurement was not exempt from these pressures.

The Labour government in the late 1970s was not prepared, however, to respond to these trends by making reductions in those military commitments that remained after the completion of East of Suez withdrawal. It went ahead, in secret, with the Chevaline improvement programme for Polaris. It confirmed the programme for production of three 'A.S.W. carriers', thus effectively reversing the 1966 decision not to replace Britain's aircraft carriers. It went ahead with the order for 385 Tornado aircraft, in a multinational programme which would eventually cost Britain alone £13,400 million (at 1984/5 prices). (10) As a consequence of the determination to press ahead with all these projects, and others, total equipment spending rose from £4,167 million in 1974/5 to £5,352 million in 1978/9 - a rise of 28%. (11)

To pay for this increase in equipment spending, other components of the defence budget had to be squeezed. Numbers employed and relative pay
levels were cut. Economies were made in fuel, maintenance and stores. Between 1974/5 and 1978/9 non-equipment spending fell by 12.5% from £9,160 million to £8,019 million.

These cuts were, by their nature, temporary economies. They were a clear reflection of the inability of the Labour government to reconcile its desire to reduce the burden of military spending on the economy and its desire to maintain its existing military commitments to NATO. Even before Labour's 1979 election defeat, it was clear that a major spending increase was needed to restore these short-term cuts. For its first two years in office, the new Conservative government spent little more than had already been budgeted by its Labour predecessor.

In addition to restoring the temporary cuts of the late 1970’s, however, the Conservatives soon made clear that further increases in defence spending would take priority over social programmes. Against a background of rising international tension, the government agreed to meet the NATO target of 3% annual real growth until 1986. (12) Between 1978/9 and 1985/6 the total defence budget increased from £13,370 million to £17,354 million (at 1984/5 prices) - an increase of 29.8%. (13) The proportion of national income spent on the military rose to 5.3% in 1984/5 its highest level since 1967, before falling to 5.1% in 1985/6.

Moreover, the increase was particularly marked in the new equipment budget, which rose by 54% between 1978/9 and 1985/6. This remarkable increase was devoted to modernisation of existing forces, rather than increasing their size. The strength of the armed forces remained constant, while the number of civilian employees fell; and spending on armed forces personnel stayed relatively constant. (14)
The large increase in military spending in the early 1980's took place against a background of a further deterioration in Britain's overall economic performance. This in turn led to reduced tax revenues, increased unemployment and a growing social security budget. The government's financial position was saved from being considerably worse only by an increase in state oil revenues from £0.6 billion in 1978/9 to £11.5 billion in 1985/6. (15) This in turn allowed total government spending to be shielded from the full impact of recession, increasing from 43% of G.D.P. in 1978/9 to 44 1/2% in 1985/6. (16)

Despite the overall growth in public spending, however, increases in expenditure on defence and social security had to be accompanied by cuts in other areas in order to keep within overall budgetary limits. In a clear reflection of the new government's priorities, overseas aid spending fell 12% between 1978/9 and 1985/6, housing by 59%, education and science by 1% and trade and industry by 56%. (17)

The pressures on government spending are likely to increase in the late 1980's. On current estimates, North Sea oil revenues could fall from £11.5 billion in 1985/6 to as little as £6 1/2 billion in 1986/7. If the world oil price falls further, or if sterling rises against the dollar, even these estimates may prove overoptimistic. (18) At the same time, the government is finding it increasingly difficult to find further savings in social and economic programmes. Indeed powerful demographic and political pressures are now working for increased spending in some of these areas, notably infrastructural investment and social spending. In these circumstances, the Treasury has clearly convinced the government as a whole that defence spending can no longer enjoy the exceptional priority it has enjoyed between 1979 and 1985.
The assumption that defence spending growth must be reduced, or ended, after 1985/6 is a longstanding one. In 1980 Defence Secretary Francis Pym indicated that his Ministry was basing its long term planning on the working assumption of one percent real annual growth after 1985/6. (19) After his 1981 Defence review, Secretary of State John Nott informed the Commons Defence Committee: "I am assuming nil growth beyond (1985/6) for the purposes of planning." (20) In 1983, the Ministry of Defence was forced to concede that no real growth could be allowed in 1986/7. (21)

Since 1983, the squeeze on the Ministry of Defence's budget has increased. Public spending plans announced in late 1985 provide for a 6 1/2% real cut in defence spending between 1985/6 and 1988/9. (22) Further reductions in subsequent years are a distinct possibility. The high priority which the current government gives to reducing the overall level of taxation has now ensured that the defence budget can no longer be exempted from the drive for economies in public spending.

2.2 Trident and the Defence Budget

Because of the rapid growth in their sophistication and capabilities, most major weapons systems cost considerably more per unit than those systems they replace. It is this inexorable rise in unit cost, rather than increased numerical strength, that has been the driving force behind the 87% real increase in equipment spending between 1974/5 and 1984/5. (23)

The Trident programme is no exception to this general trend. The cost of the original Polaris programme was approximately £2,300 million at 1984/5 prices. (24) The two major modernisation programmes for Polaris, the Chevaline programme and the re-motoring programme, are estimated to have cost £2,200 million and £339 million respectively. (25) On official
estimates, Trident will cost £9.3 billion at 1986/7 prices - more than four times the real cost of the original Polaris project. (26)

Moreover, for a number of reasons, this estimate may itself be an underestimate of the total capital cost of Trident. Firstly, it excludes the costs of a number of programmes which are closely related to the project and would not be necessary if Trident were cancelled. The cost of developing new production and research facilities at Aldermaston Atomic Weapons Research Establishment will be £325 million. These facilities "are required for purposes other than Trident but on which Trident in-service dates depend." (27) A further £200 million of public funds is being spent on improvements to construction facilities at Vickers shipyards in Barrow in Furness, which will be used partly for Trident. (28) In return for favourable terms on the R & D component of Trident spending in the U.S., Britain has agreed to man Rapier air defences for U.S. bases in the UK - a further cost of around £160 million. (29)

Secondly, the implementation of the Trident programme is dependent upon the development of a number of new facilities and equipments which will be used for both Trident and for Britain's attack submarines. These include the improvement of docking facilities at Faslane, the development of an entirely new sonar system, the development of the PWR2 power plant, and the development of new communications systems between submarines and shore-based command. (30) Yet none of the development cost of these programmes is included in Trident costings. Only the production cost of those units to be installed in the four Trident submarines is included.

Thirdly, it must be unclear whether sufficient 'contingency' provision has been made for unforeseen escalation in costs. The D5 missile has just begun test firings in 1987 and cost estimates must remain speculative. Both the PWR2 reactor and sonar programme are
still in the development stage, and their costs may escalate in the light of new threat assessments and/or unforeseen technical difficulties. The construction of the submarines themselves has only just started, and there remains widespread concern as to the efficiency of naval dockyards which may affect the cost of this component too. (31)

The difficulties of accommodating Trident spending within the defence budget, even on official cost estimates, will be greatly increased by the reduction of total defence spending in real terms during the years in which annual spending on the project is due to rise most steeply. Between 1984/5 and 1989/90, we estimate that Trident spending will increase from £163 million (at 1984/5 prices) to £900 million. Yet over the same period total defence spending is likely to fall by around 8% in real terms. In consequence, the resources available for conventional defence will fall by around 12% in real terms. (32)

It seems clear that the MoD is relying on a series of measures to increase efficiency to avoid or at least postpone the defence review that is likely to be the eventual result of these trends. The target set by the Chief of Defence Procurement, Peter Levene, of a saving on procurement costs of "in excess of ten per cent" is likely to be crucial in this process. (33) Such a saving, which would apply to both new equipment and spares, would release at least £800 million per annum. Together with continuing reductions in civil service numbers, it would, if achieved, go a long way towards preventing a major crisis.

There must be severe doubts as to whether such large savings can be realised in the short term. The small number of domestic producers for many items of military equipment, together with the absence of effective
international competition, makes an increase in competitive tendering difficult to achieve. And the increased emphasis on collaborative projects is likely to reduce, not increase, the incentives for 'goldplating' of weapon specifications.

Few outside observers therefore believe that the government will be able to avoid making hard choices on defence spending priorities in the near future. In what ways the MoD would bring its commitments within the resources available cannot easily be predicted. What is clear is that the form that these economies take will have a major effect on the situation that will face whichever party forms the government in the late 1980's. To the extent that the government relies on short term expedients - pay restraint, stock rundown, or simple financial juggling - it will be more difficult for a new government to avoid some compensatory increases. If, however, the government is able to avert a defence spending crisis by reductions in commitments and/or genuine improvements in efficiency, the pressure on its successor is likely to be reduced.

3. Continuing Current Policy

The most likely option in the immediate future, at least until the next General Election, is a continuation of current policy. The government's commitment to the Trident programme is firm, and the proportion of expenditure incurred rises rapidly in 1987 and 1988. Only a very large increase in the total estimated cost of the programme would, at this stage, be likely to persuade a majority Conservative government that a review of the Trident decision were necessary.

Yet, in contrast with many other major weapons programmes, the cost of Trident has remained remarkably stable in real terms since the decision, in March 1982, to buy the D5 system. In constant 1984-5 prices,
the cost estimate made in 1982 was equivalent to £8750 million. The latest cost estimate, made in 1987 was £9.28 million at 1986/7 prices, or £8,500 million at 1984/5 prices. (34)

By the end of the financial year 1987/8, around £1650 million (at 1984/5 prices) will have been spent on the Trident programme, according to current plans, and perhaps another £1000 million will have been contractually committed. Any government that emerges from the General Election in 1988, therefore, may find that the budgetary advantages of cancelling Trident, but purchasing an alternative Polaris replacement, are considerably less than they appeared in 1983.

Moreover, as Chapter 5 discussed, many of the canvassed alternatives to Trident are much less attractive to proponents of a national nuclear force than they might at first appear. Some would be vulnerable to comparatively modest, and thus quite plausible, improvements in superpower ballistic missile defences or pre-emptive capabilities over the next 20 or 25 years. Yet any system that could not be counted upon to survive and overcome such defences at least until around 2005-2010 could hardly be regarded as a cost effective replacement for Polaris, which is due to remain in service until the mid 1990's.

In addition, by 1988 there might also be questions as to whether alternative systems could be brought into service without expensive extensions to the lifetime of Polaris. Current plans envisage the retirement of the Polaris boats between 1994 and 1997. If this is delayed, extra spending will have to be incurred on further submarine refits. If a complete fourth refit is necessary, it is unlikely to be less expensive than the third refit, which is estimated to have cost around £500 million at 1984/5 prices for all four submarines. (35)
A new government which wished to retain Britain's nuclear force for domestic political and symbolic purposes might still decide to replace Trident by a cheaper system even if it were not likely to fulfil the criteria of survivability and penetrability until now thought necessary. This possibility is discussed further in Section 5 of this chapter.

Under a Conservative government at any rate, a continuation of the defence policies of the last decade appears the most likely possibility for the late 1980's. This would involve not only a continuation of the Trident programme. It would mean that the relationship with the U.S. would continue to be central to foreign policy, where necessary at the expense of intra-European ties. Such a government would not seek to reduce the presence of U.S. nuclear forces in Britain, or impose a veto in their use. It would seek to maintain the current size of Britain's conventional commitment to NATO, while also continuing to implement equipment modernisation programmes for all three services.

Unless there is a major shift in the policy of other NATO countries, or a growth in support for alternative policies within the Government party, the main problem such an approach will face is likely to be financial rather than political. Both the U.S. and Britain's major European allies would, at least under current administrations, be likely to welcome a continued British willingness to bear a disproportionate share of NATO's military costs, while simultaneously playing a subordinate role to the U.S. in foreign and defence policy making.

The financial problems that a continuation of current defence policy will encounter are, however, substantial. Since the 1950's, the U.K.'s rate of economic growth has been consistently lower than other West European states. If this trend continues, the government will find it
increasingly difficult to maintain a level of military spending roughly equivalent to those of France and West Germany. It will find itself faced with three choices. First, it could accept a further increase in the gap between the defence burdens of the U.K. and other NATO-European countries. Second, it might concede that the share that Britain's military effort takes in NATO's forces as a whole will have to diminish. Or, thirdly, savings in military spending might be sought that do not affect Britain's NATO contribution. We now assess the consequences of each of these three options in turn.

The first option is the one pursued in the early 1980's. Although the U.K.'s GDP continued to grow at a slower rate than other European countries, the level of military spending increased more rapidly than elsewhere. The result was an increase in the proportion of U.K. national income devoted to defence from 4.5% in 1978/9 to 5.2% in 1985/6. By comparison, other NATO-Europe states continued to spend, on average, around 3.6% of national income on the military. (36)

After 1985/6, however, the British government has made clear that it does not intend to make any further real increases in military spending. Indeed, as we have already seen, there could be a decline of more than ten percent in the level of spending on conventional defence. Such plans, if implemented, will create severe problems for the maintenance of Britain's position within NATO. For, if the arms race between the blocs in Europe continues, and this is reflected in continued growth in military spending of major NATO members, Britain will find it increasingly difficult to maintain its current share of NATO-Europe's military effort.
It is therefore possible that the next decade will be characterised by a stable, or rising, proportion of NATO-Europe’s GDP being devoted to the military. This is particularly likely if the level of inter-bloc tension continues, and/or there is growing pressure for increased European contributions to NATO. In these circumstances, if we assume an average GDP growth in Western Europe of 3 per cent per annum, the resources devoted to the military by NATO-Europe will increase by 34% or more over the next decade.

For Britain to maintain the relative position of its forces within NATO-Europe, it is likely to be under pressure to make a comparable increase. Yet if Britain’s GDP growth rate continues to lag behind that of the European countries, acceding to such pressure would require a further increase in the proportion of GDP devoted from defence - from 5.2% in 1985/6 to as much as 6.3% in 1995/6. (37) In a period of low growth and declining oil revenues, even a Conservative government would find it almost impossible to sustain such an increased priority for military spending.

It is possible, though not probable, that the next decade may see some easing of tensions and a relaxation in the pace of the arms race in Europe. NATO as a whole may find itself able to reduce the proportion of GDP it devoted to defence. As a result, Britain may find the pressures on its defence budget somewhat reduced.

Such a scenario would not necessarily prevent a widening gap between the military burdens of the U.K. and its European partners. If, for example, we assume NATO-Europe increases its real military spending by only one per cent per annum, while GDP grows at three per cent per annum, the average military burden would fall from 3.6% of GDP to 2.9%. If
Britain's economy grew at the slower rate of one percent per annum, however, keeping up with NATO-Europe would mean that the U.K. military burden would remain at 5.2% of GDP. The ratio between the U.K. and average European military burden would rise from 144% to 179%. Such an increase would be a significant increase in the relative burden placed on Britain's economy in international competition, one which a British government might be reluctant to accept.

If the U.K.'s rate of economic growth continues to lag behind that of other NATO members, therefore, it is probable that it will be unable to maintain the current relationship between its total military effort and that of its main allies. For example, were the U.K. to continue to spend 5.2% of GDP on the military, while West Germany continued to spend 3.3%, the difference in growth rates would mean that within a decade, British military spending would fall from 111% of West German spending at present to 91% in 1995/6. (38) Such a trend would in turn mean either a relative diminution of the quality of Britain's forces relative to those of other NATO members, for example by a much slower introduction of new weapons systems; or it would require a reduction in the size of Britain's forces relative to those of its allies, for example by a reduction in the size of the Army and RAF contingents in Germany.

Such reductions in the quality or quantity of Britain's NATO contribution, would be certain to reduce its bargaining power within the Alliance, perhaps leading to the displacement of British officers from some senior NATO commands. Such a development would bring the trade-off between nuclear and conventional military commitments even more sharply into focus.
The government currently argues that such difficult choices will not be necessary, and that the resources available over the next decade are sufficient to finance both nuclear and conventional commitments. The main thrust of policy in the late 1980's will be on measures to increase efficiency in military support and procurement. It is hoped that these measures will enable planned programmes of equipment modernisation to be completed without further increases in funding. (39)

A number of recent studies have suggested that there may indeed be scope for substantial increases in efficiency, especially in procurement policy. (40) Yet the extent for savings is likely to be severely limited by the policy of "buy British" in arms procurement, which in many cases leaves the MoD reliant on monopoly suppliers. Moreover the trend towards increased European collaboration, insofar as it replaces national with European monopolies, is unlikely to radically alter this constraint.

As a result of these considerations, there is a growing body of opinion arguing for a policy of opening up procurement to genuine international competition. Defence economist Keith Hartley recently argued that:

"If society wishes to introduce more cost efficiency into weapons procurement, then competition is a possible solution. A competitive procurement policy for the UK would have the following characteristics:

1. A willingness to shop around for weapons and not to restrict purchases to UK firms.

2. Abolition of entry barriers into the UK market, allowing foreign firms to compete for British defence business. Clearly the introduction of real competition into UK weapons markets will be opposed by those firms currently benefitting from protection. Change is likely to be costly, but tax payers will be eternally grateful!" (41)
Such a policy would undoubtedly help to increase the cost-effectiveness of Britain's military spending. It would allow, for any given level of spending, a greater military capability. And it might therefore contribute to the postponement of cuts in the strength of UK front-line forces. It would, however, be fraught with political difficulties. For it would bring the government into direct conflict with the industrial interests, and associated MP's, who provide much of the domestic support for high levels of military spending. It would be highly questionable, therefore, whether the perceived political costs of reducing the protection from overseas competition given to arms producers would be any less than those resulting from cuts in the military effectiveness of the armed forces.

If radical changes in the policy of "buy British" are ruled out, a government which sought to maintain its current position in NATO might turn instead to 'out-of-area' commitments for savings. In this area, however, a Conservative government will also face difficult problems. It would require a significant change in policy for a settlement to be reached that would allow a withdrawal of forces from the major 'out-of-area' commitment, the Falklands. Moreover, by the late 1980's, the immediate savings from such a move will be relatively small. On current plans, the marginal costs of the Falklands commitment will have fallen to £124 million by 1989/90 - less than 1% of the total military budget.

If a Falklands settlement can be reached, and consequent savings made, there might then be a greater willingness to contemplate a further reduction in Britain's general capabilities for 'out-of-area' operations. Such capabilities, however, are now largely dual purpose in nature -
designed for use both in Europe and elsewhere. We shall therefore return to the consequences of such a policy - which would probably be largely at the expense of the Royal Navy's surface fleet - in the next section.

To summarise, a Conservative government in the late 1980's and 1990's is likely to attempt to continue the main elements of current policy. Its success in this effort will depend to a large extent on the overall performance of the economy. If Britain's rate of economic growth continues to lag significantly behind those of its major European allies, and the MoD is unable to secure large savings through more efficient weapons procurement, cuts in the contribution to NATO conventional forces, at least relative to other countries, will become inevitable. The political consequences of such a decline could negate any possible prestige gains from the Trident programme. Certainly they would ensure that the trade-off between nuclear and conventional forces continues to be a source of considerable political controversy.

4. The Gaullist Option

If financial pressures on the defence budget increase, there are some who would wish to respond by giving increased emphasis in foreign and defence policy to what are perceived as specifically national roles and national interests. This was the central argument of Admiral of the Fleet Lord Hill-Norton, who was Chief of the Defence Staff and Chairman of NATO's Military Committee:

"...particularly since the middle 1960's Britain has been at extreme pains to prove herself the best of European and Atlantic Allies. She has done her national interest considerable damage in the process..... It is now time to re-establish our autonomy as a medium power, to provide forces - as do our Allies - which most effectively safeguard the national interests wherever appropriate". (43)
A focus on specifically national tasks, in this formulation, would involve top priority being given to (a) independent nuclear forces, both strategic and tactical; (b) conventional defence of the UK homeland; and (c) an independent capability for intervention outside the NATO area in defence of perceived national interests. It would mean that the bulk of savings in any Defence Review would come from the Army and RAF’s forces assigned to Central Europe. As Michael Chichester and Conservative MP John Wilkinson have argued:

"in the face of escalating defence costs and budget limitations the rigid maintenance of the Brussels Treaty commitment by the UK to maintain three divisions and a tactical air force permanently in Western Europe in peacetime until 1992 is now creating an unacceptable degree of imbalance in the structure of the British armed forces. A renegotiation of this commitment has become a matter of urgency". (44)

Such an option undoubtedly would appeal to some of the more national elements of political opinion, and might be one to which Mrs Thatcher and her colleagues would turn if a defence review becomes inevitable. It would accord with the suspicion of European integration still widespread in the Conservative Party, and which is a particular characteristic of Mrs Thatcher's leadership. Given the electoral dividends from the 1982 Falklands war, and emphasis on national rather than Allied interests, it might also be perceived as a means of forging a new consensus on defence and foreign policy.

Such an approach could be characterised as 'Gaullist' in its clear parallels with the policies pursued by France in the 1960’s, and to some extent in subsequent years. President de Gaulle and his immediate successors gave top priority to the force de frappe and to France's capabilities for rapid overseas intervention while cutting back sharply in
forces for conventional war in Europe. They appeared to succeed in forging a remarkable political consensus behind a policy that clearly put perceived national interests above Alliance ones, even to the extent of remaining outside NATO's integrated military command structure.

