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British uses of Aircraft Carriers and Amphibious Ships: 1945 – 2010

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University of London

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Key Points

 Recent British debates about defence policy and military capabilities have revealed a lack of understanding of the roles of aircraft carriers and amphibious forces. This paper provides a historical survey aiming to offer some empirical evidence to help correct this weakness.

Aircraft carriers and amphibious forces have a repeatedly proven ability to conduct the more common smaller-scale operations alone or to act as the foundation enablers of rarer, larger-scale operations; they are particularly well suited to longterm engagement, crisis prevention, deterrence and early action that can make larger scale intervention unnecessary; and air bases and overflight rights have again and again proved unavailable or inadequate despite policy assumptions to the contrary.

 This survey shows the options and flexibility that carriers and amphibious ships have provided for policy makers over many years in just the sort of activities and operations that are likely to be required of the British armed forces in the future.

 Carriers and amphibious forces are not a strategic panacea and have limitations in their ability to dominate ground and in the scale of effort that they can take on without the backing of land-based forces. Nevertheless, they offer unique advantages and are essential for a viable British strategy.

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Part One: Analysis and Deductions

During the UK's 'Strategic Defence and Security Review' that culminated in October 2010 much of the public debate concerning maritime capabilities was disappointingly ill-informed. Even the Prime Minister and some senior military officers publicly professed not to know what aircraft carriers were useful for. In some ways this self-confessed ignorance was an affectation for tactical reasons; for the former, it permitted a swipe at the previous government and for the latter, it served as part of the campaign to preserve the Army's swollen recent share of the defence budget. Nevertheless, this apparent lack of understanding cannot simply be dismissed as posturing since it seemed to be shared by some of the civil servants who conducted the brief review and also by many media commentators. Most seriously, it seemed to influence some of the decisions taken at the end of the process.

The principal gap in knowledge that became so painfully evident was the remarkable lack of awareness of the options that aircraft carriers and amphibious forces provide to policy-makers. This blind spot in understanding is disappointing and in stark contrast to the approach of states such as the United States, France, Italy and Spain, not to mention India and China. It is perhaps not surprising, however, in view of the lack of attention that tends to be paid to Britain's maritime interests and naval activities in contrast to the column inches and broadcast time lavished on other military capabilities. It therefore seemed that a historical survey

of what these capabilities have actually done in the recent past might be timely, helping to inform the continuing debate. The survey of cases in Part Two of this paper provides concrete, empirical evidence for how and where core British maritime capabilities have been used since the end of the Second World War. It aims to provide some wider context within which to view recent operations. Such historical analysis can also provide a more reliable guide to probable future requirements than planning scenarios that are inevitably hypothetical, can be selected to make or to obscure a certain point, and are wholly dependent on assumptions such as the precise date set for the force structure involved. The survey is followed by a thematic index as a reference guide to the cases summarised, while this first section provides some comment and analysis.

A few caveats must be acknowledged. First, the survey focuses on uses of maritime forces and makes only passing reference to land and land-based air activities when they were conducted by the other armed services. Second, within maritime forces the paper focuses on carriers and amphibious forces; it does not cover destroyers, frigates, submarines, minesweepers and most Royal Fleet Auxiliaries – all of which were frequently used, especially in counter-insurgency, maintaining and restoring order and humanitarian operations - unless they were operating with the units that are the main subject of the survey. Neither does it consider the use of naval fixed- and rotary-wing aircraft from shore bases, nor the use of Royal Marines other than when deployed from ships - Marines were routinely used from bases ashore, which they proved able to do far more easily and effectively than land-based forces have been able to retrain for amphibious operations. The picture that emerges is therefore only part of the full utility of maritime capabilities. Finally, it exclusively covers British uses of these capabilities; the experience of other states such as France and the United States¹ would provide similar evidence – which is no doubt why the emerging military great powers, China and India, have such an evident interest in these capabilities.

¹ For an examination of the US experience during the late Cold War period, see Philip Zelikow, 'Force Without War, 1975-82', *Journal of Strategic Studies*, Vol.7 No.1 (March 1984), pp.29-54.

Continuities

A number of conclusions emerge from the survey. First, it is striking how often Britain found it necessary to deploy military power at various levels of intensity and effort to further national objectives. On many occasions a political and bureaucratic preference for military retreat and retrenchment in order to save money was swept away by the realities of Britain's vital national interests in various parts of the world. The apparent activism of the first decade of the 21st century is by no means exceptional.

In terms both of geography and also the type of activities undertaken, there has been a degree of continuity that is remarkable in view of the changes in British foreign and defence policy over the period surveyed, with the predominance of the 'Cold War' and the continental commitment that it entailed making surprisingly little difference. Geographically, the Middle East and the Persian Gulf have tended to be a focus, as well as the Mediterranean (the eastern edge in particular), but across the period there were also regular activities in the Indian Ocean, the Far East, the North and South Atlantic and Caribbean, and West Africa. Equally striking is the extent to which the same types of operation recur decade after decade from the 1940s to the 2000s: contributing to and sustaining a joint force in a regional conflict; conducting limited-scale interventions either alone or as the spearhead of a joint force; deterrence and preventive deployments to stop a conflict beginning or spreading; conducting counterinsurgency and counter-terrorism operations at sea and supporting those under way ashore; assisting civil authorities (UK, colonial or friendly governments) in dealing with unrest or rebellion; conflict resolution and restoring stability either on a national basis or as part of a United Nations peace support operation; evacuating civilians from war zones; demonstrative deployments to assert freedom of the seas; maritime security operations; the provision of humanitarian assistance; building relations with other states and enhancing the capacity of their forces; and providing a contingency force for British policy in key regions.

Each of these was a recurrent task for the Royal Navy during the period surveyed and it is hard to doubt that each will continue to be required in the future.

While many of the operations surveyed were joint (that is, they involved forces from two or more of the maritime, land and air environments), a great number were conducted solely by maritime forces. This is not surprising given that they have their own embarked air² and land forces (which in turn have their own embarked artillery and armoured vehicles) and hence have an inherent albeit limited ability to operate across the different environments. The smaller-scale operations detailed in the survey were often conducted by maritime forces alone - they proved well suited to the scales of effort that were most commonly required throughout the period studied. The larger-scale operations that required the deployment of more sizeable ground-based land and air forces saw maritime forces play an indispensable enabling and supporting role for their heavier, slower counterparts; securing entry points, deploying the land-based forces and their substantial supporting infrastructure, offering fire and flank support, providing logistical support and other critical enablers, and eventually conducting and covering their withdrawal. Contemporary defence policy rightly emphasises 'jointness', yet this desirable condition can only be achieved on the basis of a thorough understanding of what each component can offer; weakening one of the crucial building blocks risks undermining the entire edifice. It is perhaps understandable that some individuals in the higher reaches of the Army were not always able to resist the temptation during the defence review to snipe at core maritime capabilities for short-term institutional gains. However, the risk of their approach is that it will undermine the pre-requisites for many military deployments and hence ultimately weaken the case for the Army itself, which geography dictates must be to a large extent expeditionary.

² Some RAF and Army aircraft have been able to operate from aircraft carriers and from the larger amphibious ships, often providing a useful supplement to fully capable naval aviation, which requires dedicated aircraft and specialised personnel that are fully integrated as an inherent part of the warship rather than simply being occasional visitors.

Another conclusion that emerges repeatedly is the impressive adaptability of carriers and amphibious forces in terms of roles taken on over the course of their in-service lives. Platforms procured for one range of tasks have proved able to take on others in response to changes in the diplomatic, military and even technological background of international politics. To take one example, HMS Invincible was designed in the mid-1960s as an anti-submarine command cruiser capable of operating eight helicopters in the defence of North Atlantic sea communications in a total war against the Soviet Union. In addition to being ready for this role, she also acted in 1982 as a force projection platform without which the Falkland Islands could not have been retaken; supported British and United Nations peace keeping and peace enforcement operations in the Balkans in the mid-1990s; acted in 1997-1998 as an instrument of forceful diplomacy against Iraq, operating 22 aircraft (eight Sea Harrier FA2, eight RAF Harrier GR7, four early warning and two anti-submarine Sea King helicopters); contributed to the no-fly zone over Iraq before redeploying to participate in the coercive air campaign against Serbia in 1999 and then immediately afterwards provided humanitarian assistance in Albania; and in 2005 exercised with allies in the Persian Gulf before operating Harriers over Afghanistan - and all of this while also conducting the full range of diplomatic-military tasks around the world. A similar comparison could be made with other carriers and amphibious ships between the roles envisaged when the decision to build them was taken as against what was subsequently done over their long service lives.

This adaptability also confers a degree of future-proofing. In the same way that previous generations of carriers and large amphibious ships have been able to adapt by operating new types and generations of aircraft, they will also provide ideal platforms for the unmanned aerial systems that are likely to become ever more prevalent – alongside rather than instead of manned aircraft – especially the larger, more capable types that would not be suitable for use from smaller ships.

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Access, basing and overflight

A particularly significant conclusion to emerge is that the availability of 'Access, Basing and Overflight' (ABO) – the vital enabler formerly known as Host Nation Support – has frequently been denied or restricted to a degree unanticipated in planning and scenario assumptions. Since 1945 British defence policy has repeatedly been attracted to the siren calls of those urging the adoption of the suspiciously convenient assumption that air bases and overflight rights will always be available where and when needed. Yet repeatedly even close allies have proved unwilling (or, perhaps for domestic or regional political reasons, unable) to allow the use of their facilities or skies. In nearly every decade since the end of the Second World War this has compelled British planners to rely on maritime forces, which can deploy, poise and intervene without the permission of any state, either in the early stages of an operation (before facilities can be arranged or up-graded) or for its entirety. Even when some degree of ABO has been available, it has often been conditional, or in a location or of a quality that was less than ideal and has left maritime forces enjoying important tactical and operational advantages due to their freedom to use the seas and the mobility that allows them to move close to the precise area of interest. In several cases an air base existed from which on a map a radius could be plotted that apparently placed the theatre of operations within reach. In practice, such bases often merely permitted a small number of expensive, long-range flights by land-based aircraft (generally enjoying media coverage somewhat richer than their military contribution deserved), while being either inadequate or hopelessly inefficient and uneconomic for a prolonged campaign in terms of scale of effort, sortie generation, flexibility and responsiveness to the needs of forces ashore or to circumstances that can change dramatically during intercontinental flight times. Alternatively, basing or overflight permission might have been available yet it was politically or militarily preferable not to use it, or at least not to rely on it. It was often the case that the ability to deploy maritime forces in the early stages of a crisis itself provided sufficient confidence and reassurance for local states to provide facilities ashore that might otherwise have been unavailable. It is worth noting that forces designed to operate without ABO can operate when it is available, while the converse is usually not the case.

Time and again, the Ministry of Defence and the British government more broadly has acknowledged in lessons-learned reports the limited availability and utility of overseas bases, the damaging interruptions to overflight and the severe restrictions imposed by any policy that took them for granted. The Strategic Defence and Security Review was therefore clearly correct to state that the UK must 'retain, in the long term, the capability that only aircraft carriers can provide - the ability to deploy air power from anywhere in the world, without the need for friendly air bases on land' and that 'we cannot assume that bases for land-based aircraft will always be available when and where we need them'. However, this survey does not provide any support for the extraordinary assumption also made in the SDSR that the UK would not need to deploy air power from the sea for the short-term.³ The decisions of the Review were predicated on the assumption that Britain will for the next ten years (although not thereafter) always enjoy unfettered access to ample, high quality, secure bases and to overflight, free of political constraint, available exactly where and precisely when it is needed. Such an assumption is unambiguously contradicted by recent history; the burden of proof must lie on those who assert such a huge change in international politics, yet this bold prophesy was presented without evidence or argument - the lack of which creates the strong suspicion that the true driver of the decision-making was less a careful consideration of strategy and requirements than short-term book balancing that targeted capabilities out of favour with the then senior military leadership. It was eminently predictable that this assumption would swiftly prove unfounded. Indeed, within a few months of the publication of the review the NATO military intervention in Libya provided a classic case where carrier-based aircraft would have provided for Britain (as they did provide for the US, France and Italy) an effective - and even more, cost-effective - means of applying force,

³ Securing Britain in an Age of Uncertainty: the Strategic Defence and Security Review, Cm 7498, October 2010, p.5.

to the clear discomfort of those who had taken the odd decision that carriers were necessary, just not for the moment. British defence policy has previous experience of the dangers of adopting an arbitrary 'ten-year rule' (in the late 1940s, as well as the more infamous case between the world wars) but the speed with which the 2010 iteration unravelled was much faster.

Related to the issue of basing is the fact that maritime forces arrived in a theatre ready to operate or fight without requiring a period of reorientation or preparation. They carried with them a significant degree of self-sustainment, being able to operate with only organic support for some time and thereafter being able to draw on an established and tried system of sustainment that can utilise bases at some distance from the area of interest for longer term support needs. They were also able on many occasions to lend this attractive ability to land-based forces. This was an efficient and also an economical way to operate; in addition to minimising deployments on land that place personnel at risk as well as causing potential domestic problems for the host state, it allowed for speedy deployment without a significant initial period of vulnerability. It also greatly reduced the need to build expensive and sophisticated infrastructure that could subsequently be lost. The price tag of aircraft carriers is a familiar target of criticism but it would be instructive to compare it to the money spent since 1945 on constructing and maintaining immobile air bases in various parts of the world to which access was then lost, or which were abandoned in areas that were no longer of interest in the light of changing political priorities.

Early action: prevention and deterrence

One notable feature of the cases identified was how many of them existed in the 'grey area' of international politics between peace and war. Deterrence or prevention was a frequent objective of the operations – understandably, given the cost-effectiveness of such activities and their consequent financial as well as

political, diplomatic and military attractions. At times, these deployments were in response to an identified threat to a territory or ally, which the operation was designed to deter from developing into an actual attack that would require a more costly and larger-scale deployment to reverse. At other times when a conflict was under way, a maritime force provided capabilities that helped to deter an actually or potentially hostile actor from escalating the conflict.

Maritime forces often permitted early intervention which allowed smaller and, crucially, more time-limited deployments than if the crisis had been allowed to deteriorate. The maritime forces considered in the survey (much the same applies to other maritime assets not analysed, notably destroyers, frigates and submarines) were often deployed within reach of an area of concern on the first indications and warnings that a crisis might be about to erupt. As noted above, this could be done on the decision of London alone without the need to seek prior approval from any other state or to negotiate for overflight or basing, avoiding the need to place any friendly government in a difficult position or to anger local populations. The deployment could be conducted with great publicity if the aim was to show determination, to support or to deter. Alternatively, it could be begun quietly, without revealing our hand or potentially escalating a situation. The maritime unit or task group was moved forward and then held nearby to poise for an extended period as a contingency force; if the crisis should develop the force could react quickly, with the early preparatory moves greatly reducing theoretical deployment times. Or, if the crisis ebbed, they could be withdrawn just as quietly as they had been moved in. In some cases the fact that such an operation had taken place subsequently became known; it should be noted that this survey is based solely on published sources, so deployments that remained covert are not included. All of this was done without any of the inconvenience and potential costs or risks (for the British government and also the hosts) of seeking basing in the region concerned.

In some cases limited national interests or relatively great constraints and difficulties meant that it was neither feasible nor desirable to commit to a prolonged deployment of large numbers of 'boots on the ground' with all the vulnerabilities and expense that this always entails. In these circumstances there is a great utility in forces that offer an alternative to inaction.

Another common theme was the flexibility of deployed carriers and amphibious forces. Time and again they were conducting one sort of operation or exercise, and were retasked while on the same mission to do something else entirely. Maritime forces proved uniquely capable of conducting multiple activities at once - building relationships with and the capacity of regional actors, reassuring friends and deterring the potentially hostile, training personnel and promoting defence sales, all at the same time. Their activities and the visibility of their presence could be precisely tailored to what was needed for changing military or diplomatic aims; there are in the list many fine cases of what might be termed 'continuous modulated engagement'. Carriers and amphibious ships displayed great versatility, being used for a wide range of tasks well beyond their core roles: obviously, activities such as providing disaster relief or humanitarian assistance, using carriers to transport heavy vehicles and equipment for landbased forces, and promoting defence equipment sales are not the principal role for which maritime capabilities are procured but they do represent an attractive and valuable additional benefit. These capabilities have demonstrated the ability to open up a whole range of options across the spectrum of types of conflict and operations, and to shift between them, that is unrivalled by any other military asset.

Many of the activities performed lie outside those often considered by headline writers in the media or by the Treasury. These have long-term diplomatic and political benefits that cannot always be quantitatively presented but nevertheless have considerable value – they represent money in the bank that can be drawn upon when needed in crisis. Deployments to regions that held particular

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importance for policy helped to develop personnel skills and familiarity with the context for future operations, as well as building relationships with local states and armed forces, with regional organisations and alliances – they also improved the capacity of those actors to contribute to multinational operations. Exercises with key allies and actual and potential partners built longer-term influence which paid off handsomely when a crisis occurred or an intervention was necessary; and the most useful capabilities in these cases proved to be those that few other states could duplicate. In this sense, carriers and amphibious forces have long been a significant comparative advantage for Britain. Cutting back on such activities might produce short-term financial savings but there must be an honest acknowledgement of the cost involved in the form of the long-term hollowing out that results in situational awareness and expertise in key areas of the world and in the ability to respond swiftly to a developing situation.

Conclusion: the centrality of choice

Perhaps the strongest and most enduring theme that emerges from the survey is the issue of political choice. The capabilities that existed at any time depended on prior choices made by governments. At various points in the period covered, carriers or amphibious forces had been reduced and this inevitably limited the political as well as military options that were available thereafter; the *Invincible* class, for example, offered an invaluable capability but could not do some things that conventional fixed-wing aircraft carriers could. At other times, maritime forces were not used when they could have been, as to do so would have cast doubt on previous decisions to reduce them. Naturally, the list of cases would have been even longer if at certain times, particular capabilities had not been removed, gapped or kept alongside to save money. Conversely, when they were available, the maritime capabilities represented by carriers and amphibious forces provided the political leadership and military planners with a wide range of choices in between doing nothing or (where it was possible) relying on the slower, more costly and more risky deployment of land-based forces.

The most compelling conclusion from the survey is just how frequently decisionmakers chose to use these maritime options. It is important to bear this in mind over the coming years when the choice has been made to voluntarily forego a significant range of capabilities. Regardless of the reasons for the decisions it needs to be acknowledged, first, that there is a cost in terms of a much reduced ability to do things that we might have liked to do and have sought to do in the past – tired slogans about 'doing the same with less' really carry no conviction; and second, this foregoing of options and flexibility has been a matter of choice. The political decision was taken to preserve some military capabilities at the expense of others and this carries consequences. It is also sadly predictable that the same interests that attacked the carriers and amphibious forces during the SDSR will in the future criticise the limited contribution of the remaining forces, weakened as they are by the very cuts that these voices championed; the absurdity of such a position should be evident but hopefully this survey will help to indicate what these capabilities have done in the past and hence what they could do again when properly resourced. The advantages attributed to maritime forces and their suitability for the types and scales of operations that have been most frequently required are not theoretical attributes but rather real qualities that were demonstrated repeatedly in the historical survey that follows. The case for such capabilities is all the more compelling given the inevitability of British military policy shifting from long-term continental garrisoning to a more nuanced policy of limited liability and flexible engagement.

Mark Twain is often quoted as commenting that although history does not repeat itself, 'it sure does rhyme'. It is not claimed that the conclusions arising from this survey will necessarily provide a precise guide to the future. However, in the absence of strong evidence pointing the other way it seems reasonable to argue that a policy that builds on the weight of this experience will prove more prudent than one that persists in ignoring it.

Part Two: Survey of Historical Cases

This survey is illustrative rather than comprehensive. It exclusively covers British forces and focuses on aircraft carriers (taken to include not only warships capable of operating fixed-wing aircraft but also helicopter carriers, helicopter-carrying cruisers and Royal Fleet Auxiliary ships designed to operate more than one helicopter) and amphibious shipping (taken to mean ships and craft capable of landing personnel, vehicles and supplies by a combination of landing craft, boats and helicopters). The survey does not extend to the activities of cruisers, destroyers, frigates, submarines or minesweepers; doing so would more than double the length of what is already a long survey. It is arranged loosely in date order, from the beginning of the deployment. A thematic index and a glossary of abbreviations are provided after the survey.

1946

Corfu Channel: Albania laid naval mines, which seriously damaged two British destroyers; Britain launched Operation Retail to sweep them: the mine sweepers involved were covered by the carrier *Ocean*, two cruisers and five destroyers and frigates.⁴

1947

The newly completed carrier *Triumph* made a port visit to the Soviet Union, one of the last such diplomatic visits before the full onset of the Cold War.⁵

Following disturbances in the Solomon Islands a Royal Navy destroyer was sent to support the arrest of the ringleaders, then a visit by a carrier and another destroyer 'had a calming effect on the population'.⁶

⁴ Eric Grove, *Vanguard to Trident* (London: Bodley Head, 1987), pp.153-55.

⁵ Desmond Wettern, *The Decline of British Sea Power* (London: Janes, 1982), p.7.

⁶ Statement of First Lord of the Admiralty Explanatory of the Navy Estimates 1948-49, Cmd. 7337, February 1948, p.4.

1948

The final British withdrawal from Palestine was covered by aircraft from the carriers *Ocean* and *Triumph*.⁷

1948-1958: during the Malayan emergency naval forces enforced a maritime blockade to prevent weapons smuggling or enemy movement by sea. They provided naval gunfire and also carrier air strikes against guerrilla targets either independently or in direct support of land forces; in this latter role, maritime fire support was particularly useful in areas where it proved difficult or impossible to bring in artillery. Warships and amphibious ships and craft were frequently used to transport security forces by sea and river to otherwise inaccessible locations; Fleet Air Arm helicopters were also used in this role.⁸

1949

Tension with Communist forces during the closing stages of the Chinese Civil War led to reinforcement of the Far East squadron, including the carrier *Triumph*.⁹

1950

June: the immediate British response to the North Korean invasion of South Korea, designed in part to show solidarity with the United States, was to deploy *Triumph* (which launched the first carrier strike of the war), joining the single US carrier that was initially available. No airfields in South Korea could operate US jet fighters and many bases were lost to the enemy advance; jet aircraft operating from Japan could only operate for 15 minutes over South Korea – and that only by remaining at their optimum altitude of 15,000 feet. There was therefore heavy reliance on carrier air power which provided about one-third of the total air effort. Early carrier strikes were launched against targets

⁷ Statement of First Lord of the Admiralty Explanatory of the Navy Estimates 1949-50, Cmd. 7632, February 1949, p.3; Grove, Vanguard to Trident, p.158.

⁸ Anthony Short, *The Communist Insurrection in Malaya 1948-1960* (London: Frederick Muller, 1975); Tim Benbow, 'Maritime Forces and Counter-Insurgency,' *Contemporary Security Policy*, Vol.28 No.1 (April 2007). ⁹ Wettern, *Decline*, p.16.

400 miles from the nearest US air bases; the targets included airfields, which successfully deterred the USSR and China from transferring to North Korea large numbers of combat aircraft. Carrier air power also helped to deter escalation, in the light of fears about the vulnerability of land air bases if hostilities should widen.¹⁰ British naval forces made a substantial contribution to the United Nations Command effort, involving over the course of the war four carriers, 30 other warships and 16 Royal Fleet Auxiliaries.¹¹ Some RAF aircraft were deployed for patrol and transport but none undertook offensive operations. A major amphibious landing at Inchon, conducted by specialised shipping and trained troops, and supported by carrier air power, routed the North Korean invasion in a classic example of manoeuvre warfare; amphibious forces were also frequently used for raids on the enemy coast.¹² These threatened the whole enemy-held coast: after a feint landing to assist ground operations in February 1951, the US commander General Ridgeway 'expressed great satisfaction with the naval operations by which his armies' flanks were secured and by which the enemy must be always looking over his shoulder.¹³ The war saw a heavy reliance on sealift: six out of seven people who went to Korea did so by sea, and for every ton of freight that went by air, 270 tons (including four tons of aviation fuel) went by sea.¹⁴

1952

The Malayan emergency continued; during 1952 alone the Royal Navy conducted five carrier air strikes and 39 warship bombardments in addition to routine patrolling and transportation duties.¹⁵

1953

Fleet Air Arm helicopters were used to assist with flood relief in the Netherlands.¹⁶

¹⁰ Grove, *Vanguard to Trident*, pp.137-39; Norman Polmar, *Aircraft Carriers* (London: MacDonald, 1969), pp.520-23, 561.

¹¹ Statement of the First Lord of the Admiralty Explanatory of the Naval Estimates 1954-55, Cmd 9079 (1954), para.4. The British vessels were the light carriers *Triumph, Theseus, Glory* and *Ocean*, and the maintenance carrier *Unicorn*; Grove, *Vanguard to Trident*, pp.137-150.

 ¹² Michael Hickey, 'The Inchon Landings, Korea (Operation Chromite, September 1950', in Tristan Lovering (ed.) *Amphibious Assault: Manoeuvre from the Sea* (Woodbridge: Seafarer, 2007).
 ¹³ Vice Admiral William Andrewes, commander of the British naval force, to Commander-in-Chief Far East, 8

¹³ Vice Admiral William Andrewes, commander of the British naval force, to Commander-in-Chief Far East, 8 March 1951, The National Archives of the UK, Kew (hereafter TNA): ADM 1/22521.

¹⁴ M.W. Cagle and F.A. Manson, *The Sea War in Korea* (Annapolis: US Naval Institute, 1957), p.10.

¹⁵ Statement of the First Lord of the Admiralty Explanatory of the Naval Estimates 1953-54, Cmd 8769 (1953), para.3.

August: earthquakes in the Greek islands resulted in an extensive Royal Navy relief effort including Fleet Air Arm helicopters. Fighters from the carrier Theseus were used for a photographic survey of the damaged area in Cyprus, then the carrier provided disaster relief.¹⁷

October: in response to unrest in British Guiana provoked by an extreme left-wing party, the training carrier *Implacable* transported an army battalion to help restore order.¹⁸

1954

1954-1959: EOKA insurgency in Cyprus. Amphibious craft were used to transport security forces around the island, which features a great deal of difficult and mountainous terrain. The Director of Operations – an Army officer – stated in 1959:

In an island such as Cyprus, whose long coast line is made up of small bays, the opportunities for smuggling arms and ammunition by sea are many. The island also lends itself to small amphibious operations to assist in achieving surprise by the Security Forces. In both these roles the Maritime Forces in Cyprus provided invaluable assistance.¹⁹

September: the carrier Warrior was used to evacuate refugees fleeing insurgents in northern Vietnam.²⁰

October: Centaur evacuated the last British forces from Trieste, Yugoslavia.²¹

1955

January: the carrier Glory provided fuel for Fleet Air Arm and RAF helicopters helping civilians during Scottish blizzards.²²

¹⁶ Wettern, *Decline*, p.74.
¹⁷ Ibid., p.83.
¹⁸ Ibid., p.84.

¹⁹ Major-General K.T. Darling, 'Report on the Cyprus Emergency', 31 July 1959, para.80, in Naval Historical Branch: Reports of Proceedings Volume 53A: The Cyprus Emergency.

²⁰ Wettern, *Decline*, p.98. ²¹ Ibid., p.101.

1956

February: *Theseus* and *Ocean* (at the time mainly used as training carriers) were reroled to deliver large numbers of Army vehicles to Cyprus, in support of the counterinsurgency campaign.²³

Suez crisis: military planning had relied on the large number of air bases theoretically available for British use in the Middle East. However, when the Suez crisis erupted access to those in Libya, Iraq and Jordan was denied for political reasons; those in Gibraltar, Aden and Bahrain were too far away; and Malta was over 900 miles from the Suez Canal area, meaning that only medium bombers could operate from there and also restricting the number of sorties they could mount; they also had to carry reduced bomb loads due to short runways, and sorties often had to be cancelled because of bad weather over Malta, when it was fine at Suez. Cyprus was closer to the Canal area but its airfields were primitive and required considerable work to bring them up to the condition needed; these airfields were then within the range of medium bombers but not of all types of fighter-bomber, and those that could reach Suez could not carry bombs or rockets and could only spend 10-15 minutes over the target. The proximity of Cyprus to potentially hostile air forces meant that some fighters had to be kept back for the defence of the airfields themselves. There was therefore a heavy reliance on carrier-borne airpower: the carriers Eagle, Albion and Bulwark (plus two French carriers) allowed combat aircraft to operate close to the area of operations, and hence to be more swiftly responsive to arising needs and to spend more time airborne, as well as carrying a heavier weapons load which could be more quickly replaced when expended. The Fleet Air Arm provided the majority of aircraft sorties – roughly two-thirds, conducted by about one third of the total number of aircraft involved. It was therefore made responsible for air defence (against an Egyptian Air Force which had modern jet fighters and bombers) and for most ground attack and close support, as well as striking pinpoint targets requiring accuracy such as bridges.²⁴ The landing, against moderate opposition, could not have been conducted without specialised amphibious shipping - though the operation was delayed by the need to bring it back into commission from mothballs: the

²² Ibid., p.103.

²³ *Naval Review*, Vol.44 No.1 (February 1956), p.103.

²⁴ Explanatory Statement on the Navy Estimates 1957-58 by First Lord of the Admiralty, Cmnd. 151, April 1957, para 56-58; Polmar, Aircraft Carriers, pp.575-585; R. Fullick and G. Powell, Suez: The Double War (London: Leo Cooper, 1990) pp.37-38, 111-13; Grove, Vanguard to Trident, pp.196-97.

neglect of amphibious forces due to previous underfunding limited the military options available quickly to decision makers. The operation was notable for the first ever helicopter-borne assault, from the carriers Ocean and Theseus.²⁵

1957

January to March: a carrier task group led by Albion and Centaur exercised with the Far East Fleet, as well as with the navies of Australia and New Zealand. En route they called at Gibraltar and Malta, then Albion visited the headquarters of the Indian Navy in Bombay while Centaur called at that of the Pakistani Navy in Karachi, and both conducted flying demonstrations. They then linked up for a demonstration off Ceylon before visiting the headquarters of the Ceylonese Navy and calling at Singapore and Hong Kong.²⁶

June: Ark Royal visited New York for the US Navy International Fleet Review - part of the diplomatic push to rebuild Anglo-US political and military relations in the aftermath of Suez. After the review, Ark Royal conducted exercises with the US carrier Saratoga, which included six types of American aircraft landing on the British carrier and British Sea Hawk, Sea Venom, Wyvern and Gannet aircraft landing on the Saratoga.²⁷

The 'Sandys' Defence White Paper looked to create a strategic reserve for intervention overseas but British strategy could not rely on airlift: 'Air transport was problematic, not only because of the limited amount of equipment which could be carried, but because of the requirement to obtain overflight rights, the lack of fighter cover in theatre, the possible lack of suitable runways and the difficulties of maintaining aircraft in theatre.²⁸ The white paper therefore made limited war and peacekeeping east of Suez the main role for British carrier and amphibious task forces:

On account of its mobility, the Royal Navy, together with the Royal Marines, provides another effective means of bringing power rapidly to bear in peacetime emergencies or

 ²⁵ Ian Spellar, 'The Suez crisis (Op Musketeer, November 1956)', in Lovering (ed.) Amphibious Assault.
 ²⁶ Naval Review, Vol.44 No.1 (February 1956), p.104.
 ²⁷ Naval Review, Vol.45 No.4 (October 1957), p.469.

²⁸ Colin McInnes, 'Strategic Mobility: An Historical Perspective', RUSI Journal, Vol.143 No.4 (August 1998), p.32.

limited hostilities. In modern conditions the role of the aircraft carrier, which is in effect a mobile air station, becomes increasingly significant.²⁹

A series of interventions ensued over the following years that strongly vindicated this concept.

1958

On-going Cyprus campaign: security forces ashore conducted counter-insurgency operations against EOKA, supported by aircraft from Ark Royal, Eagle, Bulwark and Victorious.

May-June: inter-communal fighting in Lebanon; Ark Royal was put on alert to evacuate British citizens. She deployed to Cyprus to be ready if required and was later relieved by Eagle.³⁰

July-October: Jordan, threatened by radical Arab states, appealed for British military assistance. Eagle provided air cover for troop flights into Amman, flying 500 sorties in five days to protect an otherwise highly vulnerable airlift. Bulwark and a cruiser carried in troops, plus heavy support for the troops being flown in (which were hindered by Israel and Sudan refusing permission for overflight), while Albion brought in 1,000 troops plus their vehicles. Further carrier forces deployed to the eastern Mediterranean and Persian Gulf. The cruiser Bermuda lifted elements of 45 Commando to secure the ports of Tobruk and Benghazi in Libya until army troops could be brought in by another cruiser to relieve them.³¹ This British operation was co-ordinated with the US response to a similar appeal for assistance from Lebanon, in which Marines landed at Beirut with cover from carrier aircraft. Within three days, before US Air Force aircraft became available in Adana, Turkey, there were three carriers in the area.³²

²⁹ Defence: Outline of Future Policy, Cmd. 124 (1957); quotation paras.37-38.

³⁰ John Roberts, Safeguarding the Nation: The Story of the Modern Royal Navy (Barnsley: Seaforth, 2009), pp.19-20. ³¹ Explanatory Statement on the Navy Estimates 1959-60 by First Lord of the Admiralty, Cmnd. 674,

February 1959, paras 26-28; also Roberts, Safeguarding the Nation, pp.20-21.

Polmar, Aircraft Carriers, pp.601-05.

July-September: at the same time as the military threat to Jordan was being countered, concern grew over a similar threat to Kuwait from Iraq. Plans were drawn up to drop a parachute battalion group from Cyprus onto the airfield in Kuwait, but were scrapped when Israel refused use of her airspace; the plan was revised to involve landing two companies of infantry from the sea which could be done without permission of a third party. Further attempts to incorporate an air drop into the contingency plan led to the suggestion of relocating the paras and their transport aircraft to a new launch point in Aden. However, they would have to deploy via Kano (Nigeria) and Entebbe (Uganda), which would take at least seven days; moreover, there was already severe congestion at the air base there, and it would be 'extremely inconvenient' to keep the paras and their aircraft there 'for any length of time'. Alternatively they could deploy to Bahrain - but this would take eight days, it would not be possible to keep them there for long and the deployment would make their destination obvious, thereby losing surprise. Risky options were considered such as flying the loaded transport aircraft along the Israel-Syrian border, in the hope that this might confuse the air defences of both states, or attempting to jam Israel's radar systems while the vulnerable aircraft flew over her territory. Meanwhile, the preparatory deployment of the paras and their transport aircraft in Cyprus was imposing considerable strain on the facilities there, as well as requiring the use elsewhere of expensive charter aircraft for routine transport flights.³³

September: two tankers collided in the Persian Gulf and caught fire; helicopters from *Bulwark* rescued survivors and carried over firefighting parties.

November: LSTs (amphibious tank landing ships) plus four warships lifted out of Jordan the British troops deployed earlier in the year.³⁴

1959

May-June: further contingency planning for a potential operation to defend Kuwait was complicated by the refusal of friendly governments in the Gulf to allow Britain to maintain sufficient forces in the area, and by 'the time involved in moving troops into the area from their bases elsewhere.' The Minister of Defence concluded that the existing plan to

³³ See meetings of the Chiefs of Staff with the Minister of Defence (MOM), MOM/45, 21 July 1958; MOM/46, 22 July 1958; MOM/50, 12 August 1958; MOM/52, 5 September 1958, all in TNA: DEFE32/13.

³⁴ Wettern, *Decline*, p.155.

defend this vital interest, which would require six weeks to launch, was inadequate. Consideration was again given to using a parachute drop for a quicker response but the Chiefs of Staff reported that the time needed to put in position the necessary aircraft meant that such an operation would take 10¹/₂ days from Cyprus (or Aden or Masirah, Oman) or 11¹/₂ days from the UK. Moreover: 'The most direct route from Cyprus would involve flying over at least Syria or Israel, which might involve political difficulties and grave operational risks.' They also considered moving a parachute battalion to Kenya but an operation from here would take $15\frac{1}{2}$ days. As for air cover, it was suggested that combat aircraft could be based in Sharjah, assuming the ruler agreed to extend Britain's lease on the base there, which was due to expire within the year; fighters could be based there but this would require re-surfacing the runway which would be costly and would take nine months. As for heavy armour, lifting tanks from Libya would take five weeks assuming the Suez Canal was open to British use; if not it would take ten weeks. Alternatively, if a squadron of tanks and two LST amphibious transports were based at Aden, they could arrive in Kuwait within 10-12 days.³⁵ In this case, as in others, maritime forces inevitably took on an ever greater centrality in contingency plans for intervention.

July: Victorious deployed to the western Atlantic to conduct exercises with four US Navy carriers.36

October: after serious flooding in Libya, 40 Commando Royal Marines deployed to provide humanitarian relief.37

1960

Southern Arabia: aircraft from the carrier *Centaur* conducted operations against rebels.

1961

Bulwark conducted a well-publicised amphibious exercise, with US forces, in North Borneo to show support for the new Malaysian Federation and as a demonstration to Indonesia of British determination.³⁸

³⁵ MOM/7/59, 7 May 1959; MOM/10/59, 14 May 1959; MOM/11/59, 2 June 1959, all in TNA: DEFE 32/13. ³⁶ Ibid., p.169
 ³⁷ Roberts, *Safeguarding the Nation*, p.25.

June: Kuwait came under explicit threat from Iraq and formally requested British military assistance. Royal Marines were landed by helicopter from the commando carrier Bulwark to secure the airfield to ensure its availability for the later build-up. Troops were then flown in, though their arrival was delayed by Egypt, Syria and Saudi Arabia, and initially also Turkey and Sudan, refusing permission for overflight (the latter then allowed it, subject to multiple, awkward conditions) – and they relied on amphibious shipping and Royal Fleet Auxiliaries (RFAs) for logistical support. Amphibious ships including LSTs Striker and Empire Gull, plus LCTs (tank landing craft) Bastion and Redoubt landed further troops and provided heavy lift of tanks and supplies; the amphibious headquarters ship Meon provided command and control for the operation; frigates stood ready to provide fire support. RAF fighters deployed for limited air defence (they were inferior to the Iragi Mig-19) in addition to light bombers. On 9 July, the fleet carrier Victorious arrived to establish full air defence, not only contributing her fighters and strike aircraft but also providing air direction and control for both Fleet Air Arm and RAF aircraft. A second carrier, Centaur, was deployed off Aden in case she was required.³⁹ As the Secretary of State for Defence told the Cabinet:

The operation had demonstrated both the value of amphibious forces in providing military assistance at relatively short notice and the political difficulties which might be expected in obtaining overflight rights, even from allies, when there was a risk of actual hostilities.⁴⁰

This crisis response vindicated the naval task force concept and the use of maritime forces as the spearhead for a joint operation; it cast doubt on the air alternative, which relied on knocking out the enemy air force by pre-emptive strikes that would have been diplomatically disastrous if they had ever been permitted by the government. The successful deterrent deployment meant that there was no need for a much larger and more costly military operation to evict Iraq from Kuwait.

³⁸ Wettern, *Decline*, p.197.

³⁹ Explanatory Statement on the Navy Estimates 1962-63 by First Lord of the Admiralty, Cmnd. 1629, February 1962, para 3; Polmar, Aircraft Carriers, pp.635-37; James Cable, Gunboat Diplomacy (London: Macmillan for IISS, 1994), p.189; Grove, Vanguard to Trident, p.247; Roberts, Safeguarding the Nation, pp.46-47. ⁴⁰ CC(61)38th Conclusions, 3 July 1961, TNA: CAB128/35, cited by Ian Spellar, 'Kuwait (Op. Vantage, July

^{1961)&#}x27;, in Lovering (ed.) Amphibious Assault: Manoeuvre from the Sea.

November: Victorious (later replaced by Centaur) and helicopters, plus LST Striker with Royal Marines provided humanitarian assistance after severe flooding in Kenya, in contrast to their role in Kuwait earlier in the year.⁴¹

1962

January: in response to further Iraqi threats to Kuwait, Centaur deployed as a deterrent.

January: the beginning of the 'Confrontation', a 'hybrid war' in which Indonesia launched a guerrilla campaign to prevent the creation of Malaysia and to take over Borneo. An Indonesian-encouraged revolt in Brunei was met by a British joint operation, deploying 1,500 troops – half airlifted, half deployed by a cruiser, destroyers and amphibious craft. The commando carrier *Albion* then lifted further troops, vehicles, supplies and, crucially, helicopters; carriers subsequently acted as platforms and provided maintenance for both Fleet Air Arm and RAF helicopters. Amphibious shipping was used to provide strategic lift into the theatre, as well as tactical mobility within it - crucial in areas where the only access was by helicopter, sea or river; their activities included an opposed riverine landing to rescue hostages.⁴²

Spring: during NATO exercise 'Dawn Breeze', aircraft from Victorious and the French carrier Clemenceau flew from each other's flight decks (the first time the Royal Navy had exercised in this way with a navy other than that of the US).⁴³

July: a task group including Ark Royal and Bulwark exercised with the US Navy and the South-East Asia Treaty Organisation (SEATO), then conducted a show of force in the South China Sea.

October: Ark Royal, en route home, transported the 34th Artillery Regiment from Singapore to Aden.

⁴¹ Wettern, *Decline*, p.193.

⁴² HQ Far East Command, 'Report on Operations in Borneo December 1962 to January 1963', TNA: ADM 1/28626; Statement on the Defence Estimates 1963, Cmnd. 1936, February 1963: Memorandum to Accompany the Navy Estimates 1963-64, para.23.

³ Wettern, *Decline*, p.211.

1963

April: aircraft from *Albion* assisted with flood relief in Borneo; she then swiftly retasked to transport Army troops to Borneo (due to rising tension with Indonesia) – they were landed by helicopter and minesweepers.⁴⁴

April onwards: the second stage of Confrontation began, in which Indonesia began to infiltrate forces into Eastern Malaysia overland and by sea, and into Western Malaysia by sea and even on one occasion by air. The commando carriers Albion and Bulwark were used to ferry troops, supplies, vehicles and helicopters into the theatre, and provided communications and logistic support for forces ashore. Their primary role was as platforms for helicopters transporting troops and supplies in otherwise inaccessible territory. This was especially important when a swift response was required: the 1964 Defence Statement singled out one incident in which Albion was able to react to a guerrilla attack within 45 minutes, lifting in troops for a successful ambush of the retreating insurgents.⁴⁵ Amphibious ships and craft were also used to provide the security forces with mobility, as well as launching amphibious landings and raids, including some against Indonesian territory. The carrier Victorious provided airborne early warning aircraft and fighters, as well as her own radar, for air control and defence (important in preventing airborne incursions). Carrier fighter and strike aircraft from Ark Royal, Victorious, Hermes, and Centaur supported forces ashore with air strikes while providing cover for smaller warships patrolling against infiltration attempts; they also comprised a key element of the British deterrent to escalation – being essential in this role because many key potential targets in Indonesia lay outside the range of bombers operating from bases in Singapore or Australia.⁴⁶ The Confrontation continued until 1967, when Indonesia called a halt to its campaign.

Insurrection in the Radfan, South Arabian Federation (Aden): British troop columns were transported by Fleet Air Arm and RAF helicopters operating from the carrier *Centaur*,

⁴⁴ Ibid., p.226.

⁴⁵ Statement on the Defence Estimates 1964, Cmnd. 2270, February 1964, para.89.

⁴⁶ 'Gisbourne', 'Naval Operations in the Malacca and Singapore Straits, 1964-1966' in *Naval Review*, Vol.60, No.1 (Jan. 1967); David Easter, *Britain and the Confrontation with Indonesia 1960-66* (London: Tauris, 2004); Smith, *Counter-Insurgency Operations*; Chris Tuck, 'The Royal Navy and Confrontation, 1963-66', in Greg Kennedy (ed.), *British Naval Strategy East of Suez, 1900-2000: Influences and Actions* (London: Frank Cass, 2005); Roberts, *Safeguarding the Nation*, pp.48-52, 66-70.

which later lifted in artillery, supported forces ashore with air strikes and helicopters, and transported troops and supplies.⁴⁷

1964

January: when elements of the armed forces in three former colonies in East Africa mutinied, the governments requested British help. Troops were flown into Uganda and Kenya, where loyalist troops held the airfields. In Tanganyika, however, a battalion of mutineers had rampaged through the capital Dar-es-Salaam and captured the airfield. The light carrier *Centaur* embarked Royal Marines and Fleet Air Arm and RAF helicopters at the first sign of the crisis and sailed towards the region, so she was already close when the request for assistance was received: en route, a plan for amphibious operations was put together, despite the carrier not being worked up for this role. A helicopter landing of Marines at the rebel-held barracks, with naval gunfire support, swiftly ended resistance with no British losses and just two mutineers killed. The local population was then reassured and mutineers deterred by Marine patrols and an 'air display' by low-flying strike aircraft from *Centaur*. Subsequently, Marines were flown to disarm a second rebelling battalion 340 miles inland, again with support from intimidating low-level flights by Sea Vixen strike aircraft.⁴⁸

May: in the Radfan (Southern Arabia), air support was provided for troops by RAF and carrier-borne aircraft, from *Centaur*, which flew 560 sorties; helicopters from all three services were used for transport and supplies.⁴⁹

September: Indonesian threats to freedom of the seas resulted in a task group led by the carrier *Victorious* demonstrating the right of innocent passage by means of a transit of the Lombok Strait.

⁴⁷ Roberts, *Safeguarding the Nation*, pp.53-55.

 ⁴⁸ David Hankinson, 'Dar-es-Salaam – January 1964', in *Naval Review*, Vol.67, No.1 (January 1979); Christopher MacRae and Tony Laurence, 'The 1964 Tanganyika Rifles Mutiny and the British Armed Intervention that Ended It', *RUSI Journal*, Vol.152 No.2 (April 2007); Benbow, 'Maritime Forces and Counter-Insurgency'; *Statement on the Defence Estimates 1965, Cmnd. 2592*, February 1965, para.74.
 ⁴⁹ Statement on the Defence Estimates 1965, Cmnd. 2592, February 1965, para. 66; Peter Hore (ed.),

Maritime Strategic Studies Institute Paper number 1: Royal Navy and Royal Marines Operations 1964 to 1996 (Royal Navy, 1999), p.12 – hereafter cited as MSSI Paper 1.

September: *Centaur* was held ready in Hong Kong with landing parties in case they were needed for internal security operations.⁵⁰

1965

March: a show of force aimed at Indonesia in connection with the continuing Confrontation (for which see above, April 1963) was conducted by *Victorious*, *Bulwark* plus the Australian carrier *Melbourne*.

Spring: *Albion*, en route for the Far East, was diverted to Kenya in case a need arose to assist its president after a rising.⁵¹

June: continuing operations against rebels in the Radfan (Southern Arabia); helicopters from *Albion* deployed ashore to assist the security forces. As the forces in Aden needed more support, the carrier *Eagle* deployed with helicopters, supported by RFA ships, to assist a surge – then went on to patrol in the Indian Ocean and visited Singapore.⁵²

November-December: after the unilateral declaration of independence by Southern Rhodesia, Zambia feared air attack and appealed for help in the form of air defence, especially of a crucial dam. There were delays in flying RAF fighters to the area because overflight was denied; *Eagle* provided air cover over this land-locked country for five weeks until land-based aircraft could arrive via other, longer routes and their stores, personnel and spare parts could be flow in; *Eagle* then returned to operations off Aden. The Times commented: 'the sudden appearance of the aircraft carrier *Eagle* cruising off Tanzania emphasises the advantages and flexibility held by a carrier in the Indian Ocean'.⁵³

⁵⁰ Hore, *MSSI Paper 1*, p.12.

⁵¹ Wettern, *Decline*, p.255.

⁵² Ibid., p.256.

⁵³ *Times*, 2 December 1965, cited in Roberts, *Safeguarding the Nation*, p.72; also see Wettern, *Decline*, p.256; *Statement on the Defence Estimates 1966 - Part II: Defence Estimates, Cmnd. 2902*, February 1966, paras.47-48.

1966

March to December: a UN Security Council Resolution calling for economic sanctions against Rhodesia created a political imperative for Britain to take action to enforce them, resulting in the Beira patrol. The Chiefs of Staff recommended maritime surveillance to stop oil tankers reaching Beira; frigates patrolled to intercept tankers, supported by Gannet airborne early warning aircraft from Ark Royal and later Eagle, which conducted what was then the 'longest peacetime patrol by an aircraft carrier' (a 71 day patrol, during which she flew over 1,000 fixed-wing and 800 helicopter sorties). The patrols were later conducted by frigates and RFA ships, in connection with RAF Maritime Patrol Aircraft (which were initially delayed in beginning patrols and were then limited in the number of sorties they could mount from the available bases; restrictions were placed on their operation by the government of the Malagasy Republic, at whose airfield at Majunga they were based).⁵⁴

October: in Aden, the newly commissioned amphibious assault ship *Fearless* conducted two operations to land Army troops, vehicles and RAF helicopters to surprise rebels, capturing many insurgents and large quantities of weapons.

December: the helicopter cruiser Tiger, at Gibraltar, was used for negotiations between the UK government and the Rhodesian government.⁵⁵

Despite on-going campaigns and operations in the Confrontation, Aden etc. as well as the plethora of cases noted above, the Healey defence White Paper flew in the face of historical evidence by stating that there was only one type of operation for which carriers were indispensable: 'the landing, or withdrawal, of troops against sophisticated opposition outside the range of land-based air cover'. The paper stated that the UK would no longer conduct major power projection operations without allies, cancelled the

⁵⁴ Statement on the Defence Estimates 1967, Cmnd. 3203, February 1967, para. 39; Polmar, Aircraft Carriers, p.690; Wettern, Decline, p.274. The UK press described photos of Fleet Air Arm Gannets, clearly carrying 'Royal Navy' markings, as RAF aircraft! Roberts, *Safeguarding the Nation*, pp.72-73.

Hore, MSSI Paper 1, p.17.

planned new carrier and announced the phasing out of the existing carriers.⁵⁶ Remarkably, Part II of the same White Paper contradicted this approach, acknowledging:

The carrier is the most important element of the Fleet for offensive action against an enemy at sea or ashore, and makes a large contribution to the defence of our seaborne forces. It can also play an important part in operations where local air superiority has to be gained and maintained and offensive support of ground forces is required.⁵⁷

1967

January: Bulwark provided humanitarian aid following flooding in Eastern Malaysia.

February: the annual Statement on the Defence Estimates stressed the importance of carrier aircraft in the Indonesian confrontation, where they had been used for strike and for other operations together with RAF and Commonwealth bombers.⁵⁸

Middle East: in the run-up to the Six Day War, Egypt blockaded the Strait of Tiran, giving rise to concern at the potential threat to international shipping. Victorious deployed to Malta and Hermes to the Red Sea to be ready to provide air cover for international action to demonstrate the right of passage in the Straits. The operation was not needed and the carriers were withdrawn, without the need for requests to use air bases in the region that would have caused considerable diplomatic problems and enraged Arab public opinion.

May-June: during the Nigerian civil war Albion with 41 Commando, supported by three RFA ships, deployed to be ready if needed to evacuate British nationals.

May-June: the Chinese 'cultural revolution' led to border incidents and riots in Hong Kong. Bulwark and 40 Commando RM deployed to reinforce the garrison; they conducted a very public amphibious landing as a demonstration and then stood by ready to restore order if required; they were withdrawn when the situation stabilised. July-August: after further riots Hermes deployed and supported the police in anti-communist

⁵⁶ Statement on the Defence Estimates 1966 - Part I: The Defence Review - Cmd. 2901 (1966), para.4.

 ⁵⁷ Statement on the Defence Estimates - Part II: The Defence Estimates 1966-67 Cmd. 2902 (1966) para.21.
 ⁵⁸ Statement on the Defence Estimates 1967, Cmnd. 3203, February 1967, para.28.

raids; Fleet Air Arm helicopters assisted troops and police in taking bases established on top of buildings.59

October 1967 to January 1968: the British government announced that it was ending the commitment to the long-running, costly and unpopular counter-insurgency campaign in Aden, and then brought the departure date forward, further destabilising the situation. A significant force was required to conduct and cover the difficult military withdrawal from an on-going, even intensifying campaign. Reconnaissance, early warning, air defence and strike support were provided by the carriers Eagle and Hermes (becoming all the more important after the last RAF fighters were withdrawn in November). The commando carriers Albion and Bulwark, the amphibious assault ships Fearless and Intrepid, the LSL (Landing Ship Logistics) Sir Galahad and several RFA ships supported the evacuation. Royal Marines from 45 Commando and 42 Commando landed from amphibious ships to protect the final evacuation – the latter were the last British forces to leave Aden.⁶⁰

1968

March: Iran threatened to invade the Tunb Islands in the Persian Gulf; the assault ship Intrepid deployed close to the islands to show concern and to deter attack.

April to May: a force including Eagle and Albion deployed off Aden during diplomatic talks with the post-colonial government.⁶¹

British strategy, in theory at least, dropped the 'east of Suez' commitment, yet there was at the same time a change in the approach to the Cold War, giving greater priority to conventional forces as part of the deterrent. June: Bulwark with 45 Commando and Fleet Air Arm helicopters deployed to Norway for the first time, carrying out a new role determined by changing strategic requirements - demonstrating the ability to use amphibious forces to reinforce NATO's vulnerable northern flank.

Grove, Vanguard to Trident, pp.301-02; Wettern, Decline, p.296. ⁶⁰ Statement on the Defence Estimates 1968, Cmnd. 3540, February 1968, paras 27-36; Roberts, Safeguarding the Nation, pp.79-80.

Hore. MSSI Paper 1. p.22.

September: the Philippines was refusing the right of innocent passage through territorial waters; accordingly, a demonstration passage was conducted by Hermes, Albion and *Intrepid* to assert freedom of the seas.⁶²

1969

August: 41 Commando Royal Marines conducted an assault landing from Bulwark at Gibraltar, to demonstrate Britain's political will at a time of political pressure and some Spanish military deployments.63

September: Eagle deployed to Gibraltar in response to continuing Spanish diplomatic and military pressure.64

1970

Summer: concern arose in the British government, and those of other Western states, about the increasing Soviet naval and maritime presence in Mauritius; the amphibious assault ship Intrepid made an official visit to show concern and demonstrate presence.65

November-December: Intrepid and LSL Sir Galahad with elements of 3 Commando Brigade Royal Marines provided humanitarian assistance after cyclones in East Pakistan.

1971

Eagle exercised off Singapore and in the Malacca Straits, then deployed into the Persian Gulf where she linked up with the commando carrier Albion and 40 Commando, plus RFA support, for Operation Bracken in November – a naval task group deployed to cover the British evacuation of bases in the Persian Gulf.

November-December, third Indo-Pakistan War: Albion with destroyers and frigates deployed to the Bay of Bengal as a contingency force in case of a need to evacuate

⁶² Ibid..

 ⁶³ Wettern, *Decline*, pp.337-38.
 ⁶⁴ Ibid., pp.337-38.
 ⁶⁵ Ibid., p.370.

British nationals; they were held in readiness until the war ended, then returned to the Gulf to continue Operation Bracken (see above).⁶⁶

December 1971 to March 1972: either Blake or Bulwark was stationed at Malta as a guard ship, supporting 41 Commando which was guarding key points ashore during British withdrawal from the island.⁶⁷

1972

January to February: intelligence warnings suggested that an invasion of Belize by Guatemala might be imminent; Ark Royal, on exercise with US forces, diverted to a position close enough to launch a well-publicised flight by two Buccaneer strike aircraft over the capital of Belize as a show of force. 'The FCO [Foreign and Commonwealth Office] assessed that this restrained but potent use of military strength was sufficient to deter invasion'.68

July: in Northern Ireland Operations Motorman and Glasscutter were conducted against Republican 'no go' areas in Londonderry and West Belfast; the assault ship Fearless and four amphibious landing craft were used to insert Army units and bulldozers into Londonderry via the River Foyle.⁶⁹

1973

June to December: the first out-of-area Task Group deployment, intended to replace the permanent presence 'east of Suez', was led by the helicopter cruiser Tiger. The Group exercised in the Bay of Biscay, called at Gibraltar, exercised in the Atlantic, called at South Africa and exercised with the South African Navy, crossed the Indian Ocean, held

⁶⁶ Roberts, *Safeguarding the Nation*, pp.95-96.

⁶⁷ Hore, *MSSI Paper 1*, p.30.

⁶⁸ DCDC, Naval Service International Engagement, September 2010, p.7; Cable, Gunboat Diplomacy, p.199. ⁶⁹ Desmond Hamill, *Pig in the Middle: The Army in Northern Ireland 1969-1984* (London: Book Club

Associates, 1985), pp.114, 116; Roberts, Safeguarding the Nation, pp.105-06.

a joint exercise with Malaysia and Singapore, called at the Philippines, Guam, Diego Garcia and Mauritius, and conducted further exercises with the South African Navy.⁷⁰

June: the Omani armed forces were involved in difficult action against rebels in Dhofar; Fleet Air Arm helicopters operating from LSL *Sir Lancelot* and RFA *Stromness* provided assistance and supplies.

1974

July-September: Cyprus emergency after an EOKA coup followed by Turkish invasion. A British task force deployed to the eastern Mediterranean including *Hermes* (recently having completed conversion to commando carrier) with 41 Commando, which landed and was reinforced by 40 Commando, flown out of the UK, all supported by RFA ships. They reinforced British bases, rescued and evacuated British nationals, and helped to contain the violence.⁷¹

September 1974 to June 1975: the second Task Group deployment was led by the helicopter cruiser *Blake*, plus destroyers, frigates and three RFA ships: it visited Gibraltar and South Africa, reinforced the Beira patrol, visited Kenya before a major exercise with the Indian Navy, visited Pakistan, exercised with the Central Treaty Organisation regional alliance, called at Singapore, Hong Kong and the Philippines, exercised with SEATO and visited the Seychelles.

1975

February: when the situation in Cyprus flared up once again, the helicopter cruiser *Tiger* with a frigate and RFA ship in support was deployed as a contingency force, and was later withdrawn when the situation eased.

March: while the deployed Task Group (above, September 1974) was exercising with SEATO, the crisis in Cambodia gave rise to a need to evacuate British nationals. *Blake*

⁷⁰ Roberts, *Safeguarding the Nation*, pp.100-01. See this book for the details of the other naval Task Group deployments mentioned below.

¹ Cable, *Gunboat Diplomacy*, p.201.

with Fleet Air Arm helicopters was detached from the exercise, with an RFA tanker, and supported British nationals during the evacuation by RAF transport aircraft.⁷²

May: the Task Group linked up with Ark Royal which with the amphibious assault ship Fearless had been off the US for exercises and live fire training; the combined group exercised with the Brazilian Navy and held a further exercise in the North Atlantic.

1976

January-July: Bulwark and 40 Commando deployed across the Atlantic for exercises; they were followed by Ark Royal, Blake and two RFA ships. The group conducted exercises with NATO and US forces.

June: civil war in Lebanon; two frigates plus RFA ships and Fleet Air Arm helicopters stood ready to evacuate British nationals; the situation eased and the force was withdrawn. RFA Engadine with further Fleet Air Arm helicopters was held ready at Gibraltar for possible deployment.⁷³

September-October: the increasing Soviet naval presence in the Mediterranean led to the major NATO exercise 'Display Determination' involving Ark Royal and Tiger, as well as one French and two US carriers.

1977

January-May: another Task Group deployment was led by the helicopter cruiser Blake with frigates and RFA ships. It exercised in the Gibraltar Strait, then deployed to the US for exercises and live firing training; it visited the Caribbean, Brazil and Argentina, exercised with the Brazilian Navy and visited Senegal.

March: Northern Ireland - Royal Marines in patrol craft operating from the sea intercepted and arrested a boat carrying weapons and explosives to the Provisional IRA.

 ⁷² Statement on the Defence Estimates 1976, Cmnd. 6432, March 1976, para.60.
 ⁷³ Hore, MSSI Paper 1, p.41.

June: following further threats against Belize from Guatemala, a frigate was deployed, while the commando carrier *Hermes* with 40 Commando was put on standby to deploy; the situation eased and they were stood down.

July: after unrest in the Virgin Islands a frigate and an RFA deployed to be ready to land forces to assist with internal security; *Blake* diverted from an exercise in case they needed further support.⁷⁴

September 1977 to April 1978: a Task Group deployment led by *Tiger* participated in the latest NATO 'Display Determination' exercise in the Mediterranean, visited Turkey, the Persian Gulf and Pakistan, exercised with the Pakistani Navy, the US Navy and then the Australian Navy, before visiting the Philippines, Hong Kong and India.

1978

After further Guatemalan threats to Belize, *Ark Royal* was put on notice to deploy, but did not need to do so as the crisis passed.

May to December 1978: a Task Group deployment led by *Blake* visited France and exercised with the French Navy, visited various ports in the Caribbean, transited the Panama Canal, exercised with the US Pacific Fleet before a multinational exercise, visited Canada and Mexico before returning through the Panama Canal for further exercises and visits in the Caribbean.

1979

March: the final British withdrawal from Malta was conducted by the LSL *Sir Lancelot* and other RFA ships.

July onwards: increasing illegal immigration into Hong Kong resulted in the deployment of an RFA ship with a Fleet Air Arm helicopter, as well as two hovercraft and Royal Marine boats for seaborne patrols.

⁷⁴ Hore, *MSSI Paper 1*, p.45.
1980

September: the beginning of the Iran-Iraq War. In October, threats to free passage of merchant shipping led to an international response that included Britain deploying two warships plus a RFA support ship.⁷⁵ This became the Armilla Patrol, which over the years provided much experience of operating in the Gulf, as well as a deep level of understanding of the context and the region, and developed relationships with local partners which all paid dividends in times of particular crisis during the 1980s and after.

1981

The 'Nott' Defence White Paper, heavily influenced by claims on behalf of land-based air power, focussed on one single scenario in Western Europe and the North-East Atlantic, and assumed that British forces would henceforth always operate within range of landbased aircraft. It placed surface naval forces for NATO contingencies and out-of-area activities in the two lowest priorities. Accordingly, it announced that the amphibious assault ships would be scrapped (a decision rescinded before the Falklands War), cut the carrier force - and raised questions over the future survival of naval aviation - and slashed destroyer and frigate numbers.⁷⁶

1982

April: Argentine invasion of the Falkland Islands. The campaign is not covered in detail here; its occurrence should counsel caution in making confident predictions that only a narrow range of scenarios need be planned for, in ruling out the unexpected and in assuming that air bases will always be available where needed for an operation in support of a vital national interest. The campaign was entirely dependent on the remaining carriers (Hermes and Invincible) and the amphibious force of the two assault ships (Fearless and Intrepid), the LSLs and the personnel trained and exercised in amphibious warfare; the one air base available at Ascension Island was too distant (approximately 3,750 miles from the Falklands) to be of use other than as a base for Maritime Patrol Aircraft and in a couple of expensive and largely ineffective strike sorties

 ⁷⁵ Statement on the Defence Estimates 1981, Cmnd. 8212-I, April 1981, para.413.
 ⁷⁶ The United Kingdom Defence Programme: The Way Forward, Cmnd. 8288 (1981).

against Port Stanley airfield. Without the carriers and amphibious forces the Islands could not have been retaken and Britain would have suffered a devastating, arguably irreparable blow to her reputation and influence, with huge implications for the Cold War. relations with allies and partners and a whole range of overseas national interests.

After the conflict, Invincible remained off the Falklands until late August, when relieved by the newly commissioned *Illustrious* to provide air cover while the airfield ashore was being built. Later, RFAs Diligence and Reliant supported Fleet Air Arm helicopters until the airfield was complete.

1983

February to April: the Task Group deployment 'Caribtrain 83' led by Invincible visited and conducted exercises with the forces of Portugal, the US, Bahamas and Belize (including exercises with RAF Harriers there to demonstrate British capacity to reinforce in a crisis).

September 1983-April 1984: the 'Orient Express' Task Group led by Invincible visited the Far East. En route it deployed off Lebanon during a tense time in war there, until relieved in the Mediterranean by *Hermes* and *Illustrious* (which were participating in a NATO exercise). The Group continued to the Red Sea and Indian Ocean, exercised with the US Navy carrier Ranger, visited India and promoted defence sales with the result that India subsequently bought the Sea Harrier for her own carriers. It then visited Singapore, exercised with the US and Australian navies and exercised with the French Navy in the Gulf of Aden. On the way home Fleet Air Arm helicopters conducted covert surveillance of a Soviet naval base in Egypt.⁷⁷

November 1983 to March 1984: in response to Israel's invasion of Lebanon, a Royal Navy task group comprising the assault ship Fearless, a frigate and RFA ships was sent to provide back-up for British troops serving with the UN force.⁷⁸

 ⁷⁷ Roberts, *Safeguarding the Nation*, pp.171-75.
 ⁷⁸ Ibid., pp.175-76.

1984

January to March: the force off Lebanon, including Fearless and RFA ships, was joined by the newly commissioned RFA Reliant (a helicopter support ship with four Fleet Air Arm Sea Kings). When the international force pulled out of Lebanon in February, this group withdrew the British troops and vehicles, and also British nationals.⁷⁹

1985

October: Palestinian terrorists seized the cruise ship Achille Lauro; in response, Invincible deployed to the eastern Mediterranean to launch a helicopter-borne Royal Marine assault; the cruise ship was diverted to Alexandria and the operation was called off. (Subsequently, carrier-borne fighters from USS Saratoga forced the Egyptian aircraft carrying the terrorists who had hijacked Achille Lauro to land at an air base in Italy.)80

1986

April: the refusal of continental European NATO allies to permit the use of their air bases or even to allow overflight meant that the US air strikes on Libya in response to statesponsored terrorist attacks had to be carried out by aircraft from carriers in the Mediterranean and by F-111 aircraft based in Britain. The refusal of overflight added thousands of miles to the distance flown and required significant support from aerial tankers; 'mission effectiveness was degraded because of the long routes necessitated when France and Spain denied overflight'.⁸¹

April to December: the 'Global 86' deployment, led by Illustrious, conducted the 'first circumnavigation of the world by a Royal Navy Task Group for 10 years'. In eight months, it sailed 42,000 miles and visited 21 countries including India, Indonesia and Australia, and took part in Five Power Defence Arrangements (FPDA) exercise off

 ⁷⁹ Ibid., pp.175-76; Hore, *MSSI Paper 1*, p.61.
 ⁸⁰ *Strategic Survey 1985-86* (London: IISS, 1986), p.224.
 ⁸¹ Richard Haass, *Intervention* (Washington: Carnegie Endowment, 1994), pp.26-27.

Malaysia, as well as the RIMPAC 86 exercise with the US, Canada, Australia and Japan.82

November-December: the Amphibious Task Group led by Intrepid with 40 Commando linked up with the Global 86 Task Group (see above) for exercise 'Saif Sareea' with Omani forces.

1987

January-April: Ark Royal led the 'Caribtrain' deployment for live fire and bombing practice and other exercises with the US Navy.

April onwards: attacks on oil tankers in the Persian Gulf resulted in US, Soviet and British naval forces deploying to escort tankers. In July, an oil tanker was damaged by a naval mine; Royal Navy, Dutch and Belgian minesweepers deployed, with protection and logistical support from Royal Navy warships and RFA ships. France deployed the carrier Clemenceau to the Gulf following Iranian attacks on French merchant ships.⁸³

November: Exercise 'Purple Warrior' was held to test the lessons of the Falklands War; a task force of 39 warships (including Ark Royal, Illustrious and Intrepid) conducted an amphibious operation to seize a bridgehead for the landing of a joint force.⁸⁴

1988

June to December: the 'Outback 88' deployment led by Ark Royal exercised with the French Navy in the Bay of Biscay, and the Italian Navy and US Navy in the Mediterranean, then headed to the Far East for a FPDA exercise, visited Singapore (for defence export promotion), exercised with the US Navy off the Philippines, visited Hong Kong, exercised with Brunei forces and then with Malaysia and Singapore, visited and conducted a demonstration for the Indonesian Navy, visited Australia and India, then exercised with US Navy carriers in the Arabian Sea and Mediterranean.

⁸² Statement on the Defence Estimates 1987, Cm. 101-I, 1987, p.36.

Statement on the Defence Estimates 1987, Cm. 101-I, 1987, p.36. ⁸³ Strategic Survey 1987-88 (London: IISS, 1988) pp.127-32; Statement on the Defence Estimates 1988, Cm. 344-I, 1988, pp.35-36; Cable, Gunboat Diplomacy, pp.210-11. ⁸⁴ Statement on the Defence Estimates (2020) Constraints (2020

Statement on the Defence Estimates 1988, Cm. 344-I, 1988, p.33.

1990

British, US and French warships deployed off Monrovia, Liberia to evacuate civilians from the civil war that had broken out in the country.⁸⁵

March: the annual NATO amphibious exercise in Norway involved *Invincible*, *Intrepid*, *Sir Bedivere*, *Sir Percivale*, *Sir Tristram*, 42 Commando and 45 Commando.⁸⁶

August: Iraq invaded Kuwait. The first priority of the international community was to defend Saudi Arabia against further attack. Airborne forces were deployed but these were inevitably lightly armed and required the backing of heavier ground forces, especially tanks and vehicles (as well as supplies and munitions) which had to be shipped in. The US Marine Corps was heavily involved in these early stages, accompanied by its own armour, vehicles, artillery, aviation and logistic support. US carriers rapidly provided significant combat power, which crucially arrived in the theatre ready immediately for combat and with its own logistic support; the US joint commander noted that the logistic tail of land-based air power tends to be overlooked, with each squadron requiring 'more than fifteen hundred engineers, technicians and armourers'.⁸⁷ Naval forces, especially carriers, were vital in responding to the invasion and 'presenting Iraq with a real, self-sustaining threat from the onset'.⁸⁸ There was inevitably a heavy dependence on sealift, which had to be protected: throughout the crisis and war, 95% of cargo needed came by sea - 3.5 million tons of dry cargo and 6 million tons of fuel (by contrast, 500,000 tons were moved by air).⁸⁹ The British effort alone involved 144 ship voyages; 15,000 vehicles (of which 2,500 were armoured); and 19,000 tons of supplies per week.⁹⁰ The British naval deployment was able to draw on long familiarity with the region and with allied and partner states. In November, RFA Argus, the aviation training and support ship, deployed to the Gulf with Fleet Air Arm helicopters in its secondary

⁸⁹ US Department of Defense, *Conduct of the Persian Gulf Conflict: An Interim Report to Congress* (Washington, US Government Printing Office, July 1991), paras.3.2-3.3.

⁸⁵ Ibid., p.212.

⁸⁶ Roberts, *Safeguarding the Nation*, p.218.

⁸⁷ Ibid., p.312.

 ⁸⁸ Jeffrey McCausland, *The Gulf Conflict: A Military Analysis - Adelphi Paper 282* (London: Brasseys for IISS, 1993), p.9; *Strategic Survey 1990-91* (London: Brasseys for IISS, 1991), pp.95-96; Schwarzkopf, *It Doesn't Take a Hero*, pp.301, 343; Tim Benbow, 'Maritime Power in the 1990-91 Gulf War and the Conflict in the Former Yugoslavia', in Andrew Dorman, Mike Smith and Matthew Uttley (eds.), *The Changing Face of Maritime Power* (London: Macmillan, 1999).
 ⁸⁹ US Department of Defense, *Conduct of the Persian Gulf Conflict: An Interim Report to Congress*

⁹⁰ Chris Craig, 'Gulf War: The Maritime Campaign', *RUSI Journal*, August 1992, p.12.

role as a hospital ship. The force of Royal Navy destroyers, frigates and minesweepers was also increased, supported by the LSLs Sir Percivale, Sir Bedivere, Sir Tristram and other RFA ships.

September, another exercise in the Norwegian Sea included Ark Royal, Invincible and Intrepid. Invincible also took part in NATO exercise 'Dragon Hammer' in the Mediterranean with carriers from the US, Spain and Italy.⁹¹

1991

January: as war with Iraq loomed, Ark Royal was deployed to the Mediterranean to ensure that Libya did not attempt to interfere with shipping, thus freeing further US carriers to deploy to the Gulf.92

January-February: the operation to liberate Kuwait enjoyed an unusually rich provision of air bases - though they still suffered from congestion and were not free from political complications, with Turkey giving permission for air strikes to be launched from bases on its territory only the day before the start of the air campaign.93 Nevertheless, carrier aircraft contributed about one quarter of the offensive missions during the air campaign, relieving the pressure on badly stretched air bases ashore. The US Marine Corps amphibious force that deployed to the northern Gulf was not required for a landing in Kuwait – though it stood ready in case the land invasion ran into trouble – but it conducted well-publicised landing exercises in full view of the world's media, and then an amphibious demonstration which tied down several Iraqi divisions (around 40,000 troops) to guard against an attack that never came.⁹⁴

April: in the aftermath of the Gulf War 3 Commando Brigade deployed ashore from RFA Argus and RFA Resource, with Fleet Air Arm helicopters, to meet the Prime Minister's

⁹¹ Roberts, *Safeguarding the Nation*, p.218.

 ⁹² Norman Friedman, *Desert Victory: The War for Kuwait* (Annapolis: US Naval Institute, 1991), p.317; *Strategic Survey 1990-91* (London: Brasseys for IISS, 1991), p.64.
 ⁹³ Strategic Survey 1990-91, p.66.

⁹⁴ Tom Hayden, 'Amphibious Operations in the Gulf War (Op Desert Shield, 1990-91)', in Lovering (ed.) Amphibious Assault.

urgent priority of providing humanitarian assistance to the Iraqi Kurds in Operation Haven.95

1992

May-November: the Task Group 'Orient 92', led by Invincible, aimed 'to demonstrate and maintain the ability of the UK to operate in strength outside the NATO area for a prolonged period'. It exercised with the French Navy in the Bay of Biscay, participated in a major NATO exercise in the eastern Mediterranean, visited Greece, conducted an antisubmarine warfare exercise in the Red Sea, visited Kenya, conducted an amphibious warfare exercise at Diego Garcia, visited Singapore and then Japan, exercised with the Japanese Navy, visited South Korea for a defence sales exhibition, visited Hong Kong, participated in a FPDA exercise in the South China Sea, visited Malaysia, the Philippines and Australia, deployed to the Persian Gulf for exercises with the Omani Navy and the US Navy, visited Israel and then conducted further air defence and anti-submarine exercises in the Mediterranean.⁹⁶

October: Argus with four Fleet Air Arm Sea Kings, plus LSL Sir Bedivere and other RFA ships deployed to the Adriatic to support British forces conducting peace support operations in Yugoslavia as part of the United Nations Protection Force.⁹⁷

1993

January: the Ark Royal group (later relieved by Invincible) deployed to the Adriatic to be ready if needed to support British troops operating ashore in the former Yugoslavia.⁹⁸ Sea Harriers were able to conduct maritime reconnaissance in support of the economic embargo, to help enforce the no-fly zone, to provide air defence and to conduct photo reconnaissance and close air support for peacekeeping forces. There were airfields available ashore but some were initially inadequate and required time and money to bring them up to standard (even Italian air bases required up-grades before some NATO fast jets could be based there). They also proved to be vulnerable to political restrictions

⁹⁵ Roberts, *Safeguarding the Nation*, p.215.

⁹⁶ Ibid., pp.215-17. ⁹⁷ Hore, *MSSI Paper 1*, p.93.

⁹⁸ Statement on the Defence Estimates 1994, Cm. 2550, April 1994, pp.46-48.

- for example, Italy delayed until July giving Britain permission to operate fast jets. Carrier aircraft were regularly launched at short notice when Italian airfields were fogged in – the carrier could simply move to find clear weather.⁹⁹ The British carrier cooperated and integrated with US and French carriers; at times, such as when US carriers were required for operations off Lebanon or in the Gulf, the British carrier was the only one present. Argus with Fleet Air Arm helicopters was also deployed. Amphibious forces including LSLs were used to provide logistical support for land forces.¹⁰⁰ Carriers and amphibious forces in the region provided vital military backing, under national control, to deployed land forces to reassure the political leadership that they could be reinforced or withdrawn if necessary.

1994

February: Sea Harriers from Ark Royal were called upon to conduct an armed flypast as a show of force to protect a United Nations convoy from Bosnian Serbs.¹⁰¹

April: following attacks on Gorazde, Fleet Air Arm helicopters were used to rescue the wounded under air cover from Sea Harriers. In addition to helping enforce Operation Deny Flight (the no-fly zone), Sea Harriers were also used in the ground attack role against tanks and were extensively tasked for reconnaissance missions.¹⁰²

May: Ark Royal participated in a major NATO amphibious exercise in the western Mediterranean, practising operations that might be needed in Yugoslavia. LSLs and other RFA ships, including helicopter support ship RFA Resource, continued to provide logistic support to forces ashore.¹⁰³

1995

The carriers on station off former Yugoslavia – Invincible, Illustrious and then Invincible again - continued to operate Sea Harriers on combat air patrol, in support of the no-fly

⁹⁹ Eric Grove, 'Navies in Peacekeeping and Enforcement: The British Experience in the Adriatic Sea', *International Peacekeeping*, Vol.1 No.4 (Winter 1994), pp.462-70. ¹⁰⁰ Hore, *MSSI Paper 1*, p.95; Benbow, 'Maritime Power in the 1990-91 Gulf War and the Conflict in the

Former Yugoslavia'.

¹⁰¹ Roberts, Safeguarding the Nation, pp.227-29.

¹⁰² Ibid..

¹⁰³ Ibid..

zone and the maritime embargo, for reconnaissance and for air strikes against Bosnian Serb positions, including as part of NATO Operation Deliberate Force beginning in August.¹⁰⁴ The aircraft from the carrier group made a significant contribution to the overall British effort, as well as achieving the best sortie rate: the Statement on the Defence Estimates noted that the six Sea Harriers on *Illustrious* flew over 2,200 sorties, with nine Jaguars flying 2,600 sorties and six Tornados flying 2,100.¹⁰⁵ Further, owing to the carrier's proximity to the operating area, Sea Harriers spent a considerably larger proportion of each sortie over the former Yugoslavia than land-based assets, delivering more 'effect' per flying hour and relying less on air-to-air refuelling. The British carriers also operated transport helicopters in support of the coalition maritime forces and the forces ashore and airborne early warning helicopters; in addition, anti-submarine helicopters operated from RFA ships in the Task Group. There was another example of a NATO ally imposing political restrictions on the use of air bases when Italy rejected a request for basing of US F-117 stealth fighters.¹⁰⁶ The UK maintained one carrier on station, at one hour notice or less for action, for three years.

April to August: United Nations stabilisation assistance to Angola after the end of its civil war included a contingent of troops from the Royal Engineers and the Royal Corps of Transport clearing land mines and rebuilding infrastructure. They operated from the LSL Sir Galahad, which was able to land vehicles along the coast regardless of the state of roads and to avoid the danger of land mines. The LSL's crew also provided humanitarian relief.107

1996

April: a UK Task Group including Illustrious, Argus and RFA ships, plus an Amphibious Task Group including Fearless, Sir Galahad, Sir Geraint, Sir Tristram and 3 Commando Brigade took part in Exercise Purple Star with US forces.

Summer: Invincible took part in the NATO 'Northern Lights' exercise in the Norwegian Sea, then a further NATO exercise in the Mediterranean which also included US,

¹⁰⁴ AFSOUTH Information Sheet, *Operation Deliberate Force*, 6 November 1995; IISS *Strategic Survey* 1995-96 (London, OUP for IISS, 1996), especially pp.73-74, 126-37.

¹⁰⁵ Statement on the Defence Estimates 1995, Cm. 2800, May 1995, pp.50-51. ¹⁰⁶ Economist, 16 September 1995.

¹⁰⁷ Roberts, *Safeguarding the Nation*, pp.230-31.

Spanish and Italian carriers. The UK group then visited Greece and Turkey, deployed to the Gulf, visited Dubai, Kuwait and Saudi Arabia, exercised with the Armilla Patrol and undertook an exercise with US Navy in the Persian Gulf.

1997

January to August: the 'Ocean Wave' deployment involved more than 20 warships, led by *Illustrious* (operating RAF Harriers in addition to Fleet Air Arm Sea Harriers) and an amphibious force including *Fearless*, *Sir Galahad*, *Sir Percivale* and *Sir Geraint* plus 40 Commando and elements of 3 Commando Brigade, as well as RFA ships. The group conducted 34 exercises with more than 20 navies, and visited states including Brunei, India, Pakistan, Singapore, Russia, Australia, New Zealand and Vietnam, before visiting Hong Kong for the handover of the colony to China. In March, *Illustrious* launched Sea Harrier missions to enforce the no-fly zone in southern Iraq without the need for permission from any state. 'The deployment demonstrated the Navy's ability to deploy and sustain, at range, an operationally effective Task Group.'¹⁰⁸

September: *Invincible* conducted exercises in the Mediterranean with the Spanish Navy then crossed the Atlantic for exercises with the US Navy. Iraq's failure to cooperate with UN weapons inspectors led to the deployment of military reinforcements to the Gulf; problems with the provision of basing and overflight rights for RAF Tornados (for example, neither Saudi Arabia nor Turkey would allow their bases to be used for offensive operations against Iraq) led to a heavy reliance on carrier air power. In November *Invincible* redeployed from the Atlantic to the eastern Mediterranean, carrying eight Sea Harriers, eight RAF Harriers, four airborne early warning Sea Kings and two anti-submarine warfare Sea Kings; she was accompanied by *Fort Victoria*, operating four more anti-submarine warfare Sea Kings. Iraq backed down so *Invincible* did not need to deploy into the Gulf – but given Iraq's track record was retained in the Mediterranean where in December, her fixed-wing aircraft flew missions in support of the NATO

¹⁰⁸ *Ministry of Defence Performance Report 1997-98, Cm 4170* (November 1998), p.10; 'Royal Navy still rules the waves', *Daily Telegraph*, 20 March 1997.

stabilisation force in the former Yugoslavia while also maintaining and enhancing air crew skills.109

1998

January onwards: RFA Fort Grange, operating Fleet Air Arm helicopters, was deployed under UK national control at Split, for logistical support of British forces participating in the NATO Stabilisation Force in Bosnia.¹¹⁰

January: as a result of renewed Iragi non-cooperation *Invincible*, operating Sea Harriers and RAF Harriers, was moved forward from the Mediterranean to the Gulf - this deployment being well publicised in the international media. It was noted that deploying RAF Tornados might in theory be quicker but they could not get the needed permission from Arab states for strikes against Iraq from their bases.¹¹¹ Plans were drawn up in case Invincible was required to evacuate British civilians from Kuwait in the event of a deterioration in the situation; her helicopters contributed to enforcing the maritime embargo. Saddam backed down once again. Illustrious joined Invincible in March, and at the end of month Invincible was withdrawn; Illustrious continued to contribute to the nofly zone until April. 'By any account, this was a cogent demonstration of maritime power through credible forward presence in support of difficult diplomacy - especially with all the anxieties about host nation support in theatre.¹¹²

July: The UK government 'Strategic Defence Review' reaffirmed the importance of force projection and an expeditionary approach, and drew the obvious conclusion: 'In the post Cold War world, we must be prepared to go to the crisis, rather than have the crisis come to us. So we plan to buy two new larger aircraft carriers to project power more flexibly around the world.¹¹³ The paper recognised that, 'the need is increasingly to help prevent or shape crises further away and, if necessary, to deploy military forces rapidly

¹⁰⁹ 'Saudis and Turks limit Tornado missions', *Times*, 14 November 1997; 'Britain and US bolster jet force for Gulf', Times, 15 November 1997; Roberts, Safeguarding the Nation, pp.244-46. ¹¹⁰ Task Group Deployments Since 1998, p.2.

¹¹¹ 'UK "ready to fight" Saddam', Guardian, 17 January 1998; also 'British carrier to aid US against Saddam', *Times*, 17 January 1998; *IISS Strategic Survey 1997-98* (London: OUP, 1998), pp.153-62.

Captain James Burnell-Nugent, HMS INVINCIBLE and Operation Bolton - A modern capability for a modern crisis', *RUSI Journal*, Vol.143 No.4 (August 1998), p.19. ¹¹³ Secretary of State for Defence, *The Strategic Defence Review, Cm* 3999 (HMSO, July 1998),

Introduction, para.6. The SDR and the Supporting Essays can be found at:

before they get out of hand' and acknowledged the utility of carrier and amphibious forces for doing this: 'Our amphibious capability with its improved specialised shipping will give our Rapid Reaction Forces important extra flexibility. Aircraft carriers will have a wide utility, including for deterrence and coercion... Aircraft carriers and seaborne forces have a wide utility, particularly for power projection and rapid deployment operations.¹¹⁴ One of the supporting essays made clear why maritime forces are valuable in force projection:

Maritime forces are inherently well suited to most force projection operations. Their reach, ability to sustain themselves without reliance on host nation support and flexibility are invaluable attributes. A joint maritime force often provides the opportunity for early and timely intervention in potential crises. Recent events in the Gulf have demonstrated the ability of maritime forces in this respect. In almost all operations, maritime forces will be essential to help deliver ground forces to the theatre.¹¹⁵

The essay also went into some detail to explain the need for carrier air power:

One of the key longer-term issues in the Review has been whether to replace the current generation of aircraft carriers and their aircraft, and if so with what. Our conclusion is that the ability to deploy offensive air power will be central to future force projection operations. But we cannot be certain that we will always have access to suitable air bases. Even when we do, experience has shown that bases may not always be available in the early stages of a crisis, and that their infrastructure is not always able to support the full range of operations required. In these and a range of other operational circumstances, aircraft carriers can provide valuable flexibility. They can also offer a coercive presence which may forestall the need for warfighting, as recently in the Gulf. We judge that there is therefore a continuing need for Britain to have the capability offered by aircraft carriers.¹¹⁶

 ¹¹⁴ Strategic Defence Review, paras.77, 115, 142.
 ¹¹⁵ SDR Supporting Essay 6: Future Military Capabilities, para.22.
 ¹¹⁶ Ibid., para.26.

October-November: in the aftermath of Hurricane Mitch, a task group led by the helicopter carrier Ocean, with LSL Sir Tristram and 45 Commando provided humanitarian assistance to Nicaragua and Honduras.¹¹⁷

1999

January-April: further diplomatic difficulties with Iraq saw Invincible deploy to the Persian Gulf once again, where its aircraft provided air surveillance, maritime interdiction and air patrol over the no-fly zone. In April, Invincible was on the way back to the UK and was diverted to the Ionian Sea to participate in Operation Allied Force against Serbia.

March-June: the actions of Serbia in Kosovo led NATO to launch Operation Allied Force. an air campaign lasting 78 days. Air bases on land were strained by the number of aircraft using them; initially, eight Tornado GR1 aircraft flew air operations from their base at RAF Bruggen in Germany, requiring three tanker aircraft in support; 'These long range missions initially required significant amounts of in-flight refuelling and long hours in the cockpit for the crews'.¹¹⁸ An air base can be geographically 'within range' of a theatre without providing an ideal operational capability. Invincible was therefore diverted to support the campaign in April, as NATO looked to step up the tempo of attacks: the embarked Sea Harriers 'conducted 102 Combat Air Patrol missions as part of Operation Allied Force, and it was therefore possible for multi-roled aircraft which would otherwise have been given these missions to be switched to other tasks'.¹¹⁹ Showing the ability of carriers to switch rapidly between roles, Invincible's helicopters were then used to support humanitarian relief operations in Albania. The MOD report on the operation stated: 'Throughout the campaign UK, French and, in particular US, aircraft carriers demonstrated remarkable flexibility and their unique ability to deliver air power where airfields are in short supply or unavailable.' Its executive summary listed 'Key Equipment Capability Lessons', including that 'Aircraft Carriers played a useful and versatile role in the operation'.¹²⁰ In addition to Invincible, RFA Argus deployed as a platform for helicopter operations - for casualty reception, maritime operations in the Adriatic and

¹¹⁷ *Ministry of Defence Performance Report 1998-99, Cm 4520* (December 1999), p.10. ¹¹⁸ Secretary of State for Defence, *Kosovo: Lessons from the Crisis, Cm 4724* (TSO, June 2000), para.7.28. ¹¹⁹ *Kosovo: Lessons from the Crisis*, para.9.3. ¹²⁰ Ibid., para.9.3 and p.5.

also humanitarian relief in Albania. The LSL Sir Geraint also deployed from April to support British forces in theatre.

August-December: the Amphibious Task Group (including Ocean, Fearless, and four LSLs) conducted the 'Argonaut 99' deployment to the Mediterranean to participate in exercise 'Northern Approaches' with Turkey and then exercise 'Bright Star' with the US and Egypt. In November Ocean was diverted to allow her helicopters to provide humanitarian assistance to Turkey following the earthquake there.¹²¹

2000

January-April: the Illustrious Task Group deployed to the Persian Gulf to support Operation Southern Watch; her Sea Harriers contributed to patrolling the no-fly zone. While in the region, the Task Group exercised with the US and with Bahraini forces, and visited Saudi Arabia, Kuwait, the UAE and Oman. While returning to the Mediterranean, the Group exercised with the Saudi Arabian Navy in the Red Sea before visiting Malta.

March: after a typhoon struck eastern Mozambique and caused extensive flooding, RFA Fort George with four Sea King helicopters and HQ 3 Commando Brigade was detached from the Illustrious Task Group (see above) to support international humanitarian relief efforts, resupplying remote areas along the coast without having to deplete the limited supply of aviation fuel and food ashore. On completion, she rejoined the Illustrious Task Group in the Mediterranean.¹²²

May-June: After exercising with Spanish forces and a visit to France, Illustrious was on a NATO exercise in the Bay of Biscay, while the Amphibious Ready Group (ARG) with Ocean, Argus, 42 Commando, Sir Bedivere and Sir Tristram was conducting the 'Aurora 2000' amphibious exercise off Portugal, when both were diverted to support Operation Palliser in Sierra Leone. The United Nations peacekeepers and government forces there were struggling in the face of attacks by the Revolutionary United Front rebels, and the British government felt compelled to act - initially to evacuate British nationals before the commitment was expanded to include stabilisation of the situation. Troops from 1 Para

 ¹²¹ *Ministry of Defence Performance Report 1999-2000, Cm 5000* (December 2000), p.18.
 ¹²² *Task Group Deployments Since 1998*, p.4.

(the Spearhead Battalion at the time) were deployed to secure the international airport and conducted the evacuation, with RAF Chinooks (although there was some difficulty self-deploying them: Spain refused permission for two aircraft to stage through the Canary Islands because they had called at Gibraltar). Although quickly deployable, this light force lacked artillery, fire support, reinforcement or logistical sustainment, hence the decision to deploy *Illustrious* and the ARG. The maritime force arrived in days, deployed within sight of the shore for psychological effect and flew helicopter missions and lowlevel armed Sea Harrier patrols (with assistance from embarked RAF Harriers) for reconnaissance, surveillance and shows of force to intimidate the rebels while reassuring government forces and the population. It also provided carrier strike, artillery and naval gunfire support should they be needed, as well as providing logistical support for troops – without increasing the number of vulnerable personnel ashore or creating a more pronounced political footprint. 1 Para was replaced by 42 Commando, which in June was in turn replaced by Kenyan troops – though it was held ready offshore in case of renewed rebel attacks.¹²³ The commanders of this successful joint operation were well aware that it was the maritime task group providing the back-up for the light force initially airlifted into the country that made its deployment an acceptable risk, while also providing the fire support and the sustainment that the air lift alone could not.

November: Jordan and India withdrew their troops from the UN force in Sierra Leone, so the Amphibious Ready Group (including Ocean, Argus and 42 Commando) was diverted from a NATO exercise in the Mediterranean for Operation Silkman, a show of force to demonstrate support and to reassure the government. 42 Commando conducted an amphibious landing using helicopters and landing craft, off-loaded vehicles and artillery, and drove through the centre of the capital Freetown.¹²⁴

2001

August: the 'Argonaut 2001' deployment involving Illustrious, Ocean, Fearless, Sir Bedivere, Sir Galahad, Sir Tristram, further RFA ships, 40 and 45 Commando exercised with Turkey and then headed to the Middle East for the 'Saif Sareea II' exercise (which

¹²³ Andrew Dorman, 'Sierra Leone: A Case Study in the Royal Navy's Contribution to Joint Warfare', World Defence Systems, 2007; Andrew Dorman, 'The British Experience of Low-Intensity Conflict in Sierra Leone', *Defence and Security Analysis*, Vol.23 No.2 (June 2007). ¹²⁴ Roberts, *Safeguarding the Nation*, p.262.

included RAF aircraft as well as Army forces including armour) with Oman in October. The aim was to demonstrate the Joint Rapid Reaction Force concept, to conduct training in desert conditions and to meet the foreign policy objective of reaffirming links with a key partner in an important region. While the force was en route, the 9/11 attacks on the US occurred and after the exercise, the task group was held in the Gulf to support the opening of the coalition campaign in Afghanistan.¹²⁵

September: on the day of the 9/11 attacks, the carrier USS Enterprise was deployed to the North Arabian Sea as a contingency force; it was shortly joined by other carriers, the French Charles de Gaulle, Italian Garibaldi as well as Illustrious, as the US and its allies responded to this seismic event.¹²⁶

November: in Operation Veritas, a Special Boat Service unit and then Royal Marines from 40 Commando were lifted by helicopter from Illustrious to capture Bagram air base and pave the way for the deployment of the International Security Assistance Force (ISAF).¹²⁷ Operation Oracle saw Special Air Services troops operate with Chinooks from the carrier.

The initial coalition campaign in Afghanistan relied heavily on aircraft carriers (three US, one British, one French), in part because of difficulties with basing and overflight: Iran would not allow its airspace to be used; Pakistan did but reluctantly and at a cost - not only to the coalition but also to Pakistan's internal stability; Turkey allowed the use of its bases, as did Uzbekistan; Tajikistan, Kyrgyzstan and Turkmenistan allowed use of their airspace for some operations but not others and allowed access to some of their bases, but all of these depended on Russian approval and their tenure proved to be far from secure over the years of the commitment. In contrast, carriers proved able to operate without the diplomatic complications, delays and restrictions, and without the need to expend time and money to build up bases and support facilities on land. The US deployed three carriers (Carl Vinson, Enterprise, Theodore Roosevelt) for strike operations, plus a fourth (Kitty Hawk) as a helicopter carrier for amphibious assault; the first strikes included aircraft from Diego Garcia and Missouri in the US as well as F-14s

¹²⁵ Statement to House of Commons, Minister for the Armed Forces, 26 October 2001, available at: http://webarchive.nationalarchives.gov.uk/+/http://www.operations.mod.uk/veritas/statements/statement 260 <u>ct.htm</u>. ¹²⁶ William J. Fall, 'Over the next hill', *RUSI Journal*, Vol.147 No.2 (April 2002), p.18. ¹²⁷ 'British unit moves in to keep peace in Kabul', *Daily Telegraph*, 22 December 2001.

and F/A-18s from carriers operating in the Persian Gulf; for the first three months of the operation, some 75% of US strike sorties were flown from carriers.¹²⁸ The lessons were noted by the UK Minister for Defence Equipment and Support:

In Afghanistan, we have local airfields... But you cannot count on them, or on having friendly neighbouring countries willing to supply them. That is why we need carriers, so that wherever necessary we can take our airfields with us. Indeed, the carrier aircraft dominated the early period of the Afghanistan operations.¹²⁹

December: multinational patrols with a British contribution that at times included *Ocean* began in the Arabian Sea for counter-terrorism and intelligence gathering.

2002

March: the *Illustrious* group supporting British and ISAF operations in Afghanistan was relieved by *Ocean*; the US requested additional support from specialist land forces, so 45 Commando deployed from *Ocean* into Afghanistan as Task Force Jacana, with RAF helicopters and Army artillery, all supported by sea-based logistics provided by the LSLs *Sir Percivale* and *Sir Tristram*.¹³⁰

November: a Royal Navy mine countermeasures group deployed to the Gulf, supported by LSL *Sir Bedivere*, which allowed this leading British capability to sustain itself and remain in place for an extended period.

2003

January: it had been intended that *Ark Royal* and the Amphibious Task Group would deploy to the Far East in 2003 for a major exercise with the FPDA. Rising tension with Iraq led to a change in plan to support a military build-up in the region. *Ark Royal*, reroled as a helicopter carrier, arrived in the Gulf in January and was joined in February by

¹²⁸ Lee Willett, 'More than just spare airfields: Defence Policy, Defence Reviews and the Queen Elizabethclass Aircraft Carriers', in Tim Benbow (ed.), *British Naval Aviation: The First Hundred Years* (Farnham: Ashgate, 2011); also *IISS Strategic Survey 2001-02* (Oxford: OUP, 2002), pp.229-53.

¹²⁹ Quentin Davies, letter, *The Daily Telegraph*, 27 November 2009.

¹³⁰ Roberts, Safeguarding the Nation, pp.264-65.

Ocean after amphibious rehearsals at Cyprus. They carried 40 and 42 Commando and HQ 3 Commando Brigade. This force was accompanied by the LSLs Sir Bedivere, Sir Galahad, Sir Percivale and Sir Tristram; Argus deployed as a casualty reception ship; RFA Fort Austin operated four Sea King helicopters and RFA Fort Victoria operated four Merlin helicopters. According to the MOD, 'This was the largest amphibious force deployed since 1982. The Task Group would provide force protection, and conduct mine-countermeasures operations as well as providing vital sea-based logistics in support of joint force operations on shore.'131 As coalition forces built up, naval units shaped the battlespace by contributing to the no-fly zone, conducting anti-smuggling patrols and surveying in preparation for amphibious operations. Maritime units were able to deploy more easily than land-based forces, with none of the diplomatic complications. Initial plans had placed heavy emphasis on an advance into northern Irag from Turkey but at a very late stage permission to use the territory of this NATO ally was refused, tearing up the planned two-front coalition assault and greatly increasing the reliance placed on maritime forces. Land-based air forces encountered the familiar problems with overflight and basing rights, though some countries including Kuwait did provide assistance; the MOD report concluded: 'It is important to develop a range of planning options to cater for possible uncertainties ahead of operations: for example, as a result of difficulties associated with access, overflight or basing... Host Nation Support cannot be taken for granted.'132

March: the coalition land campaign against Irag began with an airborne assault into the Al Faw peninsula by 40 Commando, using Fleet Air Arm and RAF helicopters operating from Ark Royal and from a forward staging base in Kuwait. They were reinforced by 42 Commando and operated alongside units of the US Marine Corps and US Navy SEALs. The first opposed British helicopter assault since Suez in 1956 was supported by naval gunfire from four frigates (three British and one Australian), and by armed Fleet Air Arm Lynx and Gazelle helicopters operating from Ocean, which used TOW missiles against tanks, armoured vehicles and bunkers. Fleet Air Arm Airborne Surveillance and Control (ASaC) Sea King helicopters were used over land for surveillance of enemy vehicle movements and proved remarkably effective. As well as opening the way into southern Iraq, exploiting the country's maritime flank, this operation aimed to seize the oil facilities

 ¹³¹ Ministry of Defence, Operations in Iraq: First Reflections (July 2003), para.2.7.
 ¹³² Operations in Iraq: First Reflections, p.9.

intact (preventing environmental damage and safeguarding the infrastructure that would be essential for Iraq's economic recovery) and to take the port of Umm Qasr in order to relieve the pressure on ports and airfields in Kuwait.¹³³ When the port was cleared, the LSLs *Sir Galahad* and *Sir Percivale* brought in humanitarian supplies – an important element of the coalition influence campaign. As ground-based forces took over the campaign on land, LSLs and other RFA ships continued to provide logistic support; the whole force relied heavily on seaborne support because the late move away from the plan to invade through Turkey completely dislocated the Army logistics plan. Over the campaign, sealift brought in over 95% of all British military equipment, with an effort involving 60 merchant ships plus 16 high value Royal Navy and RFA ships over a 5,000 mile route, which needed protection against the potential terrorist threat.¹³⁴

The MOD concluded that Operation Telic vindicated the SDR:

Overall, operations in Iraq confirmed the 1998 Strategic Defence Review's conclusion that the Armed Forces should develop an expeditionary-based strategy providing reach, balanced forces able to apply decisive effect in scenarios of varying intensity, frequency and character in an uncertain and unpredictable world.¹³⁵

It also concluded that the operation vindicated the importance within such a strategy of maritime forces:

The operation confirmed the flexibility of sea-borne forces for manoeuvre and for the application of combat power, theatre entry and power projection, in the form of sea-based aviation, cruise missiles, amphibious forces and Naval Fire Support. It also showed the possibilities of afloat support for sea-based sustainment of joint forces.¹³⁶

March: responding to fears of unrest in Sierra Leone when war crimes suspects were about to be arrested, the frigate *Iron Duke* deployed with an RFA ship, a company group

¹³³ Ministry of Defence, *Operations in Iraq – Lessons for the Future* (December 2003), chapter 3; Jeremy Robbins, 'Iraq: Operation Telic, March 2003 – AI Faw landings – Post-modern amphibious operations?', in Lovering (ed.) *Amphibious Assault*: Jim Dutton and Tom Waldhauser, 'Operation Iraqi Freedom: US/UK operations', *RUSI Journal*, Vol.148 No.6 (December 2003); Roberts, *Safeguarding the Nation*, pp.275-83. ¹³⁴ *Operations in Iraq: First Reflections*, p.12.

¹³⁵ Ministry of Defence Annual Report and Accounts 2002-03, HC1125 (October 2003), p.12.

¹³⁶ Operations in Iraq: First Reflections, p.20.

of Royal Marines and two Royal Marine protection teams. This deployment, to support the local government, was 'later assessed by the FCO as having been highly effective in stabilising the situation and preventing further loss of life'.¹³⁷

2004

May to July: the Aurora deployment saw a significant Royal Navy force (including Invincible, Ocean, the new amphibious assault ship Albion, Argus, Sir Galahad, Sir Tristram, Sir Bedivere and supporting RFA ships) participate in an international maritime exercise off the east coast of the US.

September: Invincible and supporting assets took part in NATO exercise 'Destined Glory'.

2005

January to March: the 'Marstrike 05' Task Group, centred on Invincible, deployed to the Persian Gulf, visited Oman and participated in exercise Magic Carpet off Bahrain with the US, France and Oman, 'to test the ability of the Royal Navy to deploy, operate and maintain a potent maritime strike force'. RAF Harriers operated over Afghanistan from Invincible. The group then conducted patrols in the Gulf of Aden and, en route home, joined NATO exercise 'Noble Javelin' off the Canary Islands.¹³⁸

2006

January to July: the amphibious assault ship Bulwark deployed to the Middle East and Persian Gulf for international engagement, capacity building (e.g. exercise 'Sea Dagger' with the UAE), counter terrorism and maritime security operations in southern Iraq and the northern Gulf. Her landing craft were frequently deployed up to 150 miles from

 ¹³⁷ DCDC, *Naval Service International Engagement*, September 2010, p.6.
 ¹³⁸ Roberts, *Safeguarding the Nation*, pp.297-98.

Bulwark for extended periods, greatly increasing the ship's reach.¹³⁹ She was then urgently redeployed to Lebanon (see below).

March-July: the 'Aquila 06' deployment saw a group led by *Illustrious* deploy to the Red Sea and Indian Ocean for counter-terrorism and maritime security operations, a visit to and exercises with India (including cross-decking of Indian Navy Sea Harriers), a visit to Dubai, and exercise Magic Carpet with Oman. Heading home, *Illustrious* had reached Gibraltar when she was redeployed to Lebanon.

July: the offensive by Israel against Hezbollah in Lebanon gave rise to a need to evacuate British and other European Union nationals. *Bulwark* and *Illustrious* were urgently deployed for Operation Highbrow, along with Fleet Air Arm and RAF helicopters, RFA ships, a destroyer and frigates. The evacuation had to be conducted by helicopter and ship, since Israel had knocked out Beirut International Airport. In total, 4,500 civilians were evacuated – 1,300 in a single journey by *Bulwark*.¹⁴⁰ Harriers from *Illustrious* made low-level flights over guerrilla positions as a show of force to deter interference with the operation.¹⁴¹ As the MOD concluded, 'The operation was successful and demonstrated the ability of UK forces in the region to respond to a complex and sensitive situation at short notice.¹⁴² *Bulwark* with Sea Kings embarked remained in the eastern Mediterranean after the operation as a contingency force in case of further need.

September: the first of the Bay class 'Landing Ship Dock (Auxiliary)' or LSD(A), *Mounts Bay*, entered service: 'This will allow the deployment of more people and equipment more quickly to trouble spots around the world and greatly enhance the capability of the Amphibious Task Force.'¹⁴³

¹⁴⁰ http://webarchive.nationalarchives.gov.uk/+/http://www.mod.uk/defenceinternet/defencenews/ militaryoperations/ILLUSTRIOUSandgloucesterwelcomedhomeafterlebanonoperationvideo.htm; http://webarchive.nationalarchives.gov.uk/+/http://www.mod.uk/DefenceInternet/DefenceNews/MilitaryOpera tions/HmsBULWARKWelcomedHomeAfterLebanonOperations.htm; Roberts, Safeguarding the Nation, pp.305-05.

¹³⁹ <u>http://webarchive.nationalarchives.gov.uk/+/http://www.mod.uk/DefenceInternet/DefenceNews/</u> <u>MilitaryOperations/HmsBULWARKWelcomedHomeAfterLebanonOperations.htm</u>.

¹⁴¹ 'Navy cuts will put lives at risk, warn Forces chiefs', 24 February 2011, *Daily Telegraph*, <u>http://www.telegraph.co.uk/news/newstopics/politics/defence/8346089/Navy-cuts-will-put-lives-at-risk-warn-Forces-chiefs.html</u>.
¹⁴² Ministry of Defence Applied Percet and Access to 2000 07, 1/2007 (1) is 2007.

 ¹⁴² *Ministry of Defence Annual Report and Accounts 2006-07, HC697* (July 2007), p.35.
 ¹⁴³ Ibid., p.77.

October-November: in Operation Vela, 'the biggest amphibious operation since the major exercise Saif Sareea in 2001', an amphibious task group including *Ocean*, *Albion*, *Mounts Bay*, *Sir Bedivere* and several other RFA ships conducted training operations off the UK and then deployed to West Africa for exercise 'Green Eagle' in Sierra Leone. This aimed to support the local government and international military training teams, to assist with capacity building, to demonstrate the ability to conduct landings in equatorial regions and to undertake jungle training.¹⁴⁴

2007

May: a force of Royal Navy minesweepers supported by the LSD(A) *Cardigan Bay* conducted a programme of exercises and visits in the Mediterranean and Black Sea.

May-June: exercise Noble Mariner was held in the Baltic to test the NATO Response Force concept, involving *Ark Royal*, *Illustrious*, *Albion*, *Mounts Bay*, *Largs Bay* and 40 Commando. *Albion* then visited Russia and Finland; *Illustrious* visited Tallinn, Estonia, to show support and to conduct naval and air exercises with Estonian forces, visited Norway and operated with Swedish forces.

July: *Illustrious* joined US forces in Operation Bold Step off the east coast of the United States, during which US Marine Corps Harriers operated from her for several weeks, developing the concept of inter-operability between one state's carrier and another state's fast jet aircraft. This activity was subsequently repeated throughout the autumn of 2007 when both Spanish and Italian Harriers and helicopters operated for a combined period of seven weeks (two of which required the air group to operate in three languages when both foreign allies were embarked simultaneously).

The LSL *Sir Bedivere* provided a Naval Assistance and Training Team for capacity building with the Iraqi Navy, while Royal Marines of 539 Assault Squadron engaged in maritime security operations off Basra and in the Shatt al-Arab.

¹⁴⁴ Roberts, Safeguarding the Nation, p.306;

http://webarchive.nationalarchives.gov.uk/tna/+/http://www.mod.uk:80/DefenceInternet/DefenceNews/Trainin gAndAdventure/SierraLeoneDeploymentProvidesValuableLessonsForRoyalNavyAmphibiousTaskGroupvide oaudioPart1.htm.

Ocean and *Largs Bay* deployed to the Caribbean and West Africa for maritime security operations, including counter-drugs patrols, while also being available to provide humanitarian aid.

2008

February to October: 'In February 2008, a multinational task group led by HMS *Illustrious* began a deployment to the Indian Ocean with the objective of boosting peace and stability in the region.'¹⁴⁵ *Illustrious* led the 'Orion 08' deployment that focused on the Indian Ocean. The Task Group exercised with Turkey and Saudi Arabia; supported the US-led CTF (Combined Task Force) 150 in Operation Calash, for maritime counter terrorism, and CTF 151, for maritime security, while on passage in the Gulf of Aden and Horn of Africa. It then exercised with Oman and India, and conducted wider regional engagement activities with Saudi Arabia, Yemen and Bangladesh, before joining a FPDA exercise.

Northern Persian Gulf: RFA *Argus* operated Fleet Air Arm ASaC Sea Kings over Iraq in support of British forces there. The LSD(A) *Cardigan Bay* relieved LSL *Sir Bedivere* in supporting the Naval Assistance and Training Team working with the Iraqi Navy.

2009

February to August: a task group including *Bulwark* with elements of 40 Commando, *Ocean, Mounts Bay, Lyme Bay*, RFA ships – as well as two Royal Navy nuclear submarines, one British and one French frigate and a US destroyer – embarked on the 'Taurus 09' deployment. The largest naval task group to deploy to the Far East in more than a decade, the group conducted anti-submarine and amphibious exercises with 13 states (Malta, Turkey, Greece, Cyprus, Saudi Arabia, Yemen, Maldives, India, Bangladesh, Malaysia, Thailand, Singapore and Brunei). It also contributed to maritime security operations, undertook jungle training in Brunei and river training in Bangladesh. It culminated in a joint and combined amphibious exercise in Brunei that also involved

¹⁴⁵ *Ministry of Defence Annual Report and Accounts 2007-08 Volume 1: Annual Performance Report, HC850-1* (TSO, July 2008), p.42; also <u>http://www.telegraph.co.uk/news/uknews/1568162/Navy-to-patrol-</u> <u>Gulf-in-the-spring.html</u>.

contributions from 1 Royal Gurkha Regiment, the US Marines, the Australian Army, the New Zealand Army and the Brunei armed forces.¹⁴⁶

2010

February-March: the British government responded to a United Nations appeal for humanitarian assistance to Haiti following an earthquake by sending *Largs Bay*. The ship carried supplies from the Department for International Development and other sources; notably, it was able to carry heavy supplies in quantities that could not go by air, heavy construction equipment and vehicles for the use of non-governmental organisations. *Largs Bay*, being far more than just a freighter, was able to unload supplies where port facilities were unavailable or damaged and then to lift supplies to otherwise inaccessible areas.¹⁴⁷

April to June: the 'Auriga 2010' deployment to the Western Atlantic and the eastern seaboard of the US involved *Ark Royal* (roled for carrier strike) and the amphibious Task Group – which had previously been conducting cold weather training in Norway – comprising *Ocean*, *Albion* and *Largs Bay* and 42 Commando, along with a destroyer, a British and an American frigate, a French nuclear submarine and RFA support. The Task Group conducted high-intensity warfighting carrier strike, anti-submarine and amphibious exercises with the US and Canada.¹⁴⁸

August to September: after participating in the 'Auriga 2010' warfighting exercises off North Carolina (see above), *Ocean* conducted maritime security operations and counterdrugs patrols in the Caribbean in cooperation with US agencies, while also being on hand if needed for disaster relief and humanitarian assistance to dependent territories during the hurricane season. A military-diplomatic need arose for a demonstration of continuing UK will and ability to operate in the South Atlantic while the runway at Port Stanley was being relaid. From a range of options, it was decided that *Ocean* should deploy to Brazil for a visit – well publicised in the media – and to conduct exercises with

¹⁴⁶ <u>http://webarchive.nationalarchives.gov.uk/+/http://www.mod.uk/DefenceInternet/DefenceNews/</u> <u>TrainingAndAdventure/NavysTaurus09DeploymentFinishesWithBruneiExercise.htm;</u> <u>http://www.thisisplymouth.co.uk/news/Royal-Navy-largest-deployment-recent-years/article-646992-</u>

detail/article.html. ¹⁴⁷ http://www.mod.uk/DefenceInternet/DefenceNews/MilitaryOperations/RfaLargsBayReturnsFromHaiti.htm ¹⁴⁸ http://www.mod.uk/DefenceInternet/DefenceNews/TrainingAndAdventure/RoyalNavyVesselsExercise InTheAtlantic.htm.

the Brazilian Navy and Marines, as well as hosting a trade delegation and government ministers for meetings with their counterparts from a state that was a new priority for British foreign policy. Had the situation required, *Ocean* could have conducted an amphibious landing exercise in the Falkland Islands. She then deployed to West Africa for exercises and capacity building with Nigeria, Sierra Leone, Benin, Togo, Ghana and Liberia.¹⁴⁹

September to December: Fleet Air Arm Merlin helicopters operated from RFA *Fort Victoria*, contributing to the NATO Operation Ocean Shield (counter-terrorism and counter-piracy in the Indian Ocean and Persian Gulf).¹⁵⁰

Iraq: Throughout the year – indeed, in the third year of her deployment – the LSD(A) *Cardigan Bay* remained in the Northern Gulf, a reminder that despite lazy newspaper headlines not all British forces had withdrawn from Iraq. She continued to act as the mother ship for British, US and Iraqi patrol boats engaged in providing security for vital Iraqi oil installations as well as supporting the training of the Iraqi Navy.¹⁵¹

Persian Gulf: *Lyme Bay* continued to support a force of Royal Navy minesweepers, providing the sustainment necessary to keep them forward deployed in a cost-effective fashion. This is an area where Britain has a unique capability, much valued by the US and regional allies, which is directed against a very significant threat that has previously been used by Iran against international shipping, both overtly and covertly.¹⁵² This force of minesweepers was also used for maritime security patrols, diplomatic visits and counter-piracy; the use of an LSD(A) as their mother ship indicates the versatility of this type of ship beyond its core purpose.

¹⁴⁹ <u>http://www.mod.uk/DefenceInternet/DefenceNews/MilitaryOperations/HmsOceanBeginsSecondAntidrugs</u> <u>DeploymentInTheCaribbean.htm; http://www.defencetalk.com/hms-Ocean-on-amphibious-exercise-with-</u> <u>brazilian-marines-28719/; http://riotimesonline.com/brazil-news/rio-politics/hms-Ocean-brings-uk-closer-to-</u> brazil/;

http://www.mod.uk/DefenceInternet/DefenceNews/MilitaryOperations/HmsOceanOnAmphibiousExerciseWithBrazilianMarines.htm.

¹⁵⁰ <u>http://www.mod.uk/DefenceInternet/DefenceNews/MilitaryOperations/RoyalNavyToUseMerlinsMagicTo</u> <u>FightPirates.htm;</u>

http://www.mod.uk/DefenceInternet/DefenceNews/MilitaryOperations/RfaFortVictoriaThwartsAnotherPirateAt tack.htm.

¹⁵¹ <u>http://www.mod.uk/DefenceInternet/DefenceNews/MilitaryOperations/RfaCardiganBayReturnsFromThree</u> yearDeployment.htm.

¹⁵² BBC News, 'Royal Navy minesweepers patrol the Gulf', 6 February 2011, <u>http://www.bbc.co.uk/news/uk-</u> <u>12374262</u>. The piece compares naval mines to roadside bombs on land.

Afghanistan: Carrier air power continued to make an important contribution to operations in this land-locked country. US carriers continued to provide much of the air support for coalition forces.¹⁵³

¹⁵³ BBC News, 'USS Abraham Lincoln provides air support to Afghanistan', 31 January 2011, <u>http://www.bbc.co.uk/news/world-us-canada-12323351</u>.

THEMATIC INDEX

Under each of the following headings some examples are listed, organised according to the date under which more information can be found above in the historical survey of cases.

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British uses of Aircraft Carriers and Amphibious Ships: 1945 – 2010

GLOSSARY OF ABBREVIATIONS

ABO	Access, Basing and Overflight
ARG	Amphibious Ready Group
ASaC	Airborne Surveillance and Control
CTF	Combined Task Force
FCO	Foreign and Commonwealth Office
FPDA	Five-Power Defence Arrangements
ISAF	International Security Assistance Force (Afghanistan)
LCT	Tank landing craft
LSD(A)	Landing Ship Dock (Auxiliary)
LSL	Landing Ship Logistics
LST	Tank landing ship
MOD	Ministry of Defence
RFA	Royal Fleet Auxiliary
SDSR	Strategic Defence and Security Review (2010)
SEATO	South-East Asia Treaty Organisation

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