

**THE ROLE OF MARITIME POWER IN THE WAKE OF
THE GULF WAR 1990-1991**

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"If anyone wishes to know the history of this war I will tell them it is our
military superiority which gives us the power of maintaining my army, while
the enemy is unable to do so."

This sub-thesis is my own work and all sources used have been
acknowledged.

David Stevens

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19 June 1992

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FIGURE

The Middle East

The Iraq invasion and occupation of Kuwait in August 1990 initiated a chain of events that led to the largest combined military operation in the world. The term "Gulf War" in this paper is used to define the period from the Iraqi invasion of Kuwait on 2 Aug 1990 to the end of the UN-led offensive on 28 February 1991.

INTRODUCTION

Since the end of the Second World War the primary focus for strategic analysis has been on a bi-polar world, consisting of the USA and USSR and their respective allies at the opposing ends of the world stage. With the rapid pace of world events that was seen in 1990-91 such analysis has become increasingly irrelevant.

The last few years have seen some remarkable changes in what was previously considered to be the established world order. The end of the Cold War and the dawn of what US President George Bush once termed the 'New World Order' have been heralded as bringing in a new era in international relations. As well as political transformation though, there have also been major economic, technological and social upheavals in the modern world. Change is being experienced at an unprecedented rate and is becoming ever more difficult to predict.

This combination of developments in all major spheres of national interest will increasingly present new circumstances and risks and will in turn demand reassessment of traditional attitudes and policies for security. It already seems certain that these changes will have important implications for the future role and development of military power.

The continuing role and relevance of navies in a changing world have so far received little detailed attention. What discussions there have been, have tended to be coloured by topical issues, such as the need for individual ships, rather than rational consideration of the whole field of maritime power. The recent Gulf War¹ however, has provided a unique opportunity to examine the practical application of maritime force in an international crisis and conflict.

The Iraqi invasion and occupation of Kuwait in August 1990 initiated a train of events that was to lead to the largest combined military operation of the

¹. The term 'Gulf War' in this paper is used to define the period from the Iraqi invasion of Kuwait on 2 Aug 1990 to the end of the 100 hr land offensive on 28 February 1991.

post-World War Two period. Thirty-nine independent nations were eventually to contribute elements of their armed forces or provide financial support to the Coalition cause.

The war was significant, not only for its magnitude, but also because it was not in any way a policing action fought to preserve the existing balance between the two great power blocs. It was thus a very different conflict to the earlier wars of the nuclear era such as Korea and Vietnam. As a major milestone in the use of military force it is very important that the war be properly analysed in the current context of worldwide change, so that relevant lessons, if any, may be gleaned and applied to future operations.

In the USA particularly, inter-service rivalries have already led to claims and counterclaims regarding relative performance and effectiveness. For most analysts, the Gulf War seems to have been primarily examined as an example of the efficacy of air power, finally proving the Douhet-Mitchell doctrine of strategic air warfare.² The United States Air Force has even gone so far as to claim that air power singlehandedly defeated the Iraqi Army.³

Conversely, the view of the proponents of land operations stresses that despite the air offensive it was the final Coalition ground offensive that actually became the catalyst for the unconditional Iraqi withdrawal from Kuwait.⁴ Then again, the view of the maritime persuasion is that the air campaign was a rather crude bludgeon and that without the support of Coalition sea power and its unchallenged control of the sea, the land operation could not have taken place at all. Thus, maritime forces are meant to have provided what the editor of *Jane's Fighting Ships*,

². See for example Kopp C, 'Desert Storm' in *Australian Aviation*, April 1991. Giulio Douhet in Italy and General Mitchell in the USA were among the strongest advocates of the primacy of air power. Air power to them meant a completely new type of war and in their view the concentration of effort on obtaining command of the air would provide rapid and overwhelming victory.

³. "This is the first time in history that a field army has been defeated by air power." Statement by General McPeak Chief of Staff USAF, quoted in 'The Most Successful Air Campaign Ever?' in *Military Technology*, 4/91, p. 36.