It seems most unlikely that a British government will attempt a fully fledged Gaullist option. For it would require, at the very least, an end to the current dependence on the United States for the maintenance and modernisation of the strategic nuclear force. And, were national interest to be given top priority, it is at least possible that British Gaullists would also demand the removal of US bases from UK soil, as France did in the 1960's.

A policy of this nature would, in current circumstances, be likely to be supported by a majority of the British public. It would increase the perceived legitimacy of the national nuclear force by ending its reliance on US systems and support, and would respond to the majority view that Britain needs its own 'Bomb'. The expulsion of US nuclear bases, and possibly others as well, might also be welcomed by many on the Left and Right as an assertion of national will against a power now widely seen as, at best, insensitive to British interests. It is ironic that, of all the options theoretically open to a British Government, this is perhaps the most improbable. For it appears inconceivable that any of the major British political parties would wish to expel US nuclear bases without also wishing to end Britain's own nuclear commitments.

Even if a neo-Gaullist option did not involve the expulsion of US bases, it would involve substantial problems for the government. A British-produced nuclear force would be considerably more expensive than Trident since it would have to involve independent research and development in areas of technology, such as ballistic missiles, in which
British industry has little recent experience. There is little doubt that, given sufficient resources, Britain could develop an independent strategic nuclear force. The experience of France, which spends 20% of its military budget on nuclear systems, (45) may suggest, however, that the cost of such a move would be unacceptably high. Without a prior US decision to cut off aid to Britain's nuclear force, it is difficult to imagine a British government voluntary taking on such problems.

It is nevertheless possible that a Conservative government might consider a diluted form of neo-Gaullism, which combined an increased emphasis on specifically national priorities with a continued acceptance of the special nuclear relationship with the US. This would involve a continuing acceptance of US nuclear bases and the US dependent Trident programme. Where it would differ from current policy would be in the high priority given to global intervention capabilities, and general purpose maritime forces, over commitments to NATO's Central Front.

Such a policy could allow Britain to make a greater military contribution to the US's efforts to maintain Western dominance outside Europe. In addition, it would allow Britain to concentrate its resources on the area where it is said to have both a 'comparative advantage' and an immediate national interest - its air and sea forces for defence of the North-East Atlantic. By contrast, UK air and land forces committed to the collective defence of West Germany would be left to bear the brunt of any economies needed in the next major defence review. Britain's European allies, it could be argued, would eventually adjust to such a change, just as they did to France's withdrawal from the integrated military command in the 1960's.
There would, however, be substantial opposition to such a reorientation from those who argue that Britain's current commitments in Central Europe play an important role in maintaining NATO's political cohesion. Although the British forces in Germany constitute only 6% of total NATO inplace strength, substantial reductions in this proportion would, it would be argued, be likely to induce other NATO members to rethink their commitments too. The already considerable pressure in the US Congress for reduction in the size of the US Army in Europe would be certain to increase. Similar forces would also be unleashed in Holland and Belgium. As Ken Booth has argued:

"A run-down of Britain's conventional contribution to the Alliance, notably the British Army on the Rhine (BAOR), would have a far reaching effect on the perceptions of our allies... it only requires a 'show of reluctance' on the part of the Europeans to meet their commitments - especially by major allies like Britain - and the USA administration might find the pressures for reduction irresistible." (47)

The probability of such a 'domino' effect may be somewhat exaggerated. A reduction in the size of BAOR to 30,000 would constitute only a marginal reduction - of around 2% - in NATO's in-place strength. One has to assume that the commitment of other countries to the Central Front is extremely tentative if one is to believe that such a reduction could not be accepted without a total disintegration of NATO's defences in the Federal Republic. For such a withdrawal would leave the fundamental interests of the major countries with large troop commitments in the Central Region unchanged. The United States, with 282,000 active forces in the Central Region, West Germany with 426,000, and the Benelux countries, with 176,000, may be unlikely to quickly replace the 25,000 departing UK troops. (48) But it seems at least possible that they will not, as a result, make large reductions of their own. All these countries already face considerable political, demographic and financial pressures
for troop reductions. Changes in the size of BAOR would, in comparison with such pressures, be unlikely to play a dominant role in determining the extent to which such reductions take place.

Even if other NATO countries do not accelerate troop reductions as a result, however, a substantial reduction in Britain’s commitment to the Central Front would involve political difficulties for the government. Most of its European allies would see such a move as further confirmation of the ambiguity of Britain’s commitment to West European co-operation. It might also be seen as an attempt to preserve a military 'fall back option' for defence of the British Isles at the expense of that of Western Europe as a whole. Such perception could have damaging consequences for the UK in a wide range of negotiations in both NATO and the EEC. The preference for the nuclear force, developed through a relationship with the US, over commitment to European cooperation would be seen as a clear echo of the events of 1962, and might have similar consequences. A partial withdrawal from the Central Front would be almost certain to mean the relinquishment of some of the senior NATO commands that the UK currently hold. Perhaps of greater significance, it may also contribute to British isolation from moves to forge greater European co-operation in defence and foreign policy, and in arms procurement.

It is possible that many Conservatives might accept such consequences as a necessary price to pay for the retention of a national nuclear force, the preservation of a blue-water Navy, and the continuation of the special relationship with the US. Such a course might be seen as a reassertion of the traditional orientation of foreign and defence policy, in the context of which the permanent commitment of troops to the European continent might be seen as a temporary aberration.
For a government to yield to such arguments, however, would require a clear reversal of the trend in foreign policy toward increased European ties that has been under way since the 1960's. And the possibility of such a trend would undoubtedly ensure that those members of the Conservative Party who favour closer industrial links with Europe, such as Michael Heseltine, would resist fiercely any reduction in BAOR.

Nor will the US necessarily support a British move towards a more national and transatlantic military posture. Some sections of the US armed forces, notably the Navy, may welcome the retention of, or increase in, Britain's current surface fleet. But it appears unlikely that the Royal Navy would ever be permitted to develop forces of such a size that they could make a militarily significant addition to US capabilities for intervention outside Europe. The US is likely to continue to encourage participation and support by the UK and other European powers in 'out-of-area' conflicts. The purpose of such support, however, will be primarily to legitimise conflicts which are often potentially controversial within the US, and in which it may be thought important that not only American lives are lost in the pursuit of interests supposedly shared by other NATO member governments. The US government cannot realistically expect, and may not even desire, a level of European forces that would begin to match US power projection capabilities.

Moreover US decision-makers are much less inclined than their counterparts in Whitehall to view the relationship between their two countries as 'special'. The US is prepared to support the UK nuclear force in order to secure the continued loyalty of a reliable ally, ensure a continued base for US nuclear forces, and prevent moves towards a radical rethink of UK policy. Were the British government to propose
reductions in its commitment to NATO’s conventional defences, however, large sections of US opinion would perceive such a move largely in terms of a general reluctance by European countries to share the burdens of alliance defence. And even to the extent that sympathetic members of the US elite did recognise the need for a British defence review, they would probably favour cuts in the UK nuclear force rather than in conventional force levels in Germany.

Despite such potential opposition, it is at least possible that a Conservative government will decide to respond to a severe budgetary crisis by making cuts in forces committed to Central Europe. For such a change of emphasis to resolve the budgetary crisis, however, a transfer of forces from Germany to the UK would not be enough. It would also require a reduction in the numerical strength of the Army and the Air Force, an abandonment or major curtailment of equipment programmes for these services, and perhaps early retirement of some existing weapon systems. It might well be found necessary, if existing economic pressures for cuts in military spending intensify, to make cuts as sharp as those made in the late 1950’s. At that time, the size of BAOR was reduced by 22,000, plans for a new fighter aircraft were abandoned, and the Second Tactical Air Force in Germany was cut by half in numbers in one year. (49)

Prediction of events over the next decade is an inherently hazardous business. Yet the multiple obstacles that would confront a ‘nationalist’ option in defence policy must make the probability of it being adopted relatively small. Indeed it now appears, as it did in the early 1980’s, that if large cuts in commitments to Central Europe are ruled out, and the government remains committed to a national nuclear force, it will be the Navy’s surface fleet that will be most at risk if a major defence review becomes necessary. The reaction of Britain’s
European allies to reductions in naval forces in likely to be less vociferous than if cuts were made on the Central Front. And, with the US Navy having grown rapidly in strength in recent years, the military need for a particular size of British contribution to NATO's efforts in the North-East Atlantic may have diminished. The number of major ships - ASW carriers and assault ships - might be reduced, and any ambitions for full-scale carriers could be finally ended. The number of frigates and destroyers could be reduced from the current level of around 50 to 40 or less.

Were such measures to be taken, they might prove sufficient to stabilise the level of spending on conventional naval equipment, balancing increases in the resources devoted to submarines and more modern weapon systems with a reduction in the number of surface ships. There must be some doubt, however, as to whether they will be enough to reduce significantly the share of non-nuclear naval spending in a static, or falling, total procurement budget. To do that, much deeper cuts in the Navy than were envisaged in the 1981 Review might then become necessary.

Such cuts would, however, be difficult to reconcile with a continuing government commitment to a meaningful 'out-of-area' role for the Royal Navy. The 1982 Falklands War stretched the armed forces to their limit, and provided the major reason for the reversal of most of the 1981 plans for reductions in the surface navy. Were those plans to be revived, then the aspiration for Britain to have a continuing capability for major intervention outside Europe would have to be severely curtailed. Yet as long as the Falklands dispute remained unresolved, cuts in the surface fleet could leave Britain vulnerable to a resurgence of Argentine military power. The current reduction in Argentine military spending
suggests that a challenge to British control of the Islands is not imminent. But this trend would be reversed if no political solution is found, or the government in Buenos Aires is changed. Certainly the need to prepare for such contingencies sets limits to the extent to which Britain can reduce its surface fleet, and its carriers and assault ships in particular, significantly below currently planned levels. Some reductions may still be possible, but it is doubtful whether they can provide sufficient savings to make major economies in other areas of the defence budget unnecessary. If the government is unwilling, or unable, to reach a settlement with Argentina, therefore, it may be forced to make reductions in Central Front capabilities, with all the political consequences that this is bound to involve.

If the government faces a major defence budget crisis in the late 1980’s, its commitment to Trident will increasingly be seen, by both Britain’s allies and by the British public, as being at the expense of major conventional capabilities. As a result the support for the programme is likely to diminish further. In these circumstances, even a government committed in principle to an independent strategic nuclear force may decide that it must be given a lower priority than under current plans. The next section discusses the potential implications of such a re-orientation.

5. The 'Centrist' Option

A large section of informed opinion now supports cancellation of Trident, while simultaneously favouring the maintenance both of an independent strategic nuclear force and of US bases. Such a policy is currently the official policy of the Social Democratic Party (SDP), and it appears, of the Liberal Party. There may also be significant numbers
of Conservative and Labour MP's, dissatisfied with their own Parties' current positions, who would in some circumstances support such an option.

If no single party has an overall majority after the next general election, an alternative of this nature - which may be labelled the 'centrist option' - would be likely to be seriously considered as government policy.

One of the arguments presented in favour of this option is that the Trident project will involve an increase in destructive power that is unnecessary for a 'minimum deterrent' force and which could threaten the prospects for arms control. Yet, if this quantitative escalation were the main reason for opposition to Trident, policies could be constructed which would effectively meet this criticism without cancellation of the entire project. A decision could be made, for example, to limit the number of warheads to a level that was judged 'acceptable' to public opinion and compatible with NATO's position in arms control negotiations. Such a reduction would be most likely to take the form of limits on the number of warheads per missile, since this would facilitate rapid expansion in numbers in the future were developments in Soviet and US ABM defences thought to make it necessary. (50)

Indeed recent unconfirmed reports in the New Statesman claimed that the government was concealing how few nuclear warheads Britain is actually capable of producing. (51) These reports were inconsistent with all previous estimates of Britain's stockpile. (52) Were they to prove to be reasonably accurate, however, it is possible that the government could use such estimates to discredit the proposition that Trident represents a massive escalation in nuclear firepower. And, if pressure from the US for an arms control agreement appeared to make it necessary, verification
measures could probably be devised to assure the Soviet Union, and
sceptical sections of the British public, that the UK's Trident missiles
were not armed to their maximum capability.

A further option of this type for the government to consider would
be to reduce the number of Trident submarines on order from four to three.
(53) This would be similar to the Wilson government's 1964 decision to
cancel the order for a fifth Polaris submarine. Because of the much less
frequent need for refits with Trident compared with Polaris, this would
not require any reduction in the number of boats on station at any one
time. It would have the advantage of allowing savings of at least £550
million and perhaps as much as £1000 million in capital costs alone. (54)
For this proportionately small saving, however, the government would have
to expose its successors to a much increased risk of accident or
vulnerability to hostile ASW. In addition, since it would be the fourth
boat in the series that would be cancelled, most of these savings would
not be realised until towards the end of the programme in the mid and late
1990's. This might well be the decisive factor in persuading a new
government against a three-boat option. (55)

It must be recognised that, for those who favour an independent
strategic force in principle, the 'escalation' arguments for Trident
cancellation have always been secondary. As we have indicated these could
be accommodated by appropriate adjustments to the programme. And even
arguments based on the destabilising effects of Trident's counterforce
potential, though still valid, are likely to have less force in potential
debate if the number of warheads is limited to, say, 200 to 250 compared
with the 500-900 currently discussed. For such a capability - with 3 or 4
warheads per missile - would appear of marginal relevance in comparison
with the thousands of counterforce weapons that both the superpowers are likely to have developed in the 1990's. (56) Because of the requirement for boat refits, perhaps as few as 100-150 would be ready for use at any one time. Even in the unlikely event that Trident could be used with counterforce accuracy without US assistance, such a capability is unlikely to be viewed as adding significantly to the increasing strategic instability which the arms race between the superpowers is likely to create. It is more likely, given these trends - and the possibility of an arms race in space in particular - that Trident, like Polaris, will be viewed by other nuclear powers as militarily irrelevant, and effectively unuseable by a British government acting alone.

The central argument against Trident by those who nevertheless favour a British strategic nuclear force is not doctrinal or on grounds of 'escalation'. It is, and always has been, financial. It is feared that the project will divert considerable resources away from conventional defence commitments. It is argued that Trident will require an increased proportion of the defence budget to be devoted to nuclear weapons at a time when both NATO commanders and the majority of the British public want an increased emphasis on conventional defences.

A central question for those supporting a 'centrist' option, therefore, is whether there exists a plausible Polaris replacement option that could be substituted for Trident, and which could provide significant financial savings. By April 1988, it is estimated that around £1650 million will already have been spent on Trident, and perhaps another £1000 million committed. (57) For an alternative system to be significantly cheaper, therefore, it will probably have to cost less than £7000 million (at 1984/5 prices) for worthwhile savings to be made. If the real cost of
Trident increases faster than expected, however, it is possible that as much as £8000-£9000 million could be allocated to an alternative system while still yielding some savings.

From the discussion in Chapter 5, we have seen that it is far from clear that a cheaper, yet credible, Polaris replacement option exists. Some alternative forces - such as Poseidon, Trident, C4, or dedicated cruise missile submarines - may not prove much cheaper than Trident D5, and would also be less adaptable to changes in Soviet defences in the 1990's and 2000's.

Other alternatives, such as using dualcapable attack submarines as launch platforms for cruise missiles, may appear relatively cheap. But they would be perceived by many as less effective as a 'last resort deterrent' than the small Polaris/Chevaline force is at present. Were such a force to be adopted as the replacement for Polaris, it would be likely to command even less public support than Trident does at present. Those who believe in a military rationale for an independent nuclear force could claim that a force whose survival in a prolonged conventional war could not be guaranteed would be unreliable and a poor substitute for Trident. Moreover, such a force would invite a renewal of the criticism, expounded by Robert McNamara in the early 1960's, that: "weak nuclear capabilities, operating independently, are expensive, prone to obsolescence and lacking in credibility as a deterrent." (58)

Instability would, indeed, be increased if the British government felt that its strategic nuclear force could not be 'held back' through a crisis or limited war. As John Simpson has pointed out,

"such a threat would have low technical credibility compared with that posed by the Polaris and Trident systems. Many would argue
that in the event of hostilities it would invite a pre-emptive strike, and that it is more dangerous to possess a technically incredible strategic deterrent than no nuclear weapons at all." (59)

There are growing indications that members of the SDP and Liberal parties recognise the problems involved in many of the national replacement options. As a result, there has been increasing discussion of possible nuclear collaboration with France. The 1985 SDP defence policy statement, for example, argues that:

"We want to explore opportunities for nuclear weapons that are less dependent on the United States and more loosely connected with our European partners, as one of the purposes of the British nuclear force is to insure against the possibility of a future change in American policy of providing a nuclear guarantee to Europe." (60)

If the British government had wished to pursue such an option, however, the most appropriate time to have done so would have been in the late 1970's, before momentum had built up behind Trident. To adopt it in the late 1980's would involve a number of difficulties which, although not insurmountable, would be bound to weigh heavily in the minds of a new British government, particularly if it were unable to rely on a stable majority in Parliament.

Firstly, the US government might perceive such a policy as based on suspicion of its own reliability as an ally, and could react by reducing the extent of its own commitments to NATO. The potential for US distrust could increase further were a UK deal with France to involve the use of information and technology first acquired from the US in the joint US-UK project. If such a distrust did develop, it could threaten Anglo-American ties in other areas, notably in joint intelligence operations.
For those in the US urging a greater self-reliance on the part of the European states within NATO, a shift in British orientation towards an Anglo-French deal would not necessarily be seen as undesirable. It might be perceived as an opportunity to reduce the US's reliance on 'first use' in defence of Western Europe, with France and Britain taking on the role relinquished by the US.

Given its continued commitment to a US nuclear 'umbrella' in Europe, however, a British government would have severe misgivings about encouraging such a trend of thought in the US. They would fear that, the more that a European nuclear force became a practical possibility, the more the US would pull back its own forces. Indeed, it is possible, as one US analyst has proposed, that the US might even at some stage in the process threaten to withdraw its 'umbrella' entirely unless the European build a credible strategic force:

"As long as wishful thinking Europeans delude themselves about the reality of American deterrence it will remain politically difficult, if not impossible, for European governments to accept responsibility for strategic deterrence.... Probably the only form of pressure strong enough....is an American threat to disassociate its strategic forces from Europe's defence unless the Europeans bite the bullet." (61)

Secondly, even if the US were willing to accept a cancellation of the Trident programme in good spirit, it would also be necessary for the UK to enlist the support of the French government. Given the historical experience of mistrust between the two countries, and the considerable technical problems involved, such support could not be guaranteed. At the very least, a period of intense negotiations would be needed between adaption of a new policy in principle by the UK and a final agreement. This delay would increase the political risks for the British government contemplating such a course. For, if it cancelled Trident immediately on
taking office, it could not be certain that a deal with France could be reached at an acceptable price. If the government were to continue Trident pending the outcome of negotiations, however, the costs of cancellation would continue to mount every month.

Thirdly, it is not impossible that these obstacles could be surmounted, particularly if the British government had a secure parliamentary majority and was therefore able to weather short term pressures. It is questionable, however, whether collaboration with France would provide a system that would be much less expensive than Trident. In order to be viable into the 21st century, both the cruise missile and ballistic missile options proposed would require substantial investment in command and control, counter-counter-measures, and probably in independent intelligence capabilities.

Were Britain to purchase French SLBM’s, it would acquire either the M4 missile, already in service, or the M5 missile, which is due to enter service with the French Navy in the mid 1990’s. (62) In order to provide a force that has some chance of penetrating Soviet ABM defences in the 21st century, acquisition of the M5 would appear to be the preferable long term option. The severe financial pressures on the French defence budget created by nuclear spending, however, could lead to its postponement or cancellation. If this occurs, Britain would have to buy the M4. if it wished to proceed with purchase of a French SLBM, despite some doubt as to whether such a system would constitute a credible force beyond the year 2000. (63)

Such a system, although it would carry a considerable risk that it would need substantial modernisation within a few years of entering service, would be unlikely to prove much less expensive than the more
sophisticated Trident D5 system. Only 14% of Trident project costs are on the missiles themselves, with perhaps a further 10% on related systems. (64) The cost has been substantially reduced because Britain has to pay only a nominal amount - £91 million at 1984-5 prices - towards US R & D costs. (65) Were Britain to enter collaboration with France, however, it would have to pay much more for development costs, especially if the M5 project went ahead. On the cost of the missiles themselves, therefore, the UK could find themselves paying more in total than for Trident in return for a system that was much less sophisticated or durable.

Nor is it clear that large savings could be made by reducing the expenditure on other items currently included in projected Trident spending. Expenditure on new submarines, together with associated tactical weapon systems, will still be necessary if a dedicated force is required. Indeed the more that has been spent on the Trident submarines by the time of a decision, the more likely it is that the M4 or M5, and new missile tubes, would simply be fitted into these. Substantial spending on warheads and shore construction would still be required; and, were US assistance to be ended, increased resources might have to be devoted to facilities for servicing the new missiles. In total, therefore, it is hard to see a justification in purely financial terms for a decision to abandon Trident in favour of a purchase of French ballistic missiles. If such a decision is taken, it would have to be based on criteria other than cost comparisons.

There would also be problems were a British government to attempt to convince France of the merit of a joint cruise missile programme. Technical development of cruise missiles, as compared with ballistic missiles, is at a relatively early stage. Substantial, and continuing, investment may be
needed to maintain a force capable of penetrating the Soviet countermeasures that could be developed over the next 25 years. In addition to the missile technology itself, the European states would need to acquire the support facilities necessary to operate a cruise missile force independently. As David Owen has pointed out:

"if a European cruise missile is to be built and to be independent for its ground-hugging TERCOM guidance from American mapping information, it will need to be updated by information from European satellites." (66)

At least until the feasibility of a cruise missile force is proven, however, it seems likely that France will feel that it has to continue to invest large sums in the development of ballistic missiles. Although the British government may be prepared to abandon ballistic missiles in favour of cruise, France would, at least initially, be more likely to try to do both. The inevitable consequence of such a policy would be further stress on France's ability to sustain the level of its conventional forces, and further strains within NATO.

Given information currently available, therefore, it appears that an Anglo-French strategic force would not contribute significantly to easing Britain's defence budget crisis in the late 1980's. Britain would still find itself under pressure to cut its conventional commitment to NATO while increasing the resources devoted to its strategic nuclear force. Such a shift in priorities might not take place in Britain alone. It could be paralleled by developments in France, where there might, as a result, be some support for Britain's position. It would, however, reduce the resources available for the improvement of NATO's conventional forces, the need for which has been a central feature of the arguments put forward by 'centrist' opponents of Trident. And, particularly if purchase of French SLBM's were financed by cuts in UK forces in Central Europe, it
would be seen in this light by West Germany.

A move designed to demonstrate British commitment to co-operation between NATO's European members might then have entirely opposite political effect.

6. Delving Polaris Replacement

Both the national and Anglo-French alternatives to Trident, therefore, could prove either infeasible or undesirable once a new government has studied the options carefully. In these circumstances there would be two choices: either to continue the Trident programme, possibly with a reduced number of missiles or warheads, or to accept that there might be no replacement for the Polaris force once it reaches the end of its lifetime.

A policy of maintaining Polaris, but making no provision for its replacement, would not be inconsistent with the position of these politicians who have argued that Britain's nuclear force is simply a 'contribution' to NATO's nuclear deterrent, and who have denied the validity of independent rationales. Moreover, it would not necessarily be unpopular if carefully presented. The government could stress that Britain's nuclear force would not be abandoned unilaterally, but would be retained for a decade or more. Even after Polaris left service, Britain would still possess tactical nuclear systems. Indeed these could be upgraded, for example, by fitting cruise missiles to Tornado, to provide some limited capability to attack targets in the Soviet Union. (67) By measures of this sort the government might hope to minimise opposition from those who believe Britain should have its own 'bomb'. It might even be possible, over a period of years, that many Conservatives would come to accept a compromise solution along these lines.
Moreover such a policy would be able to gain substantial support from those who oppose any role for nuclear weapons in defence policy as at least a step in the right direction. It would probably secure the support of large majorities in the Liberal and SDP parties, particularly if they were in government. Even in the Labour Party, support for such a policy could be mobilised. In general, 'centrist' politicians, whose main concern would be the political rather than military rationale for a British nuclear force, might see this option as an excellent way of reducing the degree of popular support for more radical measures of disarmament.

It is difficult to predict whether such a policy would be feasible, even if a stable government could be formed from the parties most likely to support it. It would probably benefit from considerable public support, at least initially. And, by saving most of the funds allocated to Trident spending, it could help to postpone a defence budgetary crisis. Yet it would also be vulnerable to being reversed by those who still wish to acquire a replacement for Polaris, both in the Conservative Party and in the armed forces. At least until the Polaris submarines actually left service in the late 1990's, the need for an independent nuclear force would remain a matter for continuing political controversy.

Moreover, such a policy would not meet the requirements of either the peace movement or the Labour Party for a radical new approach. For it would be based on acceptance of the fundamental tenets of the postwar interparty consensus on security issues. The 'special relationship' would continue to play a central role, with US nuclear bases being maintained and continuing commitment to a nuclear strategy for NATO being made.
Indeed the phasing out of nuclear weapons and US nuclear bases would be seen by Britain’s allies as of marginal significance. It would be perceived as simply a further indication of Britain’s result of continuing economic decline. Neither NATO, nor the world as a whole, would see it as based on a fundamental questioning of the foreign and defence policies on which the UK has based its security for the last 40 years. It will be the purpose of the final chapter of this thesis to discuss alternative policies based on precisely such a questioning.

7. Conclusions

This chapter has examined those options for the future of Britain’s nuclear force which involve a continuing acceptance of the fundamental tenets of British and NATO defence policy. The continuation of such a policy, it is argued, may come under considerable strain as a result both of Britain’s continuing economic decline, and of the additional burden imposed by the expensive Trident programme. In particular, the need for economies in Britain’s conventional contribution to NATO may further undermine support for the retention of a semi-independent strategic force.

Whether such options involved cuts in the maritime or the continental commitments, they would probably be associated with a decline in Britain’s political influence within NATO. Provided that their rationale were seen as primarily economic, however, they could probably be contained without precipitating a fundamental crisis within NATO. It is possible that retrenchment in British conventional forces, particularly if it affected the commitment of 55000 troops to Germany, might strengthen the movement in the United States for a withdrawal of US troops. The
pressure for a reduction in the US presence in Europe, however, is likely to be more decisively influenced by other factors, of which domestic budgetary pressure and the general perception of European support for US global policy are perhaps the most decisive. British cuts in conventional forces would, I would argue, have a comparatively limited effect compared with these other factors. Provided that they were accompanied by continued support for NATO strategy, they could probably be contained without widespread consequences for the stability of NATO.

The policies discussed in Chapter Eight, by contrast, are based on a fundamental questioning of the policies pursued by the US and by NATO. As a consequence, they would be much less likely to be seen as simply a response to economic decline; and much more likely to create instability within NATO. The case for pursuing such policies is the subject to which we now turn.
Notes


30. Ibid., pp. 263-70.


32. See Malcolm Chalmers, op. cit. The figures cited here also take account of statistical information to March 1987.


35. Ibid, p.xxi.
37. Assuming an average GDP growth rate of one per cent per annum between 1985/6 and 1995/6.
42. The Government's Expenditure Plans 1987-88 to 1989-90, op.cit., p.44.
44. Michael Chichester and John Wilkinson, 'Flexibility, Mobility, and Involvement', in Ibid., p.149.
48. Anthony Cordesman, op.cit.

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55. A final possibility would be reducing the number of missile tubes in each Trident submarine from 16 to 12, as suggested in Ian Bellamy, Cutting the Cost of Trident, Centre for the Study of Arms Control and International Security, Lancaster, 1985. Bellamy assumes that such a reduction would allow a similar reduction - by 25% - in the number of missiles and warheads, and calculates, optimistically, that this would lead to total savings of around £900 million at 1984/5 prices. It is possible, however, that most of these savings have already been made in the project's costings if the government has already decided not to use all the missile tubes. If this were so, the savings from reduced-size submarines would be as little as £160 million (on Ian Bellamy's estimate), and the potential for later expansion would be significantly reduced.


57. Malcolm Chalmers, Trends in UK Defence Spending, op.cit. The amount committed will depend, in part, on the wording of contracts between the MoD and Vickers Shipbuilders (see Financial Times, 12 February 1986). It will also depend on the extent to which other naval programmes - notably for submarines - could be accelerated to use items originally ordered for the Trident SSBN's.


64. Sixth Report from the Defence Committee, 1985, op.cit., p.xii.


67. Plans for such a project are already being discussed within government, according to Ian Mather, 'Britain may build 'cruise' missile', Observer, 3 November 1985.
CHAPTER EIGHT

IS THERE A NON-NUCLEAR ALTERNATIVE?

1. Introduction

Since the 1950's, for reasons already discussed, there has been a significant minority in both the Labour and Liberal Parties opposed to the independent nuclear force and in favour of some form of non-nuclear defence policy. Until recently, however, these views have had relatively little impact on the actions in office of British governments. Even during periods of Labour government, as in 1964-70 and 1974-9, the impact of this dissident opinion has been mainly on the style of presentation of policy rather than on its substance.

The last 6 years, however, have seen these more radical views gaining increased acceptance from sections of political opinion previously committed to the prevailing inter-party consensus. The change in the policy of the Labour leadership has been particularly significant, with the adoption of a non-nuclear defence policy after its election defeat in 1979. The change in the position of Denis Healey, Defence Secretary in the 1960's and now Labour's foreign affairs spokesperson, indicates, moreover, that this shift in party policy has not been only a result of a shift in the balance of power towards the left within the Party. It also reflects the growing disenchantment of more middle-of-the-road Labour politicians with previous policy. (1)

The change in the Liberal and Social Democratic Parties has not been as dramatic as in the Labour Party. Nevertheless, the Liberals have several MP's who are supporters of the Campaign for Nuclear Disarmament, and others who would support more modest disarmament initiatives, such as the 'freeze'. Even the SDP, whose initial formation in 1981 was
precipitated in part by the Labour Party's adoption of a unilateralist stance, has many members attracted to a more disarmament-oriented defence policy, and it will find it difficult to reverse its stance opposing Trident. Were a non-Conservative government to be formed after the next General Election, therefore, it appears possible that defence and foreign policy will be subject to a more far-reaching reappraisal than at any time since the 1940's.

The shift of opinion in Britain's main opposition parties is a result of several factors. The increase in tension between the superpowers in the late 1970's and early 1980's created a perception that the risks of war were increasing, and thus undermined support for nuclear deterrence. The policies and rhetoric of the Reagan administration further exacerbated the growing unease felt over the retreat from detente that had begun under President Carter. This unease was given added impetus, and focus, by the decisions, announced within months of each other, to deploy cruise missiles in Western Europe and to buy the Trident system to replace Polaris.

The widespread concern over these developments was articulated most notably by a new generation of activists, whose initial perceptions of international politics had often been decisively shaped by the 'first wave' of C.N.D. in the early 1960's, and the protests against the Vietnam war in the late 1960's, and were now beginning to take positions of influence in local and national politics. Combining in a well-organised peace movement, they helped to ensure that nuclear disarmament was placed near the top of the political agenda, and that both the Labour and Alliance parties were obliged to adjust their policies to take this change into account. (2)
As opposition to nuclear weapons has gained more support within the major political parties, it has been accompanied by increasing interest in, and discussion of, alternative defence and foreign policies for Britain. Although this discussion is still at a relatively early stage, it has already produced a growing literature on 'non-nuclear defence', some of which provides an indication of the options which a disarmament-oriented government might consider. (3) The purpose of this chapter will be to discuss the arguments for such policies, to discuss the problems that they are likely to encounter, and to assess the likelihood of their implementation.

We begin in Section 2 by outlining the basic characteristics of a radical critique of the West's current reliance on a policy of nuclear deterrence. This critique is twofold: first, that current policy is immoral; and, second, that it is much more dangerous than its supporters claim.

After thus outlining why existing policies are believed to be unacceptable, we discuss, in Section 3, proposals for alternative policies for Western Europe, and for the Western alliance as a whole, which are based on moving away from nuclear deterrence and reducing the risks of nuclear war. We discuss carefully the problems that may be involved with such proposals.

Section 4 then considers the role that the British government could play in precipitating a new Western policy. In particular it discusses some of the specific measures—such as scrapping Britain's own nuclear force, expelling US nuclear bases, and working for No First Use within NATO—which have been suggested as being appropriate in bringing about such a policy.
Finally, in Section 5 we argue that, for radical disarmament policies to be fully successful, several conditions will have to be met, some of which are not under the control of the British government. It is possible that circumstances will be sufficiently favourable for a completely non-nuclear defence policy to be adopted and sustained. Those who support such a policy may, however, have to be prepared to accept, as a first stage, an incomplete accomplishment of their objective if more adverse circumstances prevail. It is doubtful, for example, whether radical disarmament policies, such as those proposed by the Labour Party, could succeed without support from at least some of Britain's NATO European allies, and without genuine, and substantial, reciprocation from the Soviet Union. And, since the long-term objectives of such policies will require sustained efforts over several parliamentary terms, it will also be essential to create a new consensus on security policy which no political party will feel able to overturn.

2. The critique of nuclear deterrence

Central to most opposition to the policy of nuclear deterrence are two propositions. First, that it is by its nature morally unacceptable, and, second, that the risks of nuclear war which it involves are unacceptably high. Either of these two propositions, if correct, is, in my view, sufficient grounds for rejecting nuclear deterrence as the basis for long-term security. Together they constitute a powerful case for change.

2.1 The moral case against nuclear deterrence

The moral case against nuclear deterrence has been most powerfully put in an abundant literature on the applications of the doctrine of the Just War. It has been argued that the use of nuclear weapons would
offend against most of the basic criteria which Judeo-Christian cultures have developed to assess whether acts of violence can be justified. In particular, the human cost of nuclear war would, on any reasonable view, far outweigh any political gain for which it could conceivably be fought; and it would be extremely difficult, if not impossible, to keep 'collateral damage' - i.e. casualties amongst non-combatants - to acceptable levels given the massive destructive power of nuclear weapons and the difficulties involved in limiting the size of any nuclear exchange. (4)

The recent discovery that a major nuclear war between the superpowers would be likely to create a global 'nuclear winter', with catastrophic consequences for the climate of the entire planet, has shown most dramatically that deterrence rests on a threat to carry out an act of genocide without parallel in human history. Even some of those who believed that the bombings of Dresden, Tokyo, Hiroshima and Nagasaki were morally justifiable in pursuit of the Allies' war aims would surely have had doubts as to the acceptability of an act of violence that would risk the very existence of human civilisation. (5)

Some supporters of nuclear deterrence would argue, however, that they support such a policy only because of their confidence that the possession of nuclear weapons will deter their use by a potential opponent. Provided that each side possesses enough weapons to retaliate in the event of a first strike by the other, a 'balance of terror' will ensure that neither will use them.

For the West's threat of nuclear retaliation to be credible, however, it has not proved possible simply to rely on possession of
nuclear weapons. It has also required a continual effort to convince the Soviet Union that our leaders would actually use nuclear weapons in certain circumstances. In the circumstances we cannot assume that this effort is entirely based on bluff. In considering whether, as citizens of democratic states, we are justified in consenting to the possession of nuclear weapons by our leaders, we must assume that, in so consenting, we give our assent to their use in some circumstances. For, were a war to occur, there would be no opportunity for further consideration of the wishes of the general public; and we must assume that the political and military commanders with whom we have entrusted these weapons may use them in accordance with the plans developed in peacetime. Insofar as it is accepted that to intend to use nuclear weapons in any circumstances cannot be morally acceptable, therefore, we must also oppose a policy based on their possession.

In recent years, however, increasing currency has been given to the argument that the use of nuclear weapons need not necessarily be morally unacceptable, provided that they are used in a limited way which pays due heed to the criteria of proportionality and discrimination on which Just War doctrine is based. (6) The development of lower yield warheads, together with much more accurate delivery systems, it is argued, makes it possible to reduce considerably the number of civilian casualties involved in a nuclear attack against legitimate military targets. The average yield of U.S. warheads has fallen from 1.2 megatons in 1979 to 0.3 megatons in 1984, and that of Soviet warheads from 2.2 to 0.5 megatons over the same period. (7)

With the deployment of a new generation of highly accurate 'counterforce' nuclear systems over the next decade, it is likely that these averages will fall further since, as accuracy increases, less
explosive power is required in order to ensure the destruction of any particular point target. Such a trend, according to the current U.S. Administration, would have the additional advantage that it would reduce the risks of precipitating the most extensive form of 'collateral damage' of all - the nuclear winter. (8) As one of the most influential American nuclear strategists, Albert Wohlstetter, recently argued:

"We should make clear that we will not respond to an attack in any way that would have a substantial chance of causing a nuclear winter. We should be prepared to use discriminating offense strategies, tactics and precise weapons with reduced yields and deliberately confined effects - such as weapons that penetrate and explode deep beneath rather than at the surface of the earth close to an underground military target; and to direct our weapons at the military rather than at bystanders - to select targets of a sort, number and location that will accomplish an important military purpose and yet contain the destruction."

(9)

The trend towards highly accurate, and lower yield, nuclear warheads has been gaining momentum for several years, and is likely to continue to do so over the next decade or so as the arsenals of the major nuclear weapon states become increasingly dominated by such weapons. (10) In addition, it is possible, over a rather longer time scale, that the development of 'third generation' nuclear weapons will reduce the incidental destruction involved in a nuclear attack to a level comparable to that from the use of conventional explosives.

The technologies for such weapons, which are already being developed as part of the US Strategic Defense Initiative, would involve exploding a nuclear device, probably in space, and channelling the energy released into some form of directed energy. Such systems could, it is envisaged, be used as part of US defenses against Soviet ballistic missiles. The well-publicised 'X-ray laser' favoured by Edward Teller is an example of such a device. But the US also appears to be researching
the possibilities of using nuclear-driven directed energy weapons for the
destruction of targets on land and at sea, including most of the military
targets currently vulnerable only to direct nuclear attack. (11)

The development of more discriminating nuclear weapons, of which
directed energy weapons are the clearest example, would very considerably
reduce the indiscriminate damage caused. It would thus, it appears, make
the use of such weapons against missile silos no less morally acceptable
than, say, the use of iron bombs against enemy airfields in the Second
World War. Provided that the cause for which the war was being fought
was just, and the damage caused was not disproportionate to the expected
political gain, it might then be thought that possession of, and threat
to use, 'third generation' nuclear weapons is, at a minimum, less self-
evidently immoral than the possession of, and threat to use, the first
and second generation versions.

The development of more discriminating nuclear weapons illustrates,
however, the pitfalls involved in a critique of nuclear deterrence that
relies only on a consideration of the morality, or otherwise, of a policy
based on certain threats. For, although the threats involved in the new
generation weapons would be more in keeping with just war criteria, and
indeed perhaps because they are, they are more likely to be carried out.
The stability of deterrence as a system for keeping the peace could thus
be reduced. The 'moral' criticisms of nuclear deterrence would have
been, at least partially, answered only to have had weight added to the
'stability' criticisms.

It is, in theory, possible to argue that some small increase in the
probability of a major war occurring, as a result of the development of a
new generation of nuclear weapons, would be an acceptable price to pay
for ensuring that, were war to occur, it would be much less catastrophic
than a full-scale nuclear war fought with the weapons of the 1980's. Such a proposition, however, relies on the assumption, *inter alia*, that the introduction of highly discriminatory new weapons would be accompanied by a total relinquishment of genocidal threats, and of the weapons necessary to carry them out.

Such an assumption only has to be spelt out to be seen as most improbable. For it is likely that both superpowers will insist on maintaining a guaranteed capability to destroy the population of the other as long as the other has such a capability, (indeed 'third generation' nuclear weapons could easily be reconfigured to fulfil such a role). We could then have the worst of both worlds - a more unstable military balance between the two states, combined with a continual reliance, at least in the last resort, on threats that are clearly contrary to the moral codes on which all the societies involved claim to be based.

The development of this argument is based on speculation about technological developments that may, or may not, occur; and it may therefore seem rather marginal to consideration of the position in which the world finds itself today. Nevertheless it does, in my view, illustrate a crucial point about the nature of the nuclear debate; that attitudes to nuclear deterrence should not be based solely on consideration of whether it is morally acceptable to give one's consent, in certain hypothetical circumstances, for nuclear weapons to be used. It is also incumbent upon us to consider the outcome of various courses of action - i.e., to be concerned with a morality of consequences rather than, or at least as a complement to, a morality of intentions.

That consideration of the acceptability of current policy must be based primarily on its potential consequences is an assumption widely
shared by most of those involved in the debate on nuclear deterrence, and on British security policy in particular. And it is because of differing assessment of the risks involved in existing policy - i.e., the perceived probability of nuclear war taking place if it is maintained unchanged - that there are differing views as to the acceptability of nuclear deterrence.

Thus it is important to note that the concern about the morality of actually using nuclear weapons is widely shared by many supporters of their possession. Where they differ from those who oppose nuclear deterrence is in their assessment of the risk of nuclear war taking place, given a continuation of current policy. For the fundamental assumption of supporters of nuclear deterrence is that the probability of nuclear war is very low indeed. As the British government argued in 1981:

"The East-West peace has held so far for thirty-five years. This is a striking achievement, with political systems so sharply opposed and points of friction potentially so many. No-one can ever prove that deterrence centered on nuclear weapons has played a key part; but common sense suggests that it must have done. Deterrence can continue to hold, with growing stability as the two sides deepen their understanding of how the system must work and how dangers must be avoided. Not since the Soviet gamble over Cuba in 1962 have we come anywhere near the brink. It is entirely possible, if we plan wisely, to go on enjoying both peace and freedom - that is, to avoid the bogus choice of "red or dead". (12)

Given their assessment that deterrence 'works', and will continue to do so virtually indefinitely, its supporters then argue that it would be "an immensely dangerous and irresponsible act" to attempt to dismantle it. (13) The risks of nuclear war would increase, not decrease, if we were to follow such a course. It would demonstrate the folly of an ethical approach to nuclear deterrence that did not give due weight to the consequences of actions, but focused solely on the immorality of a
provisional intent to use nuclear weapons, but an intent which, it is argued, will never have to be tested in action. To quote the government’s 1981 White Paper once more:

"Any readiness by one nation to use nuclear weapons against another, even in self-defence, is terrible. No-one -especially from within the ethical traditions of the free world, with their special respect for individual life -can acquiesce comfortably in it as the basis of international peace for the rest of time. We have to seek unremittingly, through arms control and otherwise, for better ways of ordering the world. But the search may be a very long one. No safer system than deterrence is yet in view, and impatience would be a catastrophic guide in the search." (14)

2.2 Do Nuclear Weapons Prevent War?

There is no way of proving whether nuclear weapons have been the main factor in preventing war in Europe over the last 40 years, far less whether they can be relied upon to prevent war in future. Europe has experienced long periods of peace in the past without the possession of nuclear weapons, for example between 1871 and 1914. And the absence of war since the 1940’s could be attributed as much to the existence of political stability and economic prosperity as to the deterrent effect of nuclear weapons.

To the extent that military force has played a part in the preservation of peace, the existence of unambiguous spheres of influence, as represented by the division of the continent into U.S. and Soviet-dominated alliances, might be seen by many as the crucial factor. The case that the existence of nuclear weapons, per se, has been the decisive factor in preventing war is insufficiently strong to act as a basis for long term security. The existence has probably induced some additional caution into the thinking of the leaders of the nuclear weapons powers, and may therefore have added some extra degree of
of nuclear weapons. Increased emphasis on the nuclear component of
deterrence, by contrast, has tended to be associated with a perception
that the 'threat' is less urgent, and that reductions in overall military
spending can therefore be made - the shift to massive retaliation in the
1950's is perhaps the best example of such a period.

This historical experience suggests that, even amongst Western
leaders, there is an unwillingness to rely entirely on nuclear weapons to
prevent a major conflict between the two superpowers and their allies.
Yet, so far, the shifts of emphasis between nuclear and conventional
forces have been essentially marginal in nature. At least in the UK, the
dominant perception in the decision-making elite has been that the risks
of war involved in current policy are extremely small. The main purpose
of shifts in the emphasis of policy, therefore, is to reduce these risks
even further.

Yet there are several reasons why this optimism may be unfounded,
and which suggest that the risks of nuclear war taking place over the
next 50 years are unacceptably high. Increasingly, as the quote from
Colin Gray makes clear, the critics of this assumption come from those
considered 'hawks' as well as from the independent peace movements and
left-of-centre political opinion. Their pessimism as to the robustness
of nuclear deterrence is based on one, or in some cases all, of a number
of factors - the changing nature of nuclear weapon systems, the problems
of crisis stability, the dependence of nuclear deterrence on political
stability, and the possible consequences of nuclear proliferation.

The first consideration is that, in practice, the nuclear 'balance
of terror' has never been as stable as the advocates of deterrence claim.
The period since 1945 has been characterised by an intense competition
between the two superpowers to maintain a 'lead' or to 'catch up' in the
nuclear arms race. The widespread use of such concepts itself suggests that neither side is entirely willing to accept that this stability is an inevitable consequence of the mutual possession of large nuclear arsenals. Rather, it suggests a belief that it is meaningful to conceive of an 'advantage' in the nuclear arms race, and that it is in the national interest to seek such an advantage.

For the concept of a 'lead' in the nuclear balance to have any meaning, however, there must be some sense in which one side can use nuclear weapons in pursuit of national policy, without the result being the destruction of the societies of all concerned. To put it in another way, in order for nuclear threats in an age of mutually assured destruction (M.A.D.) to be credible, there must be some way in which nuclear forces can be used without leading to such destruction. If such a way is thought to exist for one side but not for the other, then it may indeed be argued that the side which possesses such a capability has a 'lead' in the balance of nuclear power.

It is in such a quest to make nuclear deterrence 'credible' that the military, and civilian 'strategists', have sought to develop nuclear doctrines and weapon systems for use in conflicts in which the targets to be destroyed are constrained in some way, often excluding attacks on the main centres of population of a nuclear-armed opponent. In US planning, it has been argued, there is an increasing trend towards 'nuclear war-fighting' and away from nuclear deterrence as it was publicly understood in the 1960's. Culminating in the promulgation of President Carter's PD-59 in 1980, and in the Defense Guidance documents of the Reagan administration, the US put increasing emphasis on 'counterforce' missions against Soviet missile silos and command centres in its declaratory policy and targeting criteria. (16)
This trend in US doctrine has been accompanied by, and is perhaps in large part a result of, technological developments which, it has been argued, could make a pre-emptive 'first strike' against Soviet nuclear capabilities a more feasible proposition than at any time since the early 1960's. The development of highly accurate ballistic missiles, such as MX, Trident D5 and Pershing 2, threatens the ability of the Soviets to maintain a retaliatory capability in the event of a U.S. nuclear strike against their land-based ICBM's. Combined with the development of US Navy capabilities for destroying Soviet missile-carrying submarines, and the plans for anti-satellite and anti-missile systems, based in space or space deployable, it is clear that the United States is attempting to build an effective first strike capability.

It is difficult to envisage that the weapon systems used to execute a first strike could function perfectly, in secrecy, and without warning the opponent of one's intentions. (Though it is possible that the development of counterforce non-nuclear weapons and directed energy weapons, combined with strategic defensive systems, over the next couple of decades could change this assessment).

Despite the caution which such considerations should engender, experience suggests that the current race to acquire counterforce capabilities is likely to lead to increased tension between the two superpowers. Military and political leaders will tend to make worst-case assumptions about the high performance of enemy weapons and the poor performance of their own. As the U.S. debate on the 'window of vulnerability', which supposedly exposed its ICBM force to pre-emptive attack, shows, such perceptions can contribute to a worsening of international relations and to a growth in suspicion of one's rival's intentions. Recent Soviet statements suggest that their fear of future
U.S. first strike capabilities is a very real factor in the world view of their leaders.

In summary, therefore, the high priority attached to keeping level, or ahead, in the race to acquire new generations of strategic nuclear systems does not suggest a stable order or a mutual acceptance that M.A.D. is here to stay. Rather it suggests a belief on both sides that the nuclear balance is relatively fragile and requires massive investments to be kept in being. Yet, if this is so, can one still argue that nuclear deterrence can be relied upon to work, irrespective of the wisdom of leaders on both sides, and irrespective of the development of technology over the next half a century and more? (17)

The case that one should not so rely is considerably strengthened by reflecting on the second factor: the problems of preserving strategic stability in times of acute international crisis. For the real test of whether the existence of nuclear weapons can be relied upon to prevent their being used is not whether the leader of a nuclear weapons power would ever order their use 'cold' in a period in which there is no immediate casus belli. Rather, it is whether, during a major crisis or war involving one or both superpowers, there is a significant possibility of nuclear weapons being used, deliberately or inadvertently.

As several influential studies have pointed out recently, periods of crisis are often characterised by extreme uncertainty as to the intentions of a potential adversary, and indeed by a lack of accurate, timely information. In such circumstances, simply following pre-programmed procedures can lead to a process of mounting tension and distrust, and even to the use of military force. It is particularly noteworthy that the U.S. and Soviet Union have never, simultaneously, put their nuclear forces on alert. Were they to do so, as Paul Bracken has argued:
taking necessary precautionary moves, the other side might see the precaution as a threat.....it is not all that difficult to envision a political crisis leading to an alert, and the alerting process escalating until NATO was forced to disperse its nuclear weapons from their storage positions, or until conventional attacks were authorised against Soviet or U.S. submarines patrolling near enemy coasts. It is also possible to imagine a mutual alerting process reaching the point where interference or direct attack of satellites was undertaken, or where spontaneous evacuation of Soviet and American cities would occur for civil defence reasons. Few people would disagree that operating nuclear forces at such high states of alert in this environment could easily tip over into pre-emptive attacks and all-out war. Each nation might not want war but might feel driven to hit first rather than second. Instead of war versus peace, the decision would be seen as either striking first or striking second." (18)

Nobody would dispute that, given the continuing rivalry between the superpowers and their contest for influence worldwide, there will be periodic crises which could provide the environment in which increased nuclear alerts are plausible. A major war in the Middle East at present appears the most likely candidate for providing such a trigger given the nature of US commitment to Israel, the political instability of the region and the continuing Soviet interest in involving itself militarily in the area.

Given the continuing possibility of radical political change in Africa, Latin America, and Asia, however, and the probability of nuclear proliferation, such a war is far from being the only candidate for 'Sarajevo of the 1990's'. In any one crisis, the probability of escalation to nuclear war is likely to continue to be low. But it cannot be assumed that it will be negligible. And the development of fast response, counterforce, nuclear systems, together with anti-satellite and anti-missile weapons, is likely to exacerbate the instability that would be involved were a crisis ever to provoke a mutual alert of nuclear forces.

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The third factor which induces caution as to whether nuclear deterrence can work in future is that current policy places as much emphasis on the role of preserving existing military alliances and political commitments - and in particular the continuing coherence of NATO - as it does on the deterrent value of nuclear weapons by themselves. Yet NATO has already been one of the most longlasting alliances in history. If the risk of nuclear war can be kept negligible only if the current alliance system is preserved, nuclear deterrence must be regarded as an insufficient basis for long term survival. For it is most unlikely that the societies of West and East will not continue to evolve, or that such changes will not affect their attitudes towards existing alliances. If nuclear deterrence is to be viable, therefore, it must be robust to quite major changes in the international political order.

This proposition points to a major flaw in the theology of nuclear deterrence. For it appears to be based on an overoptimistic belief in the rationality of human nature, and on the assumption of a mature awareness, at least by those leaders responsible, of the dangers and difficulties involved in the possession and use of nuclear weapons. This in turn assumes that the political process will never throw up leaders, in East or West, who act irresponsibly in this area; and that we can trust that they will behave, if not always completely rationally, at least with due caution and a degree of sanity, through future crises and conflicts.

Yet it may be judged irresponsible, given recent history, to assume that never again can our states fall under the dominion of leaders - such as the Nazis - who might be tempted to break the implicit rules by which the nuclear game of chess has so far been conducted. Such a development may not appear likely in the near future. However, the rise of the
National Front in France, the inability of the existing parties to solve Britain's continuing economic decline, and the evident appeal of messianic religious sects in the United States all show that the potential for political extremism still exists, and might gain strength if major economic upheaval occurs.

In the Soviet Union, too, although no immediate challenge to the Communist Party's leadership is now in prospect, one cannot entirely rule out such challenges in future. One should not forget that the Soviet Union is the only major socialist state to have existed since the 1950's without major popular upheaval. Whether it can continue to do so, particularly if forced to finance a continuing arms race by increased constraints on living standards, must be an open question.

Yet it is true that, since acquiring nuclear weapons, four out of the five acknowledged nuclear weapon states have enjoyed a considerable degree of political stability; and even in the fifth - China - the potential for political disintegration may have been reduced since the 1960's. (19) Even were we to assume, perhaps optimistically, that such stability were to continue, however, an assessment of the risks of nuclear war must also take into account a fourth factor; the likelihood that the number of acknowledged nuclear weapon states will not remain at five indefinitely.

The process of nuclear proliferation has so far been slower than many people had expected in the period before the signing of the Non-Proliferation Treaty in 1969. Since the Chinese exploded their first atomic device in 1964, no state has acknowledged that it has acquired a nuclear capability.
Several states - India, Israel, and perhaps South Africa - have a covert nuclear arsenal, or a capability to assemble nuclear weapons at short notice. Yet none of these countries appear so far to be attempting to build nuclear forces which would match those of even the small acknowledged nuclear weapon states. All three, for a variety of reasons, are likely to avoid an open nuclear declaration in the near future. The only event that, in the short term, is likely to disturb their existing policies would be the acquisition of a nuclear capability by one of their regional rivals - Egypt in the case of Israel, Pakistan in the case of India. In the case of South Africa, there is no immediate possibility of a Black African state acquiring a nuclear weapons capability.

Although the pace of proliferation appears to have slowed somewhat, however, it may be an illusory calm. The potential for proliferation still exists as long as (a) nuclear weapons are seen as a symbol of Great Power status, bringing a permanent seat on the UN Security Council and increased international influence; (b) nuclear threats are implicit in intervention by the superpowers in conflicts involving non-nuclear powers, e.g. in Vietnam and the 1973 Middle East war; (c) it is thought that nuclear weapons must be acquired to create, or preserve, a regional balance of power.

This last factor in particular means that, once additional countries 'go nuclear', a domino effect could occur and quite rapidly several states could acquire their own nuclear weapons. If, for example, Pakistan were to explode a nuclear device, then India might well expand its own nuclear weapons programme, and a regional arms race could soon spread to encompass other nations - e.g. Iran and Iraq - in the area. The spread of civil nuclear power over the last two decades has meant that
the technical constraints on proliferation are much less important than in the past. (20) It is the perceived political, and to a lesser extent economic, cost of openly acquiring a nuclear arsenal that is at present deterring several states from doing so.

Proliferation presents particular risks because it is most likely to take place in areas of the world where there are bitter unresolved disputes over territory, and in which large-scale non-nuclear warfare is now taking place - e.g. between Iran and Iraq - or has recently done so - e.g. between India and Pakistan.

The case is far from proven that the introduction of nuclear weapons into these areas will by itself induce such caution in the leaders concerned that it will deter war from taking place - as an incautious extrapolation of the experience of the thesis that nuclear weapons 'have kept the peace' in Europe might suggest. (21) For to expect nuclear weapons, by their mere presence, to freeze international relations and induce acceptance of a previously disputed status quo, is a most dangerous assumption. The fact that the two superpowers continued to co-ordinate their non-proliferation policies, even when their relations were at a very low ebb, indicates that they too believe that proliferation represents a danger which must be prevented, or at least controlled.

2.3 The need for an alternative

Both because of the moral objections to a 'defence' that relies on genocidal threats, and because of concerns as to the dangers of catastrophe that it involves, therefore, there are serious grounds for arguing that nuclear deterrence cannot be a wise long term policy. It would be indefensible to rely upon it to safeguard the peace of the world.
indefinitely. An alternative solution to the problem will have to be found.

The moral critique of nuclear deterrence, if taken alone, strongly suggests that there can be no justification for any policy based on the threat to use nuclear weapons, whether by one's own government or by that of an ally, whether in a first strike or in retaliation. Given the existence of 60,000 of these weapons, however, it would clearly neither be practical, nor I would argue desirable, to urge the government of either superpower to adopt a policy of total, and immediate, unilateral nuclear disarmament.

It would not be practical given the overwhelming political consensus in both countries in favour of possessing nuclear weapons, at least as long as the other does so. It would not be desirable because such an act would be likely to create a degree of uncertainty and instability in international relations that would be likely to increase, rather than reduce, the dangers of nuclear war. The practical necessity of avoiding nuclear war, or at least reducing the risk of it taking place, would, in this hypothetical situation, have to override the more morally correct stance. In the short run at least, therefore, the possession of some nuclear weapons by the superpowers may be necessary, at least until satisfactory arrangements can be made for mutual verification of denuclearisation.

But the rejection of complete unilateral nuclear disarmament by the United States, or the Soviet Union, does not mean that very large unilateral reductions in nuclear arsenals, which nevertheless fall short of complete renunciation of nuclear weapons, should not be supported. Nor does it mean that the adoption of non-nuclear defence policies by
other nuclear states, such as France, the UK, or India, could not be a positive step. Indeed, in the long run, a complete alternative to nuclear deterrence must be found. Otherwise, sooner or later, nuclear war is bound to occur.

2.4 Is nuclear superiority an answer?

Our definition of the dual problem of nuclear deterrence - its moral acceptability and the risks of catastrophe it involves - is not in any way dependent on what view we take of the nature of the Soviet regime, or of its attitude to nuclear deterrence. Rather, our critique of nuclear deterrence so far has been designed to establish that there is a problem with current policy, and that much greater urgency must therefore be attached to the quest for a solution.

In defining the shape that such a solution should take, however, one's perceptions of the Soviet 'threat' are of vital importance. That this is so is clearly illustrated by the evolution of conservative thought in the United States. There a growing body of opinion, amongst whom must be included the President and Secretary for Defence, have expressed substantial agreement with both the moral and stability critiques we have outlined. As one of the most influential advocates of this view, Edward Teller, has argued:

"We cannot hope that the policy of the balance of terror, where the terror is more certain than the balance, can deter war much longer". (22)

Yet, because of the extreme pessimism of this school of thought concerning the Soviet Union, the possibility of a political alternative to nuclear deterrence is seen as very low. Instead, they have argued for
a policy of re-establishing US military superiority through exploiting its greater potential for developing new technologies. The development of counterforce nuclear weapons is to be complemented by a massive investment in strategic defences, in anti-submarine warfare, and in high-technology conventional defences, with the ultimate purpose being to force the Soviets to make political concessions to US interests in recognition of its effective supremacy. As one recent survey of the American Right summarised this view:

"The world vision of the new conservatives is internationalist and interventionist. Accepting a live-and-let-live stalemate with the Soviet Union is defeatism: a continuing war, both global and regional, between the communist and capitalist systems has to be acknowledged and accepted. Treaties between the United States and the Soviet Union are seen as snares and delusions. The Strategic Defence Initiative is the centrepiece of conservative strategy: Star Wars offers a defensive umbrella (although this is how the idea is sold to the public) the project will catapult American military technology far ahead of the Soviet Union's, reviving the pre-1970's era of American nuclear superiority". (23)

The espousal of an aggressive version of 'containment' policy, moreover, is not a new phenomenon. Since the early 1950's the concept of 'rollback' - of seeking to precipitate the collapse of the Soviet empire by all means short of invasion - has been a recurring theme in US government policy. (24) It is an argument that strikes a powerful chord in a country which is still by far the richest and most powerful nation on earth, and many of whose citizens feel frustrated by any limits to the exercise of that power.

In the early and mid 1970's there were some signs that these tendencies in US policy were abating, as a result of the realisation that the Soviet Union had achieved effective nuclear parity, and because of the anti-interventionist mood that held sway in the aftermath of the humiliation in Indo-China. For a combination of reasons, of which
increasing Soviet intervention in the Third World was one of the most important, however, this mood did not last.

By the end of the 1970's, a much more belligerent stance was adopted by the Democratic President Carter. And the advent of President Reagan then ensured that a very substantial part of the conservative agenda would be enacted. It has been the increasingly aggressive stance of the US government, more than any other factor, that has been responsible for the major breach in the political consensus on defence that has occurred in most West European countries since 1979. Indeed the evolution of US policy will continue to play an important role in determining whether the supporters of nuclear deterrence in the UK can succeed in re-establishing that consensus.

Perhaps the greatest danger in the emergence of a more assertive tone in US policy, however, is that it appears to be based, to a considerable degree, on wishful thinking. In particular, the proposition that strategic defences can 'make nuclear weapons obsolete', because it will make the search for political solutions appear less urgent, represents a sad attempt to escape from reality.

Given the level of investment which is being devoted to them, it is certainly possible that by the end of the century a partially effective defence against ballistic missiles could be in place. But the idea that systems could be deployed that could guarantee in advance to prevent any nuclear weapons being used is quite fanciful. It would be impossible to have a foolproof defence for the defensive systems themselves without massive, and expensive, duplication of facilities. Perfect defences against nuclear bombers and cruise missiles would be needed in addition to those against ballistic missile attack. Some way would have to be
found to prevent, or at least minimise, the number of 'suitcase bombs' which Soviet special forces could smuggle into the United States; and any possible errors in the systems of command and control would have to be taken into account.

Advocates of SDI would argue, with some force, that sceptics have always underestimated the pace of technological change, and proclaimed a particular idea impossible only a few years before it was in use. The fundamental difference in the area of military technology, however, is that the existence of a potential enemy, developing his own technologies, has to be taken into account. There has never in history been a perfect defence against any weapon. Yet against nuclear weapons, unlike any weapon before it, nothing less will do. Destroying 95% of a Soviet attack of 30000 warheads is of little use, for the remaining 1500 could still comprehensively destroy Western society. As long as the two superpowers maintain nuclear arsenals at or above their current sizes, Mutual Assured Destruction will be the inevitable consequence of an all-out war between them.

It has been argued that, although SDI could not hope to provide foolproof defence against a Soviet first strike, it might be much more successful if Soviet nuclear forces had already been depleted in a US first strike. (25) Yet even this scenario is quite implausible. By taking countermeasures, such as placing forces on Launch-on-Warning and threatening to attack US strategic defensive systems pre-emptively, the Soviets could introduce, at the very least, considerable uncertainty into American calculations.

Despite this, however, the possibility that defensive systems could be used in conjunction with offensive ones in a first strike, is one that
both sides' military planners will be likely to take increasingly into account. Worst case planners will assume that adversary forces work as planned, while their own are plagued by error. In a crisis, they will become even more concerned to place forces, offensive and defensive, on 'protective' alerts; and they will interpret parallel moves by the other side as confirmation of their intention to strike first. The dangers of inadvertent escalation, already a source of concern as we have seen, are bound to increase as the nuclear arms race increasingly involves 'defensive' systems on land and in space.

Going down such a road has been opposed not only by those already unhappy with recent trends in U.S. strategy - the liberal wing of the U.S. establishment, and West European social democrats. It has also been questioned by leading Conservative politicians in Europe, whose attachment to a M.A.D. version of nuclear deterrence is stronger than that of their American counterparts. The British Foreign Secretary, Sir Geoffrey Howe, expressed this discontent openly in a major speech in 1985:

"there would be no advantage in creating a new Maginot line of the twenty-first century, liable to be outflanked by relatively and demonstrably cheaper countermeasures. If the technology does work, what will be its psychological impact on the other side? President Reagan has repeatedly made it clear that he does not seek superiority. But we would have to ensure that the perceptions of others were not different". (26)

Sir Geoffrey, like most establishment opinion in Western Europe, still professes to believe that nuclear deterrence is a morally acceptable and low-risk means of ensuring peace. As the SDI debate demonstrates, however, this rather cosy acceptance of the status quo is now under attack from two fronts, both of which accept many of the criticisms of deterrence that I have already outlined: from conservatives in the US and increasingly in Western Europe, who argue
that technology, in the shape of SDI-related systems, could provide a more satisfactory, and less risky, means of ensuring peace in future; and from those who argue that nuclear weapons must be made obsolete in some other way, involving co-operation with the Soviet Union and, in the last resort, a peaceful resolution of the conflicts between the superpowers.

The attack on nuclear deterrence from the Right of the political spectrum has highlighted the inadequacies of current policy. Yet, for reasons already mentioned, the solutions they propose would be likely to increase the dangers of nuclear war in the medium term, and are most unlikely to fulfil their promise of making nuclear weapons obsolete even in the long term. It will be the purpose of the next section to explore whether the second alternative to nuclear deterrence - a long term political solution - has anything to commend it; and if so, what practical policies today can bring such an alternative closer.

3. An Alternative to Nuclear Deterrence

If one accepts that nuclear deterrence is, at best, a temporary expedient, therefore, there is a clear need for policies that will create the conditions for a lasting political settlement of the Cold War, and for the establishment of an international order in which nuclear weapons can effectively be outlawed. Such an objective is not likely to be achieved overnight; but it must nevertheless inform policy today if it is ever to be reached. For it is clearly the case that the ability of the human species to destroy itself, through nuclear war and perhaps in other ways too, cannot be 'disinvented'. What can be done is to establish a framework of international agreement within which the means for such destruction are themselves dismantled, and which can ensure that they can never be recreated.
Such a long term goal, thus stated, is bound to appear utopian and unrealistic to many. Yet it is no more than the countries of the United Kingdom, or in large part the states of Western Europe in recent decades, have achieved: a recognition that national sovereignty must be limited for the common good, and the institutionalisation of the belief that war is no longer feasible between the states concerned.

The belief that such a long term solution is possible, however, requires a view of Soviet society that is, at a minimum, less bleak than is painted by the current U.S. Administration. It does not assume that the Soviet Union has no expansionist ambitions, or that all its disarmament proposals are genuine. But it does assume that there are strong forces within Soviet society that will recognise the common interest of East and West in preventing nuclear war; and that, at some stage, these forces will be prepared to make substantial concessions in the pursuit of this objective.

In order to create a situation in which the international outlawing of nuclear weapons becomes politically feasible, however, it is obvious that the perceptions on both sides of the other must be radically changed. Partly this can be facilitated by greater cultural exchange, trade, and education, and by conscious encouragement of economic interdependence. But it will also require a greater readiness to avoid military intervention outside their own territories by the superpowers. And it will require the initiation of a disarmament process, with progressively more stringent verification involved, that begins to increase confidence on both sides that the other can be trusted with further steps.
For such a process to succeed, it will not be necessary at every stage for there to be binding agreements made, or for every initiative by the West to be matched by the East. But disillusionment with a trust-building policy will soon spread if moves by one side are not reciprocated by the other. Unilateralism can break the deadlock in relations between the blocs. But it can only be a step towards bilateral or multilateral actions. At some stage, the Soviet Union must involve itself in the process if the public support in the West for a new policy is not to be eroded. The sooner it does so, the more likely that the momentum of a conciliatory policy can be maintained.

Such an orientation clearly has a wide variety of implications for educational, cultural, economic and foreign policy. In this thesis, however, the main focus must be on those most directly related to British and NATO defence policy, and in particular on how changes in U.K. policy can contribute to an international process of resolving the armed confrontation between East and West.

By focusing on the role of changes in defence and disarmament policy in this process, it is not our intention to underestimate the very real political differences that exist between the two military blocs, nor the role that these differences continue to have in fuelling suspicion and preventing effective disarmament. Both in Europe and elsewhere, the two superpowers have competing interests and models for development. The repeated resort to military intervention by the Soviet Union to maintain its political domination in Eastern Europe has undoubtedly made it much more difficult for Western European states to explore alternatives to their present close alliance with the United States. And in the Third World both the U.S. and the Soviet Union have shown themselves willing to promote their own interests and ideologies by force.
Yet I would argue that the continuation of the build up in arms by the two blocs plays an important autonomous role in exacerbating these political differences. The arms build up relies for its legitimacy on an image of a potential military threat, and thus on promoting the perception that the other side will consider resorting to military force. In relations between nations engaged in an arms race, the search for military advantage, and the possibility of being caught 'off guard' militarily, assumes a paramount importance. A process of mutual suspicion and fear, bred from within the structure of the arms race itself, then acquires a considerable momentum of its own which, although not entirely independent of the political conflicts between the antagonists, has the effect of making those conflicts much more difficult to resolve.

This approach was succinctly summarised in the introduction to the 1986 SIPRI Year Book by Frank Blackaby:

"...the technological arms race is damaging to world security, and ... if it could be brought under control this would contribute a great deal to a more stable world order. ...The much used quotation from Salvador de Maderiaga - 'nations don't distrust each other because they are armed; they are armed because they distrust each other' - is an inadequate statement of the relations between armaments and distrust. There is a reciprocal relationship. The build up of weapon systems itself creates distrust. An agreement that constrains or reduces weapon systems helps to create trust." (27)

Yet it is also important to remember that the military confrontation between the blocs is not caused entirely by a self-contained process of mutual distrust. Although the tension on both sides is undoubtedly considerably exacerbated by the action-reaction process of the arms race, we should not forget that there are also important conflicts of ideology and perceived 'interests' involved. Since the Bolshevik revolution in 1917, with only a short respite during
the war against Nazism, the Western powers have seen 'containment' of
Communism by military force in pursuit of this objective. The Soviet
Union, on the other hand, has consistently proclaimed its commitment to a
long term goal of world socialism. And it has shown itself willing to
accelerate the, supposedly inevitable, historical progress towards this
goal by using its own armed forces, most notably in Eastern Europe.

At least in the short run, it would be implausible to believe that
the two superpowers would simply abandon their ideological competition,
or that they would be able to resolve at short notice the many longstan-
ding disputes between them. But it is perhaps more realistic to believe
that, in the context of a general relaxation of tension, they would be
willing to take measures that would reduce the risks of military
conflict, and manage disputes without resorting to force.

Indeed without such a process, support for a general programme of
trust-building and disarmament would inevitably be reduced. Historical
experience shows that the use of military force by either superpower,
particularly if it is seen as expansionist rather than defensive, can
have a serious effect on the prospects for overall relations. The
increased Soviet willingness to intervene militarily in the Third World
in the 1970's, for example, undoubtedly contributed to the adoption of
more hawkish defence policies by the United States from 1978 onwards.

In theory it may be possible to discuss mutual limitations on both
nuclear and conventional arms entirely separately from current
developments in Central America or Eastern Europe, or the plight of
dissidents in the Soviet Union. In practice, however, although it should
as far as possible be minimised, such linkage cannot be entirely avoided.
For arms control and disarmament require a certain degree of mutual
trust between the parties; and such trust is bound to be eroded by
actions that will be perceived as contrary to protestations of purely defensive intent.

To discuss in detail the measures that could be taken to manage the competition between the superpowers, would require a book by itself. It is worth making three general points, however, which provide some context for our later examination of British defence policy options.

First, it will be important that, within each superpower's sphere of influence, there be a greater emphasis on political and economic reform as a response to instability, and a marked reduction in resort to military intervention. Such a shift in direction will prove uncomfortable for both superpowers. In the long run reforms that secure strong domestic political bases for regimes supported by one of the two superpowers would, in many cases, be extremely useful.

In many cases, however, such a shift in emphasis may require at least tacit acceptance by the other superpower of certain spheres of influence. In Afghanistan, for example, the Soviet government appears to be anxious to reach some settlement that will enable them to withdraw their troops. Yet they feel they cannot do so if a pro-American or Islamic fundamentalist regime were to take the place of the current Afghan government. Only if the U.S. were prepared to accept some measure of continuing Soviet influence in that country, or at a minimum a guaranteed non-aligned status, is it possible that the conflict in that country could be resolved.

Second, both states need to accept that it is not acceptable to use military force to undermine the sphere of influence of the other. In

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Europe, where the dividing lines are clear and well-established, this rule has already been largely accepted. But it also has implications for the Third World. The world has so far been fortunate that Soviet and U.S. forces, although frequently involved in conflict, have never met each other directly. In Vietnam, for example, the Soviets never became directly involved militarily, although considerable military aid was given to the North. Similarly the U.S. has been careful to avoid committing its own troops to conflicts - e.g. in Angola, Afghanistan, or against Syria - where the risk of direct Soviet involvement was judged to be high. It is important that this restraint is extended.

Third, there should be an effort to 'loosen' the blocs, and to encourage the development of 'Zones of Non-Intervention'. Mutual agreement by the Soviet Union and the major Western powers not to intervene militarily in particular regions could be reinforced with limitations on arms sales and joint efforts to seek settlement of disputes. Moves towards such a situation might be particularly useful in the Middle East.

For the purposes of discussion of NATO policy, the most important area in which these principles might be applied is Central and Eastern Europe. In particular, a combination of political and economic reform in Eastern Europe, with encouragement of gradual 'de-alignment', appears to some commentators the best way, in the long term, of tackling the roots of the tension between the blocs in Europe. The continuing inability of the Communist regimes in Poland, Czechoslovakia, and the GDR to secure broad popular consent to their rule means that the threat of Soviet military intervention is always in the background. This greatly increases the political difficulties facing proposals for disarmament in Europe.
There are encouraging signs of a more wideranging policy debate within the Soviet Union, now that a new generation is taking control. So far, however, there is little indication of a major revision in policy towards Eastern Europe. However, such a revision will, at some stage, be a necessary component of a far reaching process of trust building in Europe. Our emphasis on military policy measures in this chapter, therefore, should not be seen as signifying a failure to recognise the importance of political reform. Rather it is, in part, a reflection of our belief that measures to reduce the military confrontation can, over time, create a climate in which such reform becomes more feasible.

Although most of the policies that we consider fall into more than one category, it will be convenient to divide them into three categories; first, measures designed to confine the role of nuclear weapons in Western policy solely to retaliation against a Soviet nuclear strike; second, measures designed, by both independent steps and bilateral agreement, to prevent developments in nuclear weapons technology that could be interpreted as designed to achieve a disarming first strike capability; and, third, measures designed to reduce the fear of attack by conventional forces and, if possible, reduce the economic burden that these forces impose on the countries involved. A combination of policies in some, and perhaps all three, of these areas will be necessary if the long term goals of a disarmament-oriented policy are to be made realistic. The interrelationship between measures in each category is something we hope to make clear in the discussion that follows.

3.1 Restricting the Role of Nuclear Weapons

The main proposal in this category is for NATO, and in particular the United States, to adopt a policy of No First Use of nuclear weapons, which would confine the role of nuclear weapons strictly to retaliation
against enemy nuclear attack. The adoption of such a policy would, it is argued, enable large reductions to be made in the size of today's nuclear arsenals, particularly of tactical weapons. It would, if adopted by both superpowers, enable a shift towards a 'minimum deterrence' regime, in which each side possessed only a small nuclear force, consisting of perhaps only a few hundred warheads. Such a reduction would ensure that nuclear weapons were "no longer the centrepiece of military planning" and would save considerable sums of money. (28) Yet it would still reassure each superpower of its ability to retaliate against nuclear attack by the other, or indeed by a third, perhaps clandestine, nuclear weapons state. (29)

A policy of No First Use would accord with the views of the overwhelming majority of public opinion in Western Europe, as a recent survey has shown. (30) It would provide reassurance that the Soviet Union could not launch a nuclear attack on the West without some possibility of retaliation. Yet it would also enable a major 'denuclearisation' of NATO doctrine and forces to take place.

Such a policy would, of course, require changing the basic tenet of NATO's flexible response strategy, that it reserves the right to use nuclear weapons first in response to conventional attack. Yet, as our historical discussion in earlier chapters has shown, the rationality of First Use has been questioned by an important section of the US elite ever since the Soviet Union acquired a secure second-strike capability in the 1960's. There is particular concern over the possibility of 'automatic first use' taking place as a result of the decentralisation of control over battlefield nuclear weapons that would occur were a conventional war in Central Europe to break out. (31)
Supporters of flexible response strategy would argue that the possibility of unauthorised first use contributes to deterrence of a Soviet attack, and ensures the 'linkage' of the United States to Western Europe's defence. Supporters of No First Use would argue, on the other hand, that the risks in such a stance are too great to justify any additional deterrent value that they may have. Making irrational and suicidal threats can, if they are believed, be quite effective in preventing an opponent from certain moves. But if, for whatever reason, they are disbelieved or ignored, as must be possible, then they are a recipe for disaster. If, moreover, political leaders may not have complete control over whether these threats are actually carried out, then the characterisation of the NATO posture that incorporates such threats as 'tantamount to a regional doomsday machine' seems a very accurate one. (32)

Part of a No First Use policy, by contrast, would be to ensure that the possibility of unauthorised use was minimised. All nuclear weapons would be withdrawn from frontline forces; and the number of battlefield nuclear weapons would be drastically reduced. If any theatre nuclear weapons are retained, as a counter to equivalent Soviet weapons, (33) they should be as invulnerable to pre-emptive destruction as possible, and their command structures should be separated from that for conventional forces. (34) Medium range missiles deployed well back from the battlefield would be preferable to short range weapons deployed on it. And submarine-based weapons would be more preferable.

The initial logic of a No First Use policy would essentially be a unilateral one. Irrespective of whether one believes that the Soviet Union would be willing to use its nuclear weapons first, it makes no sense for NATO to do so. No First Use, therefore, is a policy that NATO
can adopt without a lengthy process of negotiation or reciprocal steps. Even without any equivalent Soviet moves, it would require the withdrawal of a large proportion of the US nuclear weapons currently in Europe. It is likely that all nuclear artillery shells and depth charges would be dismantled, together with most of the stock of gravity bombs. The current planned arsenal of 4600 warheads in Europe could be reduced to 1000 or less, even without any equivalent Soviet reciprocation.

Whether a policy of No First Use could lead to further disarmament measures would depend on the extent of Soviet reciprocation. This linkage would be particularly clear, at least in the first instance, in the negotiations over Intermediate Nuclear Forces (I.N.F.) in Europe. For a No First Use policy would remove what is, in reality, the main stumbling block, on the Western side, to the 'Zero Option' in Europe: the insistence on the maintenance of at least some intermediate range US missiles on European soil as a political symbol of the US's commitment to use its nuclear force to deter Soviet conventional invasion. If the West were to accept that the destruction of Soviet SS20's in Europe should be balanced by an end to any US Cruise and Pershing 2 deployment in Europe, it would effectively have accepted the main elements of the Soviet offer made in February 1986.

There can be little doubt that, if the two sides were committed to reaching agreement, a compromise could then be negotiated on the remaining points of contention. Discussion of British and French SLBM forces could be transferred to the talks on strategic forces. Indeed the Soviet willingness not to count existing forces in the Eurobalance already implies such a transfer. The Soviets would withdraw their short-range nuclear warheads from Eastern Europe, where they were supposedly
deployed only as a 'countermeasure' to US INF deployment. And the US proposal to allow a limited number of Soviet SS20's in Asia could be accepted.

Were the Soviet Union, in such circumstances, then to retreat from its previous proposals, the timetable for further disarmament would, inevitably, be lengthened. NATO could still retain its No First Use policy, whose logic is, as we have seen, not dependent on Soviet reciprocation. But disarmament-oriented governments within NATO would then find it much more difficult to persuade their allies to take further unilateral moves to reduce their nuclear forces in Europe.

On the other hand, were the Soviet's 1986 offer to be proved to be genuine, the prospects for nuclear disarmament would be transformed. Once the West had abandoned its commitment to First Use, it would not only make a deal banning intermediate-range nuclear missiles from Europe a possibility. It would also mean that NATO's current opposition to nuclear-weapon-free zones could be reversed. For at present that opposition, like that to the 'Zero Option' on INF, is based on a fear that it would weaken the US nuclear guarantee. Were that guarantee no longer to be required, except in a second-strike capacity, the rationale for retaining US nuclear weapons in Europe, irrespective of Soviet moves, would no longer exist.

As a first step in such a process, and in order to build confidence in the value of such measures, Nuclear-Weapon-Free zones might be established in Scandinavia, the Balkans and Central Europe. (35) Provided that both sides were satisfied by these steps, however, there is no reason why the process could not be extended to encompass Europe as a whole. There would of course be many problems involved, for example how French and Soviet strategic forces would be covered in such
an agreement, and one could not necessarily expect rapid agreement. If agreement could be reached, however, it would constitute a major symbolic and practical step towards a 'minimum deterrence' regime. It could be a model for similar Zones elsewhere, in Asia, Latin America, and Africa. And it would help to discourage, though by itself it would not be able to entirely prevent, further nuclear proliferation.

The success of measures in this category, which are designed to confine the nuclear arsenals of both sides solely to a retaliatory role, would, however, depend in part on success in the second category, i.e. measures designed to prevent technological developments that would be perceived as contributing to a first strike capability. For, in order to have confidence in a 'minimum deterrent' posture, each side must have confidence that its own nuclear forces can survive attack, by nuclear or conventional forces, by the other. The more that potential first-strike forces are developed, therefore, the larger a minimum second-strike force will have to be to guarantee a given level of retaliatory destruction.

Were measures to reduce the first strike threats to minimum deterrent forces to be very successful, the size of those forces could be very low indeed. Admiral Noel Gayler, former head of US forces in the Pacific, suggests that as few as 100 weapons on each side would suffice. But such a small arsenal would only be possible if there were a high degree of confidence that it could not be substantially depleted by accident or by enemy action. Were it to be perceived to be vulnerable to a first-strike, such a force could actually be more destabilising than a rather larger one, say of 1000 warheads. And were first-strike technologies, nuclear and non-nuclear, to be seen to be developing rapidly and without restraint, it is possible that arsenals even larger than those currently in existence might someday be seen as necessary. If, for example, US missile defences were thought to be 90% effective
and US ASW forces were believed to be capable of destroying 90% of Soviet submarines before they could launch their missiles (either in their bases or at sea), then the Soviet Union would need around 10000 warheads in its strategic submarines in order to be confident in its ability to have the 100-weapon 'minimum deterrent' force that Admiral Gayler prescribes. On the other hand, if effective limitations could be placed on missile defences and strategic ASW capabilities, the requirement for a minimum deterrent force would be considerably less.

Proposals for confining nuclear weapons to a retaliatory role have a logic of their own, independent of the balance of conventional forces. Yet there is little doubt that the case for a No First Use policy would be considerably strengthened if there were also a reasonable expectation that, were there to be a Soviet conventional invasion, the probability of defeat for the West would be low. Thus the measures discussed in the third subsection of this section, designed to reduce the fear of conventional attack, would be an important complement to nuclear disarmament proposals.

It is an inescapable part of a No First Use policy that one must be prepared to accept that there is some risk that one may have to surrender rather than be the first to use nuclear weapons, with the unacceptable risk of precipitating a global holocaust that this could involve. But it is not an essential part of such a policy that NATO would need to make large increases in its conventional forces in order to reduce that risk to a tolerable level. In reality, a growing literature on the conventional balance in Europe suggests that, with existing forces, NATO can already have a high degree of confidence in its ability to withstand a Soviet conventional attack. (37) A further strengthening of that confidence, for example by measures to reduce the capabilities of both
sides to launch surprise attacks, would undoubtedly reassure those in the
West who have expressed concern that No First Use might make conventional
war in Europe more likely. And mutual reductions in expenditure on
conventional forces, whether by agreement or by independent actions,
would answer those critics who contend that No First Use will require
higher defence spending.

3.2 Preventing First-Strike Developments

One of the driving forces of the nuclear arms race has been the
attempt by each side to develop weapon systems that can destroy the
nuclear weapons of the other before they can be launched, or in some way
render them 'obsolete'. As we saw in section 2 of this chapter, in
seeking to replace M.A.D. by American nuclear superiority, the New Right
has been particularly vocal in supporting developments that are seen as
contributing towards this objective.

As we also argued, however, such developments are bound to lead to
increasing mistrust between the superpowers, and in particular to
increased instability in crises. Yet the underlying objective of the
arms build up - to achieve an effective nuclear superiority over the
Soviet Union - cannot, in reality, be achieved. For, as long as both
sides maintain nuclear arsenals of the present size or above, Mutual
Assured Destruction could not be avoided by the action of only one
party.

Both because it reduces the stability of the nuclear balance,
therefore, and because it increases the level of forces that each side
must maintain in order to possess a secure second strike 'minimum
deterrent', the development of first-strike capabilities should be
restricted as far as possible. In combination with the other measures
discussed in this chapter, such restrictions can reduce the risks of nuclear war even while nuclear weapons are still in existence. And they can increase confidence that, even with much reduced nuclear forces, neither superpower can gain any advantage from being the first to use its nuclear weapons.

Measures to restrict first-strike potential have been a constant focus of debate in the arms control talks between the Soviet Union and the United States. Proposals have included: (a) measures to prevent the development and deployment of more accurate ballistic missiles, such as a complete 'freeze' on all new deployments of strategic nuclear systems, an agreement to halt all further nuclear tests, and a total ban on long-range missile testing; (38) (b) agreement to withdraw or dismantle some of the most threatening nuclear systems already in existence, e.g., Pershing 2 and the Soviet Yankee class submarines off the U.S. coast; (39) (c) a reaffirmation, and strengthening, of the 1972 A.B.M Treaty, in order to prevent the testing and eventual deployment of strategic defences and anti-satellite weapons; (d) measures, both unilateral and bilateral, to increase the invulnerability of missile submarines, perhaps by agreement to, or acceptance of, 'sanctuaries' for each side's naval forces. (40)

All of these measures, and others, could be agreed provided that both sides accepted that current nuclear arsenals give neither side any useable overall advantage. Given this assumption, and given an acceptance that no such advantage should be sought, there should be no objection in principle to the first three of the proposals above. Provided that acceptable means of verification are available, and once the basic assumption of parity as both a reality and an objective is accepted, there could be no plausible objection to their implementation.
The fourth proposal, however, would involve restrictions on conventional, as well as nuclear, forces, and will therefore pose some additional problems, which we will discuss in the next sub-section. We mention it here simply to highlight the fact that nuclear arms control and conventional arms control cannot be entirely distinct, and the more that nuclear arms are reduced the more important that control over first-strike conventional weapons becomes.

3.3 Restrictions on Conventional Forces

It is clearly important that the partial nuclear disarmament measures already discussed will, at a minimum, make complete nuclear disarmament more likely. For this to be the result, however, they will have to be accompanied by growing mutual trust, and by a diminished fear of attack by the other. It is clearly important that the perceived probability of invasion is reduced, rather than increased, as a result of nuclear disarmament measures, whether they be unilateral or multilateral.

At the same time, it is important to recognise that, in all the societies concerned, there are organisations and individuals who have a vested interest in exaggeration of external military threats. Because of the high levels of military spending that can be justified, arms manufacturers can make higher profits, defence workers will be more likely to retain their jobs, and the armed forces can look forward to greater prospects of promotion and more modern equipment. It is not surprising therefore, that these groups will press for a 'worst case' analysis of a potential opponent's intentions.

It would be wrong to believe that these 'military-industrial complexes' play a dominant role in determining threat perceptions,
either in the Soviet Union or in NATO members. But they do tend to bias decision-making against disarmament-oriented policies, and they can mobilise powerful political forces towards this end. Reducing their influence has to be an important part of a long term process of building confidence between the members of the two military alliances.

Because of the need to reduce the fear of invasion, as well as because of the desirability of reducing the influence of the arms lobbies, it is important that, if possible, measures of partial nuclear disarmament are not accompanied by an increase in the level of conventional defence spending. There may be strong political arguments for such increases in the short run, both as a means of reassuring the general public of the government's commitment to defence in general, and in order to placate the armed forces and weapon manufacturers. In the long run, however, a build up in conventional forces, whether unilateral or bilateral, is bound to conflict with the general objective of mutual reassurance, particularly if the build up is concentrated on offensive forces. For it would be likely to lend credence to the argument that nuclear disarmament makes a conventional war in Europe more likely.

Any defence policy is bound to involve some risks. But a proposed policy that can only reduce the likely casualties in a major European war - perhaps from billions to millions - at the expense of increasing the likelihood of such a war taking place would, understandably, be rejected by the general public. In both Western and Eastern Europe, though not perhaps to the same extent in the United States, the memory of World War Two is still too painful for politicians to support policies that appear to make a further, and perhaps more devastating, conflict more likely. Were the perception to become widespread that this would be the
consequence of denuclearisation of European defences, it would bring such a process very quickly to a halt.

An important complement of nuclear disarmament, therefore, should be changes in the structure and disposition of conventional forces, on both sides, that can increase mutual confidence and security. This can be done by, as far as possible, structuring conventional forces in a manner that is clearly defensive rather than offensive; and by seeking, both through mutual agreement and reciprocal action, to reduce the size of military establishments and of defence budgets. We discuss these in turn.

The need to ensure that conventional defences are structured in an unambiguously defensive manner is a common theme of most of the literature on non-nuclear defence for Western Europe. The Alternative Defence Commission, for example, favoured a posture of 'defensive deterrence' defined as:

"having the capability to inflict heavy losses on any invading force, but at most only a limited capacity to mount offensive operations in the opponent's territory". (41)

A move towards such a posture, to the extent that it can be accomplished, could be most useful in contributing to the easing of fears of attack. The less suitable an opponent's conventional forces are for offensive action, and the more clearly they are designed solely for defence, the greater the confidence of a potential opponent that its foe is unlikely to contemplate invasion.

In seeking to develop a 'defensive deterrence' posture it will be necessary to examine current, and planned, developments in NATO conventional defences in order to assess whether they are compatible with such a direction. In recent years there has been growing emphasis in
NATO force planning on acquiring non-nuclear capabilities for offensive missions against Warsaw Pact forces. On the Central Front this has taken the form of a high priority being given to enhancing NATO's capabilities for attacking airfields, 'second echelon' troop concentrations, and command centres deep inside Eastern Europe. In the North Atlantic, it has been reflected in a growing emphasis on 'forward defence', ie attacking Soviet naval forces in their bases and in the surrounding waters rather than waiting for them to 'surge' into the Atlantic.

NATO commanders justify these changes as being necessary to enhance the ability of conventional forces to defend Western Europe against Soviet attack. Soviet leaders could not be blamed, however, if they perceived them as measures designed to give the United States and its allies a capability for attacking, and defeating, the Soviet Union. The greater the resources that NATO devotes to these roles, the more that those holding such views within the Soviet Union would appear to be justified; and the more remote the possibilities for trust-building would be. Indeed, if the political price for partial nuclear disarmament were to be a major offensive conventional build-up of this nature, one must have some doubt as to whether the net result will not be more, rather than less, dangerous.

An increasing offensive emphasis in conventional forces, therefore, is likely to contribute to a 'worst case' interpretation of one's long term intentions; and could thus have adverse implications both for trust-building and for the possibilities of curbing the conventional arms race. Moreover, in addition to these effects on normal peacetime perceptions, it could also make war by miscalculation in times of crisis more likely.

The crisis stability arguments against offensive conventional forces are similar to those developed earlier in this chapter against
counterforce nuclear forces. In a crisis, perhaps originating outside Europe, both alliances may feel it prudent to put at least some of their conventional forces on precautionary alert. Doing so may, however, itself increase fear of attack and lead to a process of mutual escalation in levels of preparedness. If one side then believes that it could gain a possibly decisive military advantage by launching an attack on the other, it may feel obliged to do so. Even though its leaders may have entered the crisis with no aggressive intent war may be perceived as increasingly inevitable, and the arguments for 'getting retaliation in first' may seem unanswerable. Such arguments will be given added force by the knowledge that a similar line of reasoning is likely to be followed by the leaders of the other side, who themselves may have had no intention to attack before the crisis began.

The incentive to launch a pre-emptive attack with conventional forces, moreover, could potentially be more attractive than a nuclear first-strike. Provided that the risk of escalation to nuclear conflict were judged to be small, the attacker would not need to fear a global climatic catastrophe. And, unlike a nuclear first-strike, he would not need to destroy all of his opponent’s forces in order to have gained an advantage. It would be sufficient to destroy enough of an enemy’s forces to give the attacker a decisive advantage in the war that followed. Destroying 70% of an opponent’s nuclear bombers and missiles in a first strike would make little effective difference to the scale of retaliation. But destroying 70% of an opponent’s conventionally-armed bombers and missiles in a pre-emptive strike could, almost certainly, determine the result of a conflict in which nuclear weapons were not used.
Whether either side would, in practice, have the capability to launch a pre-emptive conventional attack, and destroy such a high proportion of opposing forces, depends inter alia on the type of offensive forces it possesses, and how they are deployed. The greater the pre-emptive capability of either side's conventional forces, the greater is likely to be the incentive, on both sides, for striking first once war is thought to be inevitable. It is therefore important to ensure that pre-emptive capabilities on both sides are kept below a level that might be thought to give a decisive advantage to the side that attacked first.

It is because of such considerations that some of the proposals now being made for developments in NATO's conventional forces are potentially destabilising. The acquisition of 'deep strike' conventionally-armed missiles, for example, could give NATO a capability for destroying a large proportion of Pact aircraft on the ground before they could be used. Taking only a few minutes to reach targets deep inside Eastern Europe, such missiles could 'decapitate' Warsaw Pact forces and render them vulnerable to follow-on attack by NATO land and air forces. And the development of similar systems by the Soviet Union and its allies, which would threaten NATO aircraft and missiles, would make the incentives for a conventional first strike even greater.

The situation with regard to forces for maritime warfare is, if anything, even more dangerous. NATO continuously monitors the positions of Soviet submarines and surface ships, and in times of crisis would allocate many of their own naval forces to tracking these vessels. Because of NATO's considerable lead in ASW technology, it has a capability to track a much larger proportion of Soviet forces than vice versa. The magnitude of this technology gap is, by its nature, not susceptible to precise assessment. Nevertheless, most of the open literature acknowledges that
it is considerable. Together with the geographical disadvantages that it faces, this technological inferiority could lead the Soviet Union, in times of crisis, to fear that its conventional navy, and much of its SSBN force, could be destroyed in a pre-emptive US/NATO attack. Such a view could lead the Soviets to adopt a 'trigger happy' posture, in which even a small-scale attack on their Navy would be seen as a part of a much larger operation, and would be dealt with accordingly. (43)

Moreover, recent developments in U.S. maritime strategy also increase instability at a strategic nuclear level. For they threaten the one part of the Soviet strategic nuclear arsenal -their missile submarines - that are currently thought to be least vulnerable to a disarming first-strike. Were significant numbers of these submarines to be lost in a conventional war, either in port or at sea, Soviet fears that a U.S. counterforce strike against its land-based nuclear forces would follow would be intensified, and the risks of inadvertent escalation to nuclear war would thus be increased.

In opposing these developments in NATO offensive capabilities, however, advocates of 'defensive deterrence' recognise that there may be a need for enhancing NATO conventional defences in other ways. Even if it is believed that the balance of conventional forces in Europe is roughly equal, there will still be a requirement to match any increases in Soviet military preparedness. Western electorates will have to be reassured that their governments are committed to defence, if they are to continue to support disarmament-oriented policies. At the same time, some degree of reassurance will have to be given to the Soviet Union that improvements in NATO military strength are designed only for defensive purposes.
It will be a high priority of governments seeking to move towards a policy of 'defensive deterrence', therefore, to ensure both that any additions to military capabilities are primarily defensive in nature, and that existing forces are reorientated, as far as is possible, towards defensive missions.

Amongst proposals for defensive enhancements to conventional ground forces are ideas for territorial defence, increased availability of reserve manpower, barriers and obstacles on the intra-German border, and the use of emerging technologies in enhancing anti-tank defences. Air forces, it is argued, should be restructured to place more emphasis on air defence and ground support roles, and the capability for deep strike should be given a much lower priority than at present. And maritime defences in the North-East Atlantic should be restructured so as to considerably reduce the emphasis given to 'forward defence'. Instead, a more defensive posture should be developed, probably involving greater emphasis on 'barrier defence' in the seas between Scotland, Iceland, and Greenland, and perhaps also involving greater resources being devoted to coastal defence of the U.K. and other NATO member states. (45)

It is important to emphasise, however, that it is not the intention of a policy of 'defensive deterrence' to dispense with all forces capable of offensive missions. Not only would such a project be quite impractical, given that many forces can be used in both defensive and offensive roles. It also ignores the important role that counter-attack can play in responding to enemy attack. Some limited offensive capabilities will have to be retained both in order to be able to regain territory temporarily lost, and to ensure that an opponent's own territory cannot provide a complete sanctuary for his forces.
Some proponents of 'defensive deterrence' or 'non-provocative defence' would object that nothing less than a complete abandonment of any offensive capabilities will suffice. By favouring such a formulation, however, they may be in danger of forgetting that the purpose of restructuring conventional defences is not to create a risk-free 'model' defence, which would obviate the need either for resolution of the underlying political conflicts or for bilateral disarmament. It is to provide reassurance to the Soviet Union that the West poses no military threat to the Soviet Union or its allies, and to reduce the incentives for pre-emption in a period of crisis. In order to achieve these objectives, it is not necessary that the West possess no offensive capabilities. It will be sufficient for those capabilities to be reduced to a level where they would clearly be inadequate for either a major invasion or a pre-emptive first strike.

Independent steps to reduce the offensive emphasis in Western conventional forces can play an important role in reducing the risks of crisis instability, and can provide reassurance that partial nuclear disarmament will not make conventional war in Europe more likely. Their impact would, however, be greatly increased if they were accompanied by parallel developments in Soviet conventional forces. NATO could encourage such developments both by dispersal and protection of its own forces, thus making Soviet deep strike weapons less effective, and by proposing agreed limitations on the development and deployment of forces that are thought to be particularly destabilising.

Agreement not to deploy medium range conventionally-armed ballistic missiles, for example, would reduce fears of pre-emptive attack on both sides. The establishment of 'tank-free zones' in Central Europe would be particularly useful in meeting Western fears of a Soviet 'blitzkreig'. The creation of 'sanctuaries' for submarines would reduce Soviet fears of
a surprise attack on its missile submarines. And agreement of limiting the size of military exercises, and on the siting of military observers in each other's territory, could reduce the ability of either side to mobilise for a surprise attack. (46)

A process of reciprocation and mutual agreement would be particularly important in efforts to reduce the size of the military establishments on both sides, thus enabling cuts to be made in defence spending. The Western nations, having accepted that rough parity exists in conventional forces, could announce, for example, that they would increase their defence budgets at a rate no faster, in real terms, than the rate at which, on the basis of Western assessments, Warsaw Pact spending was believed to be increasing. If the prospects for reciprocation were judged to be promising, they might go further and make limited, and independent, reductions in their own defence budgets and invite the Soviet Union to do likewise.

Because of their symbolic importance, reaching an agreement at the MBFR talks would clearly be a high priority, particularly since the two sides' positions are not very far apart. Although the initial reductions now being discussed are relatively small, a successful first stage agreement would have several important consequences. First, it would help to convince public opinion in the West that, despite previous propaganda, rough parity in conventional forces, at least in Central Europe, now existed. Second, it would act as a clear indication that, in reducing their reliance on nuclear weapons, both sides wished to ensure that a conventional arms build-up did not take place. And, third, it would allow both sides, if they wished, to make some modest reductions in the size of their armed forces, and in the level of their defence budgets. Such a mutual de-escalation could then be used as a catalyst
for further cuts, to take place both by mutual example and by second and third stage MBFR agreements.

4. Can The U.K. Contribute To The Disarmament Process?

If the general case for moving towards an alternative to nuclear deterrence is accepted, those involved in the debate on security policy in Britain must then consider how best U.K. policies can contribute to the adoption of such an alternative. In doing so they must acknowledge that there can be no independent British solutions to the problem of security in the nuclear age. By its nature the threat of nuclear holocaust is a global one, and can ultimately only be lifted by international action. Britain cannot opt out of the world system. Rather, whilst recognising that it must operate within the realities of that system, it must consider what steps it can take to change those realities in the direction it desires.

A disarmament-oriented British government should have a much better chance of playing a significant role as a catalyst for international disarmament than almost any other state outside the two superpowers. It is the only one of the five acknowledged nuclear weapon states in which there is not a domestic political consensus in favour of retention of a national nuclear force. Because it makes a major contribution to NATO forces in Europe, its policies could not be easily ignored in the deliberations of that organisation, in the way that the views of Greece or Denmark have been. Its potential influence on the debate within the United States would be enhanced by the close historical and cultural links between the two countries. And, because the U.K. played an important, albeit ultimately subsidiary, part in the origins of current Western policies in the 1940's, the psychological impact of its
abandoning those policies, of which it had been a keen advocate for 40 years, should not be underestimated.

Britain in the 1980's has less influence, economically or politically, than at the time of Yalta and the formation of NATO. Yet it still ranks as one of a number of medium ranking industrial states - along with France, West Germany, and Japan - which are economically significant and could exercise a substantial measure of autonomy in foreign policy. If there has been little use made of this potential in the past, it has been because British governments have, for the most part, been content to permit the U. S. to take a dominant role in Western foreign and defence policy.

Moreover the continuing decline in Britain's economic strength, although it has had the effect of reducing its importance in comparison with other medium-sized powers, also opens up opportunities for more radical policies. As Chapter 7 made clear, one of the consequences of decline has been an intensification of pressure on the defence budget which is likely to require a significant retrenchment in Britain's military capabilities, and has added to the political pressure for a reconsideration of the commitment to an independent nuclear force.

It would be possible for the U.K. government to adjust its defence programme in line with the country’s economic decline in such a way as to minimise the effect of adjustments on NATO policy. It could present any necessary reviews and retrenchment as being consistent with a continuing commitment to reliance on nuclear deterrence. Much as in the withdrawal from 'East of Suez' in the 1960's, a reduction in Britain's conventional contribution to NATO could be represented as a move that was necessary to reflect economic realities. It would even be possible, though inevitably
more difficult, to represent a refusal to replace Polaris as an adjustment to decline. For, provided Britain continued to allow U.S. nuclear bases to be stationed on its territory, and took part in NATO preparations for tactical nuclear roles, the wider repercussions of such a move might prove to be relatively limited.

If the analysis of this Chapter is accepted as correct, however, such a course - of reluctant adjustment to economic decline - would not be the best one. Instead the opportunity presented by the economic need to review military commitments should be used as a catalyst to start a process of international disarmament going.

The idea that unilateral initiatives can help to bring about tension reduction is one that has received increased attention in recent years. The peace movements in Western Europe, though not to the same extent in the U.S., have urged unilateral restraint in NATO nuclear weapons deployments. And the new Soviet leadership, under Mikhail Gorbachov, has demonstrated its interest in the idea by steps such as its moratorium of nuclear tests and its withdrawal of limited numbers of troops from Afghanistan and Mongolia. (47)

Generally the discussion of unilateral initiatives to curb arms races has focused on actions taken primarily in the hope of eliciting reciprocation from the potential adversary. (48) In the case of British nuclear disarmament, however, it would be the purpose of an initiative to elicit a favourable response both from the Soviets and from Britain's own allies in NATO. (49) The central purpose of British action would be to create opportunities for disarmament and tension reduction between the two superpowers, rather than the promotion of British-Soviet detente in isolation.

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For the British government to commit itself to a policy of independent initiatives, designed with the express purpose of breaking the cycle of tension between the blocs, would require a rejection of some of the fundamentals of current foreign and defence policy. In relations with the United States, it would signify a much greater willingness, where necessary, to take an independent stance in foreign policy. In relations with the Soviet Union, it would be likely to mean that Britain would no longer accept a U.S. veto on the progress of those relations. And it would mean that the government would no longer accept that nuclear deterrence was an adequate basis for long term security, with the implications for so much of foreign policy that this implies. Whatever particular measures a government felt able to take immediately, it would be these basic changes in outlook, and in the desired role for Britain in the world, that would be most important.

Perhaps the most difficult change for the British establishment to accept would be the changed relationship with the United States. The adoption of an independent, disarmament-oriented, foreign policy would almost certainly be seen as a challenge to both current U.S. policies and to the U.S.'s leadership role within the Western world. It would involve a more or less explicit refutal of the main tenets of the 'special relationship' to which British leaders have attached such weight in the past. Even under a more liberal U.S. President than Ronald Reagan, it would be likely, at least initially, to provoke a hostile response from a superpower anxious to preserve its control of the Western side of the arms control process.

The possible measures that might be taken by a British government that was willing to make these radical changes in foreign policy have been a focus of party political debate for several years now, at least
since the change in Labour Party Policy that took place soon after its
defeat in the 1979 General Election. By 1986 Labour appeared firmly
committed to substantial measures of nuclear disarmament. And many of
the prominent leaders of the SDP/Liberal Alliance, whose attitude could
prove crucial in a 'hung' parliament, also appear to be sympathetic to
some unilateral disarmament initiatives by the U.K.

In assessing the potential effectiveness of the various British
measures proposed, I will focus my attention on the extent to which they
could contribute to the three policies outlined in Section 3 of this
Chapter - a shift towards a 'minimum deterrence' regime by the
superpowers; the prevention of destabilising first strike developments in
nuclear forces; and a reduction in the fear of attack by conventional
forces with, if possible, a reduction in the economic burden that those
forces impose. Although there may be other objectives involved in a
policy of British disarmament initiatives, I believe that these are by
far the most important.

Measures taken by a British government are likely to have the
greatest direct effect on progress on the first and third of these
overall objectives, i.e., on moving towards a 'minimum deterrence'
regime, and on reducing the risks, and costs, involved in conventional
defences. Britain has a major role in NATO plans for both nuclear and
conventional warfare in Europe, both as a base and as a provider of
significant forces. As a result it could exercise considerable leverage
on NATO to make major changes in its 'flexible response' policy, and to
reverse the recent trend towards increased emphasis on offensive
conventional forces. Unlike action by one of the smaller member nations,
British dissent could not simply be 'footnoted'. The size and importance
of British bases and forces would ensure that.
The direct leverage which a British government could have on the development of destabilising first strike nuclear forces would, however, be considerably less. The cancellation of Trident would not significantly diminish the U.S.'s counterforce capability in the 1990's. And a refusal to allow British firms to bid for 'Star Wars' contracts would be unlikely to have a major direct effect on the timetable of the U.S. programme. At least for the foreseeable future, only the two superpowers can take steps that would have a major direct effect on the development of first strike capabilities.

The indirect effectiveness of British initiatives is more difficult to judge. Were Britain to openly announce its intention to disband its nuclear force, it could have a significant effect on attitudes towards nuclear weapons throughout the world. If presented as a considered step aimed at achieving nuclear disarmament, rather than simply an economy measure, it might swing the balance of the argument in some of the 'near-nuclear' states, such as India and Pakistan, away from acquiring nuclear status. And it would, at a minimum, be likely to generate a series of major national debates in the U.S., France, the Soviet Union and China. It is unlikely that any of the four other nuclear weapon states would, as a result, follow Britain's unilateral lead. It is, however, more plausible that it would make them more open to multilateral disarmament.

The indirect and 'demonstrative' effects of Britain abandoning its national nuclear force are likely to depend, to some extent, on how it is presented, and on the reactions of the two superpowers to British moves. In the long run it may be that the example of a nuclear weapons state being willing to adopt a radical new way of thinking will have a profound catalytic effect on moving the world towards a more secure future. For such effects to become apparent, however, the British policy must first
be sustained in the short term. And it is likely to be the direct effects of that policy, favourable or otherwise, which will determine whether British unilateral initiatives are sustained, or whether, like the Kennedy experiment of 1963, they are abandoned without making a serious dent on the course of the arms race. (50)

The remainder of this chapter, therefore, will focus on the direct effects of British disarmament initiatives. We will look in turn at four types of measures which a radical U.K. government may consider, assess in what ways they could effect desirable changes on the policies of NATO and the superpowers, and discuss some of the obstacles that they might face.

4.1 Giving Up Britain's Strategic Nuclear Force

The first possible U.K. government measure which I consider is an abandonment of the commitment to the retention of a national strategic nuclear force. As I have already argued, the military rationales for this force are dubious at best. There is some doubt as to how independent it would be in times of crisis. There is little doubt that its retention, at least under current circumstances, involves a degree of dependence on U.S. policies that imposes severe constraints on a government's ability to take initiatives that conflict with the policies of the U.S. administration of the day.

As the last Chapter discussed, it is possible that a decision not to replace Polaris, and thus an acceptance that Britain's strategic nuclear role should eventually cease, would be seen as little more than an adjustment to the realities of decline. Were a disarmament-oriented government interested in using its strategic nuclear force in order to facilitate wide reaching changes, therefore, it would be important to send an unambiguous signal that the primary purpose was to act as a
catalyst for international progress towards disarmament. In order to do this it would be vital to retire the existing strategic force, i.e., Polaris, well before it had reached the end of its life. In practice this probably means before the mid-1990's.

The premature decommissioning of Polaris, without its replacement in the strategic nuclear role, could, in my view, play an important part in creating a radically new climate for superpower arms talks. It would constitute the most important challenge yet to continued reliance on nuclear deterrence by any major state. With that reliance increasingly a subject of political debate in both East and West, it would undoubtedly give encouragement to those with similar perspectives elsewhere.

Crucial to the impact of such a step in the short term would be that the Soviet Union takes measures of reciprocation that are clear and widely understood. In 1986 the Soviet government reaffirmed its commitment to make 'equivalent reductions' in return for Polaris. (51) Now that such a commitment has been made, the catalytic effect of Polaris decommissioning depends, to a large extent, on it being kept.

It is likely that any arms agreement reached by the superpowers in the near future will be limited in scope. On this assumption, bilateral steps of disarmament by the U.K. and Soviet Union could have important symbolic value, and should encourage those arguing for a more conciliatory line within the U.S. Particularly if a bilateral process involved the acceptance of new verification measures by the Soviet Union, it would help to increase trust in the U.S. concerning Soviet intentions.

The retiral of Polaris might, at least initially, lose the government some public support. If taken immediately after a General
Election, however, the electoral cost of this policy will have diminished by the time of the next contest, provided that, by that time, the catalytic effects of British action on the international climate are clearly visible.

Moreover, while the scrapping of Polaris would be unpopular domestically, it would in other ways be easier to implement than other unilateral steps. Because it would be perceived as a primarily national weapon system, designed to fulfil domestic political needs, it would be unlikely by itself to precipitate a storm of protest from Britain's allies. Even if other countries felt that the British decision was a wrong one, they would probably feel that it had only a marginal effect on their own policies. Unlike the other types of measures - involving tactical nuclear forces, U.S. bases, and conventional forces - it is most unlikely that a British government would feel it necessary to carry out more than a formal process of consultation with its allies before implementing its policy.

Even if Polaris were retired without other unilateral measures being taken, however, there would probably be considerable implications for Anglo-American relations. Firstly, an independent initiative of this type would be seen as a challenge to the basis of the arms control policies of the Reagan Administration. And, secondly, it would be likely to lead to a reappraisal of the 'special relationship' that still exists between the two nations, especially in intelligence matters. Even if all the funds saved from Polaris and Trident were diverted to conventional forces, it would probably be seen as signifying a weakening of British commitment to European defence, at least by the hawkish forces that currently hold sway in Washington. (52)
Nevertheless, if a bilateral trade-off between Polaris and equivalent Soviet systems were the main result of a new British policy, the US government would be unlikely to feel that it would be in its interests to precipitate a major crisis. It might hope that it could, with little difficulty, circumvent additional pressure for Soviet-US detente that this deal would create. And it would be thankful, given the policy position of the Labour Party in opposition, that British action was limited to this area.

The reaction of Britain's European allies to such a deal would also be much less pronounced than if NATO strategy or the presence of US nuclear bases were brought into question. Their attitude would probably depend to a considerable extent on US and Soviet responses; and might well vary from country to country.

While the German SPD and the smaller member states might guardedly welcome the policy as a move away from Great Power illusions, others, especially on the political Right, would be disappointed at the blow it would deal to any aspirations for a European nuclear force. Since British nuclear disarmament would leave France as the only country in Europe with a strategic nuclear force, it would make any proposal for replacing a US 'umbrella' by a European one even more unpalatable than at present. And, given the similarities between the rationales developed for the French and British nuclear forces, it would be hard for the government in Paris not to see the British decision as a clear criticism of French policy, and as a threat, at least in the long term, to the political consensus within France behind that policy.

Although the British government could expect considerable, and initially adverse, reaction from its NATO allies to Polaris retiral, however, it is likely that their strongest protests would be reserved for
those measures that directly affected their own policies and forces. I now turn my attention to these.

4.2 Ending Britain's commitments to tactical nuclear forces

The second type of measure which a radical British government is likely to consider concerns the UK's current commitments to tactical nuclear forces as part of NATO's 'flexible response' policy. All three of Britain's armed services currently have a tactical nuclear capability, either with UK or US warheads. (53)

Were a British government to be serious about denuclearisation of its own forces, the removal of these capabilities would appear to be a logical accompaniment to a retiral of Polaris. Indeed without the retiral of Britain's own tactical warheads (as distinct from US warheads that would be available under the 'dual key' system), the UK government could not claim to have become a non-nuclear nation. It would remain relatively easy for a successor government to rebuild a national nuclear arsenal. And, because it would require the retention of some of the existing facilities at Burghfield and Aldermaston, it might reduce substantially the financial savings from denuclearisation. If a British Government were willing to take the political risks involved in Polaris decommissioning, it is therefore probable that it would also wish to divest itself of all other nuclear weapons in its possession.

Moreover the removal of tactical nuclear capabilities from British forces could be used to back up demands for NATO to make drastic reductions in the size of its nuclear arsenal in Europe, and to move towards a policy of 'No First Use'. Since, even under predominantly conservative governments, NATO is making substantial reductions in the number of nuclear warheads it has in Europe, it should be possible for
such an approach to gain at least some concessions from Britain's European allies.

The ultimate success of such demands, however, would depend crucially on political developments in the Federal Republic of Germany. It is hard to imagine that a Christian Democrat-led government would be willing to adopt a No First Use policy, given its previous commitment to flexible response. While they would be willing to contemplate further reductions in warhead numbers, there is little doubt that they would oppose strongly a direct challenge to some of the fundamental tenets of flexible response. It would only be in the event of the Social Democrats returning to power, perhaps with the support of the Greens, that a Labour government would be likely to encounter much sympathy for demands for a major rethink of NATO strategy.

Were the new British policy to involve not only the retiral of its own nuclear forces but also a denuclearisation of its Army units, which operate artillery pieces and short range missiles using US nuclear warheads on a 'dual key' basis, the directness of the challenge to NATO strategy would be even more apparent. It would be more likely to provoke a major dispute within NATO than either the retiral of Polaris or even than the withdrawal of other national nuclear forces. For while Polaris, and to a lesser extent other nuclear forces, are perceived as being concerned essentially with national roles, and thus as a matter primarily for British decision, nuclear-capable forces held by BAOR are seen as being committed to collective defence. Almost all NATO members, including 'non-nuclear' members Holland, Belgium, West Germany, Turkey, Greece and Italy, operate comparable systems. The sharing of nuclear tasks in this way is seen as an important symbol of all members' commitment to the nuclear elements of flexible response policy; and
recent attempts by the Netherlands even to reduce the number of such
tasks it undertakes have been met with opposition from other member
governments. For a major member nation such as Britain to withdraw its
commitment to these systems would thus have a clearer relationship to
NATO policy as a whole than the retiral of Britain's own nuclear weapons,
strategic or tactical.

The clear challenge to NATO policy that a British withdrawal from
tactical nuclear capabilities would represent would, however, be an
advantage to a government seeking to change that policy. It would oblige
NATO, at a minimum, to start a major debate on the role, if any, of
nuclear weapons in its defence. And it would clearly make Britain's new
policy not only a matter of national discussion within the UK, but one
that opened up discussions within every other NATO member state.

The success of British proposals for changes in NATO policy would
depend primarily on the extent to which opinion in other NATO countries
shifted in its direction. This in turn would depend both on the extent
to which Soviet reciprocation was judged to be significant, and on the
outcome of elections which may be decided on issues quite unrelated to
security policy. In a 'best case' analysis, an SPD-led administration in
Germany would be joined by Socialist governments in the Netherlands,
Denmark and Norway, and a liberal Democrat succeeding Mr Reagan in the
United States. The new Soviet leadership would reinforce its disarmament
proposals with major concessions on verification, and would demonstrate
further its commitment to detente by other foreign policy initiatives,
for example in Afghanistan. In such a coincidence of circumstances, a
Labour government might find that proposals for a No First Use policy,
and for a negotiated Nuclear-weapon Free Zone in Europe, would attract
widespread support from NATO members.
Even in a less favourable conjunction of political circumstances, a radical British government could reasonably expect to achieve some progress in forcing NATO to make further reductions in its nuclear stockpile in Western Europe. It would be likely to find it extremely difficult to persuade conservative governments to adopt a declaratory policy of No First Use. Given the widespread scepticism of the need for battlefield nuclear weapons, however, it may be possible to win over allies to significant reductions beyond the 4600 target now being implemented by General Rogers.

Negotiations between Britain and its NATO partners on these questions, however, are likely to be seen as a secondary question on the agenda if the UK government is also committed, as is the Labour Party at present, to:

"the unconditional removal of all US nuclear weapons and nuclear bases from British soil and British waters ......the current roles of some US forces and facilities in Britain are unacceptable. These include the Cruise missile bases, F111 bases and the nuclear submarine bases.

Labour will therefore take appropriate action to ensure that the US government removes its nuclear weapons and nuclear delivery systems from British territory and British territorial waters'. (54)

As the next section will discuss, this is almost certainly the area in which a disarmament-oriented British government would face the toughest opposition from its NATO partners. Were a Labour government to seek to implement this demand, it would undoubtedly be an important factor in determining the progress of negotiations within NATO on proposals for reductions in short-range systems and for negotiated nuclear-weapon-free zones. On the one hand, such a policy might encourage conservative governments, particularly in the US and West Germany, to believe that concessions on other issues in nuclear weapons
policy would serve only to encourage British radicalism. On the other hand, they may believe that a move towards Britain's position on No First Use and Nuclear-weapon-free Zones would help to defuse pressure for the rapid removal of US nuclear bases from the UK.

4.3 Removing US Nuclear Bases in Britain

The issue of the United States' nuclear bases in the UK could not be avoided by a radical British government. After West Germany and the US itself, no other nation plays host to so many US nuclear weapons. According to estimates made by William Arkin and Richard Fieldhouse, 1332 US nuclear weapons are deployed in the UK in peacetime. By comparison 3396 are deployed in West Germany, 549 in Italy, 489 in Turkey, 164 in Greece, 81 in the Netherlands, and 25 in Belgium. (55)

In addition to bases housing nuclear weapons, the UK also hosts a number of American military facilities which would play a key role in plans for the prosecution of nuclear war in Europe. These include facilities for intelligence gathering, communications, command and control, and anti-submarine warfare. (56). Most of these have important missions in conventional warfare in Europe in addition to their nuclear roles. Without physical British control over their operations, however, it would be difficult for a British government to ensure that they did not also support US nuclear forces.

There is general agreement that, of all the measures that might form part of the disarmament agenda of a radical British government, it is the proposals to expel US nuclear bases that would be most disruptive of Britain's relations with its NATO allies. The retiral of Britain's own nuclear force might be viewed with disquiet, especially by those in the US who would fear a diminution in UK domestic commitment to a heavy
defence burden. British proposals for No First Use, particularly if accompanied by a withdrawal of participation in all nuclear tasks, would be seen as representing a major shift in the balance of argument within NATO on an issue which has become an increasing focus of debate in recent years. Although it would be difficult to assimilate these proposals, however, they would not be seen, for the most part, as being incompatible with a process of gradual reform of NATO strategy.

A UK commitment to the removal of all US nuclear bases from its territory, however, would be viewed, however inaccurately, not only as a challenge to NATO's current policies, but also to its very existence. Because it would involve US forces, it would be seen as being based on a questioning of the US role in Europe, and indeed on a more general anti-American sentiment. As a Conservative Minister recently argued:

"The Labour party's commitment is one of the most damaging and serious defence commitments to be made by any political party in this country... Many Americans will say that if Britain or Europe does not want them, they should start to pull out. They will start to pull out. They will pull out not only their nuclear but also their conventional assets. (57)

Yet despite the opposition that it would encounter, both from inside Britain and from overseas, a policy of seeking to remove US nuclear bases from Britain has strong arguments in its favour.

Firstly it would be necessary to take such a step if a commitment to a genuinely 'non-nuclear' defence policy were to have credibility. If the British government is convinced that it is morally wrong to prepare for the use of nuclear weapons, or to play a part in such preparations, the continued consent to the use of British territory for the deployment of such weapons would clearly be unacceptable.

Secondly, the removal of US nuclear bases, like the other measures of denuclearisation already discussed, could play an important part in
persuading Britain's NATO allies to support a Nuclear-weapon-free Zone in Europe, and thus in facilitating the move towards a 'minimum deterrent' regime. Such a radical change in US and NATO policy would not, of course, be accomplished without difficulty. The crisis generated by a British demand for the removal of US nuclear bases, however, could be a productive one if it were to help to start the process of rethinking that is needed if there is to be any chance of breaking with the long-established NATO consensus on these questions.

The two arguments in favour of the expulsion of US nuclear bases do, for the most part, reinforce each other. Yet they could, nevertheless, suggest rather different approaches, particularly on the timing and tactics of a British policy. For, although it is at least conceivable that NATO may, over a period of time, move towards a minimum deterrent posture, it is unrealistic to suggest that the US can be persuaded to give up all its own nuclear weapons, at least until the Soviet Union does likewise. If one's opposition to US nuclear bases is based primarily on a rejection of any association with nuclear weapons, there would seem to be little more merit in refusing to house nuclear bases, but continue in a military alliance with a nuclear weapons power. Immediate withdrawal from NATO would then be the most consistent action to take, whether or not such a step were judged likely to move NATO as a whole towards a minimum deterrent posture.

In my view, however, it is possible to resolve the tension between the two arguments. It may at present be necessary for the US to possess a minimum deterrent force, as long as the Soviet Union does. For it must be recognised that, whether or not formal guarantees are made to allies, the US strategic nuclear force may make some contribution to the deterrence of Soviet use of nuclear weapons, and vice versa; and it would
therefore be undesirable for either superpower to give up all its nuclear weapons until the other also agreed to do so.

Such a recognition, however, would be perfectly consistent with the creation of a Nuclear-weapon-free Zone in Europe. Such a Zone would be a powerful symbol of the dramatic narrowing of the role of nuclear weapons that a 'minimum deterrent' regime would entail. It would outweigh the additional deterrent effect, if indeed any exists, of basing US nuclear forces in the UK as a symbol of its nuclear 'guarantee'. (58)

The argument for using the removal of US nuclear bases as a means of changing NATO policy would appear particularly strong, in current circumstances, when applied to the deployment of 160 ground launched cruise missiles at Greenham Common and Molesworth (the latter due to be completed by 1988). The deployment of these weapons has been justified, at least in public presentation, as a necessary response to the Soviet deployment of SS20's. Yet the Soviets have now offered to scrap all their SS20's within range of Europe if all NATO INF forces were removed from Western Europe. Provided that this proposal is genuine, the main obstacle to a 'zero option' agreement is likely to be the support within NATO for INF deployment as a necessary symbol of the US nuclear guarantee. Those holding this point of view argued against the US 'zero option' proposal made in 1981, and were instrumental in ensuring that the US response to the 1986 Soviet offer of a European zero option was a negative one. (59)

Were a radical government to take office in the UK, however, it could use its commitment to removal of Cruise missiles from its territory as a means of isolating those within NATO who oppose an INF deal on these grounds. With Britain clearly determined to go ahead in any case with its policy, the US might feel that a deal with Moscow on INF would be a
face-saving way to avoid the humiliation that would result from a unilateral expulsion. Britain's European allies, fearful of the consequences for NATO of an escalating confrontation between the US and the UK, might well decide the benefits from acceptance of the major Soviet concessions embodied in their 'zero option' outweighed the doctrinal and political costs involved in withdrawal of INF.

It would clearly be in the interests of a disarmament-oriented British government to encourage the development of such a 'best-case' scenario. Not only would it allow the US to withdraw its INF forces as gracefully as possible, and thus reduce the possibility of its adopting an overtly hostile posture towards the new British government. It would also, along with the process of Soviet reciprocation over Polaris, demonstrate very clearly that unilateral initiatives by Britain can play a role in 'breaking the logjam' between the superpowers. And, finally, if the principal of a 'zero option' for one class of nuclear weapons were established, either in Europe or globally, the case against it for nuclear weapons as a whole would be considerably weakened. The possibility of a negotiated Nuclear-weapon-free Zone in Europe could then be placed very firmly on the political agenda.

A similar line of reasoning can be applied to the 156 nuclear-capable F-111 bombers stationed at Upper Heyford and Lakenheath, together with the 600 or so nuclear weapons deployed on these bases. (60) Although it has so far been resisted by the US, there is no reason why these systems could not be withdrawn as part of a process of reciprocal reductions by the two superpowers. (61) Certainly a British commitment to removing the nuclear role of the F-111's, unilaterally if necessary, might help the US to reassess the need for retaining them.
The nuclear role of the F-111 bases, and of the nuclear depth bomb storage facilities at Machrihanish and St Mawgan, would in any case be less necessary were NATO to adopt the 'No First Use' policy that a radical British government is likely to propose. The removal of nuclear weapons from these facilities would be a logical accompaniment to the denuclearisation of Britain's own nuclear forces which I discussed in the last section. Since it would involve US forces rather than national ones, the adverse reaction from the Americans would certainly be greater. Yet it is at least possible that this will increase the leverage that proposals to take these steps will give Britain in negotiations over changing NATO strategy.

It will be more difficult to use opposition to First Use in relation to the presence of US Poseidon ballistic missile submarines at the Holy Loch. These boats are clearly strategic systems, one of whose roles is to provide the US with a second-strike capability. Opponents of asking the US to vacate this base are likely to argue that, if the UK wishes to be 'protected' by the US second-strike deterrent, it cannot oppose taking some part in its servicing and support if asked to do so.

A British government that was committed to removal of all other US nuclear bases from its territory is unlikely to be impressed by this argument. For to allow the Holy Loch base to continue to service ballistic missile submarines would undoubtedly diminish the symbolic impact of its commitment to a non-nuclear approach. Instead it would be likely to point out that, if the US were committed to minimum deterrence, it could base all its nuclear weapon submarines at its own ports. Given the enhanced range of modern ballistic missiles, there is no logistical necessity for them to be based in Europe in order for them to be within range of targets in the Soviet Union. (62)
Despite this, it is clear that a British demand that the US withdraw all its nuclear forces from its territory will provoke a major crisis within NATO. Considerable pressure will be put on the new government by the US and other allies. It is possible that this pressure will include the severance of many of the intelligence links which are as important as the nuclear bases to the 'special relationship'. It is not impossible that sanctions taken against Britain will also include measures designed to weaken the British economy. Certainly it would be naive to suppose that a disarmament-oriented British government may not find it considerably more difficult to obtain economic assistance from its NATO allies than a government pursuing a more orthodox foreign policy.

Whether the government could resist such pressure, or whether it would decide to dilute its policies in order to reduce it, cannot be predicted in advance. It would depend on the ability of its leaders to mobilise public opinion on its side, and on whether it could count on the support of any of its major NATO partners. It would depend also on the extent to which Britain's new policy led to a significant shift in informed opinion in other NATO countries, which at present has never even seriously considered the type of policies suggested by the Labour Party.

Perhaps most important of all, the extent to which British initiatives are successful in creating a new international climate will depend on developments in the Soviet Union, both in terms of the general process of reform now beginning to take place, and in terms of the degree of Soviet reciprocation to British initiatives.

The changes in Soviet policy since Mr Gorbachov's accession to the position of CPSU General Secretary in March 1985 give grounds for optimism in this regard. There is increasing evidence that the Soviet leadership is considering seriously a much broader range of options in
foreign and defence policy than in the past. (63) And there appears to be a growing willingness to tolerate public debate and dissent, symbolised perhaps most clearly by Dr. Sakharov's release from exile in December 1986.

If British initiatives are to be successful, however, these trends in Soviet policy will need to accelerate. On the arms control front in particular, Soviet reciprocation for British actions will need to be both clear and wideranging. In the first instance it will need to include at least equivalent reductions in nuclear arsenals for the UK's destruction of its nuclear forces. But, perhaps of greater long term importance, it will also have to include a demonstrated Soviet willingness to take other steps, concerning both nuclear and conventional forces, that indicate a genuine willingness to move away from current military postures.

4.4 Restructuring Britain's Conventional Forces

So far in this section we have been discussing initiatives that the British government could take that involve nuclear forces. As was discussed in Section 3, however, developments in the conventional arms race are in some ways as important to control. Although it would not be appropriate to discuss in detail possible changes in the structure of conventional forces in this thesis, I will therefore briefly mention those changes in conventional force planning that have the most direct bearing on discussions of the nuclear arms race.

One of the first areas which a new government should review is the process of threat assessment which currently underlines general declaratory policy, as well as detailed force planning. Official assessments of the overall balance of forces are currently constructed in order to ensure that the Soviets are seen to have a massive superiority
...in conventional forces. Little account is taken of the growing literature that suggests that NATO and Warsaw Pact forces are approximately evenly balanced in Europe. (64)

The widespread perception of Soviet conventional superiority which NATO governments foster would have to be countered if Britain was to convince its NATO allies to adopt a policy of 'No First Use'. Although public opinion polls already show a large majority in support of such a policy, the spectre of Soviet conventional superiority, if not countered, could overturn this support. As a matter of priority, therefore, a new government would have to exert its control over those agencies within the MoD which generate threat analyses. (65)

Secondly, a radical government should consider what measures it can take in order to move NATO's conventional forces towards a less offensive defence posture. In particular, it should look at the role of the Royal Navy in US plans for 'forward defence' in the North-East Atlantic, and in Britain's contribution to deep strike missions on the Central Front. By using the substantial contributions that the UK makes in these areas as a lever, it should seek to ensure that NATO as a whole moves towards a less destabilising posture.

Thirdly, the new government should be wary of the argument that denuclearisation requires more spending on conventional defences. Such an argument cannot be justified by reference to the balance of conventional forces in Europe that exists at present. And, although domestic vested interests and foreign pressure may need to be 'bought off' in the short term, it would be dangerous for a radical government to rely on raising defence spending as a means of appeasing opposition to denuclearisation. For the weakness of the British economy is such that a
new government could not finance increases in defence spending without politically damaging reductions in welfare and economic programmes. It would be difficult for such cuts to be sustained by a government that was also insisting on the need for detente and reduction in international tension. Indeed, once the government has survived the immediate crisis caused by denuclearisation, we believe it should seek to make substantial reductions in the burden of defence spending, and of military R&D in particular, on the economy. (66)

Changes in these three areas are closely linked. A less pessimistic view of the balance of conventional forces between East and West would lessen the pressure for retaining current levels of conventional defence spending, particularly if the members of the Warsaw Pact were to make reductions in their own military budgets. A less offensive defence posture would involve the abandonment of roles and projects which, precisely because they involve long range attack against Soviet-dominated territory, are inordinately expensive. It could therefore, ceteris paribus, assist the process of reducing the level of defence spending. Were such a policy to be adopted, it would be bound to have wideranging implications for Britain's armed forces, for procurement policy, and for military planning.

Firstly, a reorientation of policy in this direction would probably mean a further reduction in the emphasis given to the military's 'out-of-area' role, particularly if a negotiated settlement of the Falklands dispute with Argentina could be reached. The retention of an 'out-of-area' role, except possibly for disaster relief, UN peacekeeping and similar ventures, would be seen as inconsistent with a policy that, in other respects, emphasised the need for Britain to abandon the trappings of past grandeur. And, if the need for substantial
savings in defence spending is accepted, it is probable that forces most closely associated with non-NATO roles would be most vulnerable.

If the case for reducing further Britain's already limited capability for out-of-area intervention were accepted, the Royal Navy's surface fleet would bear the brunt of the resulting economies. The size of that fleet, and in particular the need for aircraft carriers, has traditionally been justified, at least in part, by the flexibility they provide for intervention outside Europe. Were that capability no longer required, the case for retaining a surface fleet of the current sophistication and cost would be weakened.

Secondly, spending on the Royal Navy could be further reduced by a reappraisal of its role in the defence of the North-East Atlantic. At present, the US Navy, with the support of the Royal Navy, is putting increasing emphasis on preparations for attacking Soviet SSBN 'sanctuaries' in and around the Kola Peninsula. This forward deployment is often justified as a means of tying down Soviet naval forces in the defence of their SSBN's, and thus preventing their deployment in missions against Western merchant shipping. It is a policy, however, that is clearly inconsistent with an attempt to make conventional forces, as far as possible, unambiguously defensive. In a crisis or limited non-nuclear conflict, it would be extremely destabilising and would be bound to increase Soviet fears of a first strike.

A reassessment of the balance of naval forces between NATO and the Warsaw Pact might also lead a new government to question the need for the Royal Navy to continue to enjoy its current priority. According to one recent study, the US and its allies now enjoy a considerable global advantage in naval forces, with 16 large-deck aircraft carriers to zero
for the Warsaw Pact, and 479 major surface ships (over 2000 tons) to the
Soviet bloc's 145. (67) The rapid growth in US naval expenditure in
recent years has, if anything, increased the Western lead. As a result,
a significant reduction in the UK's contribution to NATO's maritime
forces could be accomplished without relinquishing the West's substantial
overall advantage.

Thirdly, a disarmament-oriented government will want to look
carefully at the RAF's commitments to the defence of NATO's Central
Front. Such an examination would have to encompass a thorough review of
the programmes and doctrines of the RAF. It would have to consider in
what ways force structures could be changed in a more clearly defensive
direction, taking into account the results of a revised assessment of the
Soviet military threat in this region.

Perhaps the most obvious change that would have to be considered
would be a reduction in the assets deployed in 'deep strike' roles. At
present the RAF's Tornado GR1 squadrons in Germany are intended to be
used mainly for offensive missions, both conventional and nuclear,
against targets inside Eastern Europe. As part of a policy of 'defensive
deterrence' it would make sense to reallocate most, if not all, of these
aircraft to other missions. This conclusion may be reinforced if recent
reports of a confidential NATO study prove to be correct. This study is
said to have calculated that:

"NATO aircraft attacking enemy aircraft will lose
almost as many aircraft as they knock out on the
ground. However, NATO's air defences on the central
front are expected to shoot down four or five enemy
aircraft for each NATO aircraft that is lost in air
combat". (68)

A change in the RAF's emphasis from offensive to defensive missions
would not only affect Tornado GR1, and associated programmes such as that
for a long-range stand-off missile. It would also enable the Ministry of Defence to look again at other parts of the RAF budget. Some defence analysts have argued that the cost of European Fighter Aircraft could be dramatically reduced were it to be designed without the requirement for optimising offensive as well as defensive roles. (69) Were this indeed to be the case, the potential for financial savings could be considerable.

Finally, a restructuring of conventional forces would involve a review of current Army doctrine and forces. The possibilities of adopting postures less dependent on mobile, and potentially offensive, forces - such as tanks - would have to be examined. The government would need to question the incorporation of doctrines such as Air Land Battle into NATO plans for ground warfare. My initial impression is that the changes in the British Army consequent upon the adoption of a defensively oriented conventional defence would be less than those required for the other two services.

Clearly, changes as comprehensive and wideranging as those touched on here would encounter considerable resistance from sections of the armed forces, and from some of Britain's NATO allies. As a consequence, the process of implementation of these changes would probably be a relatively slow one. However, it is at least arguable that changes in the structure of NATO's conventional forces could contribute as much to stability and trust on Europe as could the removal of nuclear forces. In my view, therefore, it will be important for a disarmament oriented government not to neglect conventional force reform altogether in order to concentrate on nuclear disarmament. The two processes may develop at different speeds. But both will have to be pursued if Britain is to make its full potential contribution to achieving a more stable system of military security in Europe.
5. Conclusions

In this Chapter I have argued that an alternative to nuclear deterrence as the basis for international security must be found; and that one of the central purposes of Britain's foreign and defence policy must be to help bring about such an alternative.

The continuing decline in Britain's economic position may provide an opportunity for a radical shift towards a disarmament-oriented policy, which in turn could make a major contribution to the search for such an alternative. As previous Chapters have made clear, one of the consequences of decline has been to intensify pressure on the defence budget, and thus to force choices between military commitments. Partly as a result, the political consensus in support of Britain's semi-independent nuclear force, which has been steadily eroding, has come to an end. There is a real possibility that Britain, one of only five recognised nuclear weapon states, could decide to cease to be a nuclear power.

As a contribution to international efforts to move the world towards a minimum deterrence regime, and as part of a transition towards a non-nuclear security system. I believe that such a step could have a decisive political impact. Particularly in the debate within NATO, it could facilitate a more constructive Alliance position in East-West arms talks. Provided that the UK were able to mobilise support from other NATO member states, it might also be possible to move NATO as a whole towards a 'No First Use' policy.

To be effective, such a policy would have to overcome formidable obstacles. Its success would depend in part on the extent to which the
new Soviet regime responded to British initiatives in ways that were internationally recognised as substantial. Perhaps even more crucially, it would depend on the ability of the British government to weather the crisis in its relations with its allies that would undoubtedly result from such a radical shift in policy.

In both these areas, the fate of a disarmament-oriented foreign policy might be, to a considerable extent, dependent on political developments over which the British government had little, or no, control. While a 'best case' scenario - with the SPD in office in Germany and Gorbachev delivering on his radical promises on disarmament - can be envisaged, it is also not difficult to see that such a scenario is only one of many. It is quite possible that instead a disarmament-oriented UK government would have to sustain its policy through several years without dramatic 'logjam-breaking' effects, and during which it was an isolated voice within NATO.

Adverse international factors could in turn increase the difficulties that a radical government would have in maintaining sufficient domestic political support for its policies. So far the independent peace movements, and the political parties that support their main proposals, have been unable to convince a majority of the general public of the case for giving up Britain's own nuclear force. While the old consensus has been broken, therefore, there is no indication that a new one can be developed easily.
Notes


28. For a more sceptical appraisal of this policy, see 'The long nuclear peace', *Economist*, 22 February 1986.


33. It is possible, however, that strategic forces could fulfil this role.

34. See William Kaufmann, 'Nuclear Deterrence in Central Europe', in John Steinbruner and Leon Sigal (eds.), *op.cit.*, pp.40-42.


39. This is suggested in Paul Bracken, *op.cit.*, p.245.


42. See the case for such systems in the report of the European Security Study (ESECS), *Strengthening Conventional Deterrence in Europe*, London, Macmillan, 1983.


46. Some movement in this direction was achieved during 1986 at the Conference on Disarmament in Stockholm.


57. House of Commons Debates, 1 July 1986, col. 919.

58. For two different approaches to the question of the residual effect of the US 'guarantee' in the event of a non-nuclear Britain, see Defence with the Bomb, op. cit.; Ken Booth, 'The Case for Non-nuclear Defence', in John Roper, (ed.), op. cit.

59. For example see 'Europe warns US on missile deal', Guardian, 18 February 1986.


61. The 'walk in the woods' agreement between US negotiator Paul Nitze and Soviet negotiator Yuli Kvitsinsky included a ceiling of 150 on the number of US F-111's and FB-111's based in Europe. (Strobe Talbott, Deadly Gambits, London, Picador, 1984, p.126). Although the ceiling was high enough to require only a handful of F-111's to be withdrawn from the UK, there is no reason in principle why it should not be set at zero if NATO moves towards a 'No First Use' policy.


63. Charles Glickman, 'New Directions for Soviet Foreign Policy', Radio Liberty Research Bulletin, September 6, 1986; Patrick Litherland, Gorbachev and Arms Control; Civilian Experts and Soviet Policy, Bradford, School of Peace Studies, November 1986.

65. Indeed the Labour Party's 1986 policy statement (Defence Conversion and Costs, Statement by the National Executive Committee to the 85th Annual Conference of the Labour Party, October, 1986) makes this very point.


CHAPTER NINE

CONCLUSIONS

The story of Britain's nuclear force is now almost half a century old. Since the discovery in 1940 that an atomic bomb was a technical possibility, the perceived need for such a force has been a central element of the policy of successive governments. It remains so today.

Yet much has changed in fifty years. In the 1940's Britain was one of the three Great Powers which, in the aftermath of their victory over Germany and Japan, decided the outline of the settlement that provides the basis for European politics to this day. It still possessed a global empire, and had fought in three continents to defend it. Few could foresee that the next period would see an acceleration, rather than a halting, in the process of national decline.

Yet, over the decades that followed World War Two, Britain's relative economic standing fell sharply, as it failed to keep up with the rapid growth rates of most other major industrial powers. By the mid-1980's, the UK's share of world exports of manufacturers had fallen to 7.7% from 20% in the mid-1950's. Even Italy, until recently regarded as Europe's poor relation, now seems set to overtake Britain in total GDP.

This decline in economic power inevitably brought with it an undermining of Britain's military and political influence. Although they continued to devote a relatively high proportion of national income to the military, successive governments still found themselves forced to retreat from one after another of the wideranging military commitments of the 1940's. Increasingly the limited resources available for military spending were focused on the UK's role in NATO.
This retreat from Great Power status was not accepted without considerable resistance from leaders whose views have been formed in the years of Empire, and whose feeling of national greatness had been reinforced by victory in two world wars. As a result, the foreign and defence policies pursued since 1945 have been largely geared to the perceived needs of a power seeking to preserve its position in the world, or at least to slow the erosion in that power. Both during the Second World War and thereafter, Britain's main foreign policy concern has been conservative, not revisionist, seeking to preserve the status quo rather than to change it.

The argument of this thesis has been that this policy has served neither Britain's economic interests, nor its security interests. It has tied Britain into a dependent relationship with the United States, thus helping to prevent the emergence of a fully European-oriented foreign policy. It has contributed significantly to the maintenance of a level of arms spending that has had serious adverse consequences for economic performance. And, perhaps most importantly, it has acted as an obstacle to any real consideration of alternatives to containment of the Soviet Union as the fundamental objective of foreign policy, or to reliance on nuclear weapons as the means for implementing that policy.

The possession of a quasi-independent nuclear force has played a not insignificant part in encouraging this process of resistance to the consequences of economic reality. The exclusive Atlantic nuclear relationship is still seen as an indication of Britain's special position as a 'bridge' between Europe and the US. The perception of major power status which the nuclear force symbolises has in turn increased the pressure for high military spending, and rendered unthinkable the proposition that Britain should spend no more on the military than countries, such as Italy, with similar levels of economic wealth.
Although the objectives of the nuclear weapons policy pursued for the last 40 years have varied little, and the alternation between Labour and Conservative governments has made little apparent difference to policy, the political consensus supporting the possession of the nuclear force has been less than total since the 1950’s, and in recent years has disappeared altogether. Continuing economic decline, and the budgetary pressures which accompany it, have made Great Power illusion appear to be of questionable relevance to many of the leaders of the 1980’s. And the upsurge of protest against nuclear weapons in the early 1980’s now appears to have tipped the balance of the argument on these questions in at least one of Britain’s major political parties.

Because the previous consensus of nuclear weapons policy has been broken, there must now be a real possibility of a government being elected within the next decade committed to a radically different defence and foreign policy, a central part of which will be the abandonment of the attempt to remain a nuclear weapons state.

The outlines of the alternative on offer are not entirely clear. In my view, however, such an alternative must include an end to the commitment to maintain a ’special relationship’ with the US, if that commitment stands in the way of achieving other objectives. For, at least in its current form, that relationship is a major block to any radical changes in existing policies. Its nature is that Britain has geared its policies as much, if not more, to possible US reactions as to an independent assessment of the Soviet threat. Britain’s motives have been largely conservative: to ensure continued US support for its national nuclear force, to prevent any possibility of the US abandoning its commitment to the defence of Western Europe, and to tolerate Britain’s military role outside Europe. The last of these motives has declined in
importance since the withdrawal from East of Suez. As US aid to Britain in the 1982 war with Argentina showed, however, it is not entirely irrelevant even today.

Given the policies which a radical British government would wish to pursue, it is in any case likely that the US would be unwilling to continue to give the UK any special status, for example in access to intelligence. If a new government is to implement its policies it will have to accept this. For to continue to cling to the special relationship as an essential part of policy would amount to giving the US a veto over the UK's direction. And, given the likely complexion of US governments in the near future, this would halt any disarmament-oriented policy in its tracks.

However, any new policy cannot be simply about Britain's national role in the world and its own national interests, on the assumption that the rest of the world remains as it is. It must also take account of, and may be geared towards, the responses of other states to British steps. Indeed, to a considerable extent, the rationale for a radical new policy, particularly on the question of changing NATO strategy, must be about using independent British moves in order to encourage change in the international security system as a whole. Chapter 8 discussed some of the details of such moves.

Because of their preponderant military power, the future of the world security system in the next few years will depend primarily on the policies of the two superpowers. Medium size powers, such as Britain, can have some positive effect, both directly and through their influence on the debate within, and action of, the superpowers. But they cannot on their own determine the direction even of the alliance, if any, to which
they belong, far less of the East-West system as a whole. There are very
definite limits to the powers of a disarmament-oriented British government
to influence the actions of other states.

An alternative British defence and foreign policy must therefore, in
my view, have both a 'maximum' and a 'minimum' track. The 'maximum' track
would consist of working towards a fundamental change in the European
security system, involving a major reduction in the role of the two
military alliances in ensuring stability. It would see international
willingness to accept considerable restraints on national sovereignty, for
example in nuclear technology, as in the interests on international order.
And, as a concomitant to a radical reduction of the role of the military
in ensuring national security, it would permit large reductions in
military spending, particularly in those countries, such as the UK, which
currently spend most on defence.

This track, however, depends more on the action of others than on
those of the UK. It would require the Soviet Union to make much more
progress toward openness in its military deployments than it has made in
recent years, and to accept a radical change in its relationship with the
countries of Eastern Europe. It would also require a decisive defeat for
the hawks on the US, and an awareness in that country that there are no
unilateral technological solutions to the security of the West. A British
government can use its power, and its example, to facilitate such changes.

In the end, however, they will be determined more by the internal
political dynamic of the two superpowers than by the UK.

As a result, it is therefore necessary for a British government,
while it gears its policies to the attainment of these broader objectives,
to have a more 'minimum' programme which provides for a new role for the
country within a world that has not fundamentally changed. The use of
British actions as a lever for reducing the role of nuclear weapons in
NATO strategy must be accompanied, insofar as it is possible, with an attempt to adjust the level of Britain's military spending to one more appropriate to the country's economic resources. And, in the absence of any radical change in Soviet foreign policy, a 'minimum' programme must seek ways of promoting a new detente between the blocs in Europe in order to provide space for more positive long term developments.

Britain cannot change the world on its own. But, by pursuing a dual policy of this sort, a radical government in Britain can make a major contribution to constructing a safer world. Indeed the conjunction of several circumstances may provide more opportunity for Britain to do this than any other medium power. Both because of the peculiar nature of Britain's relationship with the US, and because of the budgetary pressures resultant from economic decline, Britain is the only existing nuclear weapons state in which the unilateral abandonment of its nuclear force is a real possibility. In adopting a new role in the world by such action, Britain may find that it can influence the course of world effects more than it has in the last four decades. The stakes are so great that it must be worth a try.
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