⁴. See for example Flanagan E, 'The 100-Hour War' in *ARMY*, April 1991, p. 18.

has termed 'the enabling factor' for the whole operation.⁵

A fourth and final school of thought, with a more wide-ranging view, but no less parochial, has also made itself felt. In this view all three environments of air, land and sea were successful, largely because of the superior military technology available to the Coalition.⁶ Thus, it is argued that honours for the liberation of Kuwait should more rightfully be bestowed upon Western high technology rather than any of the individual branches of the armed forces.

There are of course elements of truth in all of the positions taken and a combination of these and many other factors would probably provide a more correct assessment. The primary aim of this paper will be to examine the role of maritime power both during and after the Gulf War. The events of 1990-91 will be used as a case study to assist in an analysis of the ways that maritime forces may have to evolve to remain useful in the new strategic environment. The paper will also argue that despite the new environment, the traditional benefits of maritime power still remain largely unchanged.

SEA POWER AND MARITIME STRATEGY

Classical Theories

The study of classical strategy continues to serve a useful purpose. By analysing historical examples, certain maritime themes can be seen to have had continuing validity. This is not to say that traditional thinking will always remain relevant and correct. Modifications have been made in the past and will continue to be made, to allow for scientific development and technological innovation. Thus the advent of steam, armour, submarines, nuclear and guided weapons have each in their

⁵. See editorial comment by Captain J Sharpe in *Jane's Fighting Ships 1991-92*, Jane's Publishing, London 1991, p. 43.

⁶. Capps A, 'The High-Tech War' and 'Smart Weapons for a Desert War', in *Defense & Diplomacy*, May 1991, p. 7.

turn been regarded as revolutionary advances which, their proponents claimed, have rendered previous warships and maritime strategies obsolete.⁷

The ongoing analysis of sea power seems to have identified three fundamental reasons why a nation seeks to use the sea. Firstly, a nation may seek to obtain economic benefit through trade or the exploitation of resources. Secondly, a nation may seek military benefit by supporting friendly forces overseas. Finally, a nation may desire to protect its own security interests, sea-lines of communication (SLOC) and territory both in peace and war. Thus the use of the sea is not an end in itself but directly concerned with the well-being of the nation as a whole.

To be able to use the sea a nation must first exert a measure of control; sea power is the tool which enables them to achieve this control. In its broadest context sea power can include not only naval vessels and their embarked aircraft, but also many other factors including; merchant ships, fishing fleets, maritime industries, oceanographic research and shipbuilding. The phrase 'Maritime Power' is now gaining favour and more properly reflects the importance of a country's general maritime interests to its national security.

Sea power cannot in general secure territorial objectives and cannot usually be decisive unless used against a maritime dependent state. However, sea power does contribute to efforts ashore and can influence their course and outcome. Captain Alfred T Mahan, one of the most influential of naval strategists of the nineteenth century, was probably the first to lay down the primary objective of sea power: that is, to make use of the sea for one's own purposes, including the securing of sea communications and their denial to the enemy.⁸ To be really effective though, this power must be wielded as part of an overall maritime strategy.

⁷. For a recent illustration of this type of argument, using the example of anti-ship guided weapons, see Mack A, 'A Case Against the ANZAC Frigates' in *Pacific Research*, August 1989, p. 6.

⁸. Roskill S W, *The Strategy of Sea Power - its development and application*, Collins, London 1962, p 15.

Maritime Strategy

Another well-known naval strategist, Sir Julian Corbett, seems to have expressed the concept of a maritime strategy most succinctly when he defined it as; "...the principles which govern a war in which the sea is a substantial factor."⁹ Or as Admiral Gretton was to put it at a later date; "...a maritime strategy uses the sea to exploit geography to the advantage of (a) country and seeks to deny its advantages to the enemy."¹⁰

Within a classical maritime strategy a naval force can fulfil three basic roles in times of conflict. The first role, to obtain free use of the sea while denying it to an enemy is termed 'sea control'. Sea control or as it is sometimes termed, 'sea command' is rarely absolute but instead tends to be temporary and limited to particular localities.

The second role, to deny free use of the sea to an enemy without necessarily being able to use it freely yourself is termed 'sea denial'. This has been the typical strategy of the weaker maritime power in confrontation with the larger.

The third naval role is the projection of military power. This can comprise either the direct support of land and air operations by attacking targets ashore, or the completion of independent action at sea.

Recent Conceptions

In the more recent past interpretations of maritime strategy have identified additional roles for naval forces particularly during times of peace and tension. At the lowest rung there is the routine peacetime presence mission. Here naval forces are used simply as an expression of national interest in the particular operating region. In times of crisis however, these same naval forces can be used to

⁹. Corbett J S, *Some Principles of Maritime Strategy*, Conway Maritime Press, London 1972, p. 13.

¹⁰. Gretton P, *Maritime Strategy*, Cassell, London 1965, p. 3.

express national concern or at the highest level of crisis, actually as a show of force. These roles have been particularly important during the period of the Cold War, with the more powerful maritime nations using the presence of naval forces to respond to inadequate diplomacy or ambiguous messages with a flexible and obvious statement of intent.¹¹

Recent interpretations have also had to cope with changes in geographic conceptions. Historically the sea has been thought of as being uncontrolled, the opposite of the situation occurring on land, which has always been politically controlled. Now with the expanding quest for sea bed and ocean resources the importance of the sea for national economic security is increasing. Maritime nations therefore, are nowadays much more likely to be seeking to extend their ability to achieve sea control into their own exclusive economic zone (EEZ).¹²

US Maritime Strategy

The United States is the pre-eminent maritime power of recent times and took the leading role in the prosecution of the Gulf War. The maritime strategy of the United States Navy (USN) is therefore worthy of separate examination.

Expanding on the three traditional naval roles the USN is now configured to provide four fundamental capabilities; control of the sea, projection of power ashore, nuclear deterrence and strategic sealift. The USN has wholeheartedly embraced the 'total force concept' in which the navy acts as part of the entire United States Armed Forces rather than as a separate entity. This concept aims to achieve cost efficient combat capability by utilising the unique strengths of each of the four US armed services. The USN has also regarded itself as a key player in the overall United States strategy of forward defence, with a significant, permanently deployed, forward presence.

¹¹. Sharpe, *op cit*.

¹². The United Nations Convention on the Law of the Sea adopted in 1982 the concept of the EEZ. The EEZ may extend up to 200 nautical miles from the coast and within it the coastal state has sovereign rights for the purposes of exploring, exploiting, conserving and managing natural resources.

In the early 1980's the USN adopted a plan for confronting the Soviet Union in a major war, short of outright nuclear war. In what was officially termed the 'Maritime Strategy', the USN planned offensive global operations to counter the Soviet Union. In particular, it was intended that naval strike forces would conduct a rapid and early forward deployment to establish sea control and counter a thrust by the Soviet Union into Europe. Forward operations were planned to prevent the Soviets overrunning the flanks of NATO and once Soviet naval forces were overcome would allow deep strikes against Soviet offensive forces in central Europe. Thus naval power would be able to directly affect events on land.¹³ The Maritime Strategy was often summarised by the words; "... *forward, global, allied and joint(service)*".¹⁴

The threat for which the USN had planned had some parallels with the situation arising from the Iraqi invasion of Kuwait. In both cases a land power with large well- equipped forces had invaded a friendly area. Thus large land forces were needed to defend and liberate the area and these could only be supplied by sea. The USN was in a good position to use this planning experience in relation to the Gulf War.

THE CHANGING WORLD ORDER AND CRITICISMS OF SEA POWER

As previously noted the world today appears to be undergoing change at a more rapid rate than ever before, fuelled by dramatic and constant advances in science and technology and ever higher human expectations. The unpredictable nature of developments is already making the management of change one of the most consuming of political activities.¹⁵

¹³ . For a more thorough discussion of USN plans see Friedman N, *The US Maritime Strategy*, Jane's Publishing, London 1988.

¹⁴ . *Ibid.*, p. 3.

¹⁵ . For a useful discussion on the management of change see Boothby D, 'Maritime change in developing countries: the implications for naval arms control' in Fieldhouse R, *Security At Sea - Naval Forces and Arms Control*, Oxford University Press, Oxford, 1990, p. 77.

This dynamic transformation is affecting all aspects of modern life, but it is particularly influencing traditional perspectives of national security. Of specific concern is the fear that the security challenges of tomorrow will not reflect current concerns and thus the structure and practice of current armed forces. Maritime thinking in general and naval forces in particular are not immune from these challenges and questions are now arising over the continuing utility of sea power in the new strategic environment.

End of the Cold War

With the end of the Cold War and the dissolution of the Soviet Union the conception of the threat facing the West has required considerable readjustment. The scale of change is well illustrated by the Gulf War where the easing of US/Soviet tensions allowed the redeployment of not only land and air forces from the European Theatre but also naval forces formerly considered sacrosanct.¹⁶ Thus a number of nuclear attack submarines (SSN), previously required to trail Soviet ballistic missile submarines, were able to be released for operations in direct support of Operation 'Desert Storm'.¹⁷

Without the threat of the Soviet Union to provide a unifying purpose even the term 'the West' may require redefinition. Traditional alliances may no longer have the stature that they have received in the past. Former 'special allies' of the United States cannot simply assume that their privileged status will continue.¹⁸

With the decline in the Soviet threat the United States will also find it more difficult to use the Soviets as a justification for foreign bases. Third-world countries will increasingly perceive the US as unrestrained by a balancing threat and will be less likely to accept infringements of their own sovereignty.

¹⁶. Roberts J, 'Going in Harm's Way - The US Navy in the Light of the Gulf Crisis', in *DEFENCE*, March 1991, p. 28.

¹⁷. Operation 'Desert Storm' describes the Coalition offensive against Iraq that took place between 17 January and 28 February 1991.

¹⁸. For an assessment of the change in Australia's status from a 'special ally' of the United States to 'just another trade competitor' see Button J, 'Brand New Day' in *Time Magazine*, April 6 1992, p. 13.

Local Conflicts Rather Than Global

The end of the old world order does not however, mean the arrival of a new era of peace and stability under the magnanimous leadership of the United States. Without the international competition between the two former power blocs, conflicts may tend to be defined on a local or regional basis rather than as elements of a wider global struggle. Without the direction of the Soviet Union, former client states will become increasingly independent and unpredictable. We may therefore see the beginning of a more complicated and confusing situation with not just political, but also ethnic and religious tensions coming to the fore.

These regionalised conflicts are already well in evidence in many areas of the globe.¹⁹ They are usually internal struggles and though often protracted, have few lines of communication extending overseas and hence few vulnerabilities to the application of maritime pressure.²⁰ Thus, there is a strong argument that traditional forms of sea power will have little role to play in most of these situations.

Collective Security

Collective security and its apparent advantages became a popular topic in the aftermath of the Gulf War. However, with the rapid withdrawal of superpower military forces from overseas, what is more likely is that individual nations will feel obliged to make a more substantial contribution to their own security.²¹ When it comes to another country providing aid, the actual cost of providing assistance versus the expected gain will be taken into account more than ever. With states following their own diverse national interests, economic rationalism

¹⁹. Examples include current conflicts in the former Soviet Union, Balkan states, Iraq, Cambodia, Central America etc.

²⁰. It is in a protracted war, that the economic considerations of a nation's dependency upon vulnerable sea lines of communication weigh most heavily.

²¹. This trend is particularly evident in the Asia/Pacific region, where most of the ASEAN nations, Korea and Japan, are all increasing expenditure on defence. This is in spite of United States assurances that a substantial presence will remain in the region. See 'USN to stay on in Asia/Pacific' and 'Options for Defence' in *Jane's Defence Weekly*, 22 February 1992, p. 282 and p. 293.

and political expediency will almost certainly assume precedence over moral issues.

This point of moral or economic objectives, was certainly at issue in the Gulf War²² and as Professor Ken Booth has noted:

*"...few would-be aggressors would surely repeat Saddam's major blunder of committing blatant aggression in an area of vital interest for the industrialised world."*²³

Level and Type of Threat

One of the most common criticisms of Western maritime power, and the USN in particular, has been that it has always concentrated on the 'worst case' military threat; global conflict with the Soviet Union, to justify its existence.²⁴ This concentration has been at the expense of the more likely conflicts such as low-level contingencies in the third-world.

With the maritime forces of the former Soviet Union in disarray large budget items such as SSNs are now seen as having far fewer employment options in the USN.²⁵ The USN has already been directed to react to these trends and is being forced to reduce overall fleet combatant numbers.²⁶ Similarly, many recent naval missions now require radical reassessment. Regional adversaries are not likely to be able to concentrate sufficient naval force for effective open ocean operations. Thus the USN's number one warfighting priority of the 1980's, anti-submarine warfare, is now regarded as having much reduced relevance in likely future regional conflicts

²². See Beyer L, 'The World Closes In' in *Time Magazine*, August 20 1990, p. 15.

²³. Booth K, 'The 'New World Order' and the Future of Naval Power', in *Journal of the Australian Naval Institute* - November 1991. p. 21.

²⁴. Gretton M, 'The American Maritime Strategy: European Perspectives and Implications' in *RUSI Journal*, Spring 1989, p. 19.

²⁵. Recent reports indicate the scrapping of plans to develop the very capable, but very expensive 'Seawolf' SSN past one unit. See *Jane's Defence Weekly* 29 February 1992, p. 339.

²⁶. Hyde J, 'DoD's Heavy Hitters Converge on Hill; Congress Eyes Deeper Personnel Cuts', in *Armed Forces JOURNAL International*, April 1992, p. 8.

and has been superseded by power projection as the primary fleet mission.²⁷

For many small and medium-sized nations the possession of capabilities able to respond to the likely types of security threat is also causing concern. Though military security is a consideration, there are other more likely threats such as terrorism, drug-smuggling and illegal immigration that produce more pressing security problems. These non-defence threats are reported to be increasing in many areas of the world's oceans.²⁸ Conventional, highly capable, maritime forces may be relevant to some of these issues but perhaps only to a limited extent.²⁹

Reduction in Available Resources

The economic lure of the so-called 'peace dividend' has come at an opportune time for the West. The worldwide recession combined with the reduction in East/West tensions has brought sharp cuts to defence budgets and a close scrutiny of the overall defence establishment. Big defence spending is increasingly seen as counterproductive.

Though all arms of the defence forces have taken reductions, naval elements exhibit particular vulnerabilities in cost-cutting exercises. Warships are extremely expensive to build, arm, crew, maintain and eventually replace. They have been increasing in cost at a rate far exceeding the general rate of inflation.³⁰ Warships also take many years to design and build, meaning that they must be built

²⁷ . Phillips-Beauden E, 'At Sea with the New World Order' in *Defense & Diplomacy*, Oct/Nov 1991, p. 51.

²⁸ . See Zimmerman S, 'Maritime Patrol Presents a Varied Menu of Choices' in *Armed Forces JOURNAL International*, January 1992, p. 40.

²⁹ . See Mack, *op cit.*, p. 7.

³⁰ . The inflation rate for navies tends to be worse than it is for armies because navies are more capital intensive. Air Force inflation rates are even greater but achieve less visibility because of lower unit cost. See Till G, *Modern Sea Power*, Brassey's Defence Publishers, London 1987, p. 10.

in anticipation of future need, rather than as a reaction to current events.³¹

On budgetary grounds alone there has been and will continue to be increasing public resistance to the purchase of major warships.³² The widespread domestic opposition to New Zealand's purchase of the ANZAC Frigate well illustrates this trend.³³

Spread of Arms to the Third-World

Third-world countries, though economically poor have often managed to acquire considerable capability in military terms. The extent of the change that has taken place in the last few decades can be easily observed in the massive all arms effort that was required to remove Iraq from Kuwait in 1991. In stark contrast, the deployment of a single commando carrier, HMS BULWARK, was enough to deter Iraq from a similar invasion in 1961.³⁴

The possession of effective guided anti-ship weapons is now commonplace. This capability, combined with the use of relatively cheap sea mines apparently places the realistic potential to exert sea denial within easy grasp of even militarily small nations.³⁵ Further, adding to the threat is the proliferation of

³¹. For example, project planning for the new destroyer to replace the Charles F Adams Class DDG in Australian naval service began in 1988, Government approval will not follow until 1999. Actual building is due to commence in 2001 with the first vessel in service in 2006. With an expected service life of 30-40 years the ship will still be expected to be capable almost 60 years after it was initially conceived.

³². Due to budgetary constraints almost all Western European navies have declined both in numbers of ships and tonnage afloat over the last few decades. The decline has been up to 50% in some cases. See Till G, *op cit*, p. 12.

³³. An opinion poll taken in early 1989 showed that more than 70% of New Zealanders failed to see why the government should spend over \$NZ1 billion on frigates when at the same time it was cutting expenditure on education and social welfare. Quoted in Cheeseman G 'The Frigate Saga Continues' in *Pacific Research*, May 1989, p. 11.

³⁴. Admiral Sir Julian Oswald, 'The Reach and Scope of Maritime Power', presentation to the Royal United Services Institute 15 March 1990, p. 12.

³⁵. In 1991 72 countries had a combined inventory exceeding 20000 anti-ship missiles. By 1997 the threat is expected to expand to 100 countries and more than 40000 missiles. Source - General Dynamics

bacteriological and chemical warheads, to which, it has been argued, naval forces are particularly vulnerable.³⁶ The acquisition of a capacity to prevent operations by an adversary at sea is already the central maritime strategy of several developing nations.³⁷

Utility of Military Power

The expense of employing military power may well outweigh the benefits that will accrue from its use.³⁸ This observation does not just apply to the logistic cost. As noted above, warships are expensive and represent a considerable investment in international prestige. With the proliferation of anti-ship weapons, each capable of achieving a relatively 'cheap kill', it will often not be politically acceptable to risk such a loss.³⁹

Politically-imposed operational constraints were well in evidence in the Western forces involved in the Gulf War and have often been noted in the naval components of other recent wars including the Falklands and Iran/Iraq conflicts.⁴⁰ To maintain public support in the Gulf War there was a real need to keep casualties to a minimum, hence the refusal to sanction an amphibious landing despite intense lobbying from the US Marine Corps (USMC). To use another Gulf example, Australian ships were at first limited only to operations in the relatively secure Gulf

Marketing Department, Rolling Airframe Missile brochure.

³⁶ . Phillips-Beauden, *op cit.*, p. 53.

³⁷ . For example India and Indonesia have both publicly admitted that they are structuring their forces to fulfil, at least in some circumstances, a sea denial strategy. See Stevens D, 'Seapower and the Chinese/Indian Naval Expansion' in *Journal of the Australian Naval Institute*, October 1990, p. 17.

³⁸ . Booth K, *op cit.*

³⁹ . Recent demonstrations of the damage that guided weapons can inflict on large naval vessels include the sinking of HMS SHEFFIELD by the Argentine Air Force in 1982 and the attack on USS STARK by Iraq in 1987. See also Mack, *op cit.*, p. 6.

⁴⁰ . See Till G, *op cit.*, p. 16.

of Oman. Later when operations were extended to the Arabian Gulf⁴¹ the Australian ships were still prevented from being used in the higher threat areas close to Iraq.⁴²

Crisis Control

Navies have traditionally played particularly useful roles in times of tension and crisis.⁴³ In these situations warships can hopefully prevent further escalation or perhaps stop the conflict starting in the first place. However, paradoxically, the advent of more complex technology can also make warships less controllable.

As the speed of modern warfare increases, more decisions are being taken from human operators and left to computers. For crisis-control this has the potential to be de-stabilising, particularly in an air threat environment when automatic target engagement may take place as part of anticipatory self-defence.

The institution of very restrictive Rules of Engagement may help to control this problem but cannot solve it. The shooting down of an Iranian airliner in 1988, after misidentification by the USS VINCENNES, demonstrates the difficulties that will be faced more often in the future.⁴⁴

It has also been argued recently that without the support of a capable (and expensive) carrier battle group (CVBG), surface warships are now too vulnerable to risk in the face of guided-weapons and thus of little utility in a threat area. Furthermore, it has been claimed that individual surface warships will normally

⁴¹. Throughout the Gulf War the term Arabian Gulf was used in preference to Persian Gulf in deference to the sensitivities of the Arab allies.

⁴². The author served on the staff of the Commander of the Australian contingent during the Gulf War.

⁴³. See Allen C, *The Use of Navies in Peacetime*, American Enterprise Institute - Studies in Defence Policy, Washington DC, undated.

⁴⁴. Cordesman A, *The Lessons of Modern War Volume II: the Iran-Iraq War*, Westview Press, San Francisco, 1991, p. 573.

lack the intrinsic offensive power necessary to provide an effective diplomatic presence in a crisis.⁴⁵

Social Concerns

Throughout the developed world there is an increasing trend towards the acquisition of political power by groups outside the old political scheme. These special interest groups, whose primary purpose is to pursue domestic issues such as political, economic or environmental change, do not tend to support large military expenditure or the capability to use it overseas.⁴⁶ A major challenge to all Defence Forces in the future will be simply to justify their continuing necessity.⁴⁷ Following this trend the general naval potential to offensively project power will come under increasingly greater scrutiny. Arguments that naval vessels should be concentrated on coastal protection tasks are already common in many maritime nations.

MARITIME ASPECTS OF THE GULF WAR

In evaluating the strategic changes and criticisms of sea power that have been highlighted above it is now worthwhile to turn our attention to the Gulf War. The role of maritime power is worthy of particular examination because unlike land or air forces, maritime forces were fully employed both before, during and after the war and across the full spectrum of crisis and conflict; from the exertion of influence to large scale conventional war. The Coalition maritime force was also formed from the largest number of individual nations, with over 20 navies

⁴⁵ . Mack, *op cit.*, p. 7.

⁴⁶ . See Warner D, 'Frigates... They've got to be joking' in *Pacific Defence Reporter*, April 1989, p. 15.

⁴⁷ . See comment by the Australian Chief of Defence Force General P Gration in 'Forces must prove worth' in *N T News*, April 10 1992, p. 4.

contributing one or more vessels.⁴⁸

Iraqi Maritime Strategy

Like many third-world countries, the Iraqi armed forces were highly politicised. The Ba'ath Party leadership under Saddam Hussein had never been able to fully trust the armed forces or allow them to become entirely professional.⁴⁹ Thus the conduct and details of operations were in most respects directed from the highest levels while their political character affected all aspects and prevented the accurate collection and interpretation of data.

The extent to which Hussein's strategic thinking was assisted by his military advisors or coloured by his own personal fears and objectives is open to debate. That Iraq seemed to have no coordinated plan other than to sit back and absorb punishment would tend to indicate that Hussein himself, accepted sole responsibility.

Iraqi Objectives

The actual invasion of Kuwait on 2 August 1990 appears to have been primarily caused by a combination of Saddam Hussein's personal ambition, desperation over increasing financial problems, and from a maritime view, Iraq's longstanding desire to obtain better access to the Arabian Gulf.

Iraq's coastline is only 58 km long and its sole major port at Basra is

⁴⁸. Those countries providing naval units included the United States, United Kingdom, France, Canada, Italy, Belgium, Denmark, Norway, Netherlands, Australia, Argentina, Greece, Spain, Portugal, Saudi Arabia, Kuwait and Bahrain. The USSR had naval units in the area but they did not take part in operations. Poland provided two hospital ships.

⁴⁹. See Tusa F, 'Aspects of Arms Absorption in Arab Armies' in *RUSI and Brassey's Defence Yearbook 1990*, Brassey's Defence Publishers, London 1990, p. 341.

only 30 km from Iran.⁵⁰ Basra is situated inland on the Shatt al Arab waterway, which in turn has been the subject of a long-running border dispute with Iran. Thus, Iraq is severely restricted in access to sea communications. One of the major objectives for Iraq in its 1980 invasion of Iran was to gain full control over the Shatt al Arab and by acquiring the Iranian coastal province of Khuzistan secure Iraq's access to the Gulf.⁵¹

At the end of the eight year Iran-Iraq War, Iraq controlled the Shatt al Arab waterway but not Khuzistan. The waterway itself was heavily silted, narrow, and littered with sunken ships. The war left Iraq heavily in debt and with an urgent need to increase oil revenue to help rebuild its shattered economy. Despite having built some additional smaller ports and overland pipelines Iraq clearly believed that its access to the Gulf remained inadequate and that its economic survival was at stake. Having failed to secure access in the east Iraq had little strategic choice but to turn west.⁵² Saddam Hussein appeared to see Kuwait as offering both the assets of one of the wealthiest nations in the Gulf, and ready-made port facilities.

Iraqi Navy

Iraq has long been anxious to be recognised as the principal naval power in the Gulf but it has not had a history of particular affinity with the sea. The Iraqi Navy is the smallest of the three services and is largely manned by conscripts. Like many other developing countries, Iraq possessed a number of reasonably capable fast patrol boats armed with surface-to-surface missiles (SSM). These vessels had been acquired from the USSR but Iraq had also looked further afield for supply and as part of its planned naval expansion, placed orders in Italy for a

⁵⁰ . Figure 1. provides a detailed view of the geo-political situation.

⁵¹ . For a full list of Iraqi objectives see Cordesman A, *op cit.*, p. 31.

⁵² . For more detailed arguments regarding Iraq's strategic motivation see Patton J H, 'More Gulf War Lessons' in *US Naval Institute Proceedings*, April 1991, p. 52.

number of modern frigates and corvettes.⁵³ With the possession of a relatively powerful fleet Iraq hoped to challenge Iranian dominance in the Arabian Gulf and thus exert influence throughout the Gulf region.

Unfortunately for Iraqi maritime aspirations, at the time of the invasion of Kuwait the USSR was neither in a political nor financial position to consider support.⁵⁴ In addition the vessels on order from Italy had been embargoed since the Iran-Iraq war and had still not been delivered. As it eventuated Iraqi surface vessels played virtually no tangible role in the Gulf War. It could perhaps be argued that for a time the Iraqi Navy posed a threat as a 'fleet-in-being', but with its rapid destruction at the hands of coalition air strikes even this role was soon denied it.⁵⁵ By February 2 the USN was able to announce that the Iraqi Navy had; "...passed into history".

Sea Denial

Without a fleet capable of challenging Coalition superiority in the Gulf, Iraq was forced to revert to a denial strategy. The Iraqi strategy aimed to protect what it regarded as its most vulnerable flank, the Kuwaiti coast, from amphibious invasion. The first element of this strategy was the sea mine. Soon after the Iraqi invasion, fixed mine fields, comprising both moored-contact and influence mines, were laid in a crescent covering the approaches to the Kuwaiti coast. In perhaps the greatest Coalition failure of the war this minelaying was allowed to continue unopposed. Subsequently, the moored mines caused severe delays in Coalition activities while those that had broken free or were deliberately set adrift became a constant hazard and concern throughout the Gulf.

From the Coalition point of view the Iraqi mining effort was very

⁵³ . Vlahos M, 'Middle Eastern, North African and South Asian Navies', in *US Naval Institute Proceedings*, March 1988, p. 58.

⁵⁴ . Sharpe, *op cit*.

⁵⁵ . The 'fleet-in-being strategy' is the method by which an obviously second best navy adopts a passive defence, seeking not to pursue the opposing fleet in battle but instead, by simply maintaining its existence, threaten its adversary and thus prevent it from assuming complete control of the sea.

successful. The US amphibious task force commander has been quoted as saying that any prospect of the 17 000 embarked marines storming ashore evaporated after the 17 February mine strikes on the US ships PRINCETON and TRIPOLI.⁵⁶ However, it is also worth noting that Saddam Hussein obviously thought differently. From his point of view it would seem that the Iraqi mine threat failed, while the Coalition amphibious threat remained quite real.⁵⁷

The second successful element in the Iraqi denial strategy was the positioning of coastal 'Silkworm' SSM batteries. These sites were well-camouflaged and comprised decoy sites as well as pre-prepared areas. The presence of these sites forced the coalition to provide constant air defence escorts to mine countermeasures (MCM) and amphibious forces in the northern Gulf. This escort was required even after the Iraqi Air Force and hence the threat from air-launched missiles, had been virtually eliminated.

Despite continued attention from Coalition attack aircraft there was great difficulty in comprehensively countering the Silkworm sites. This was graphically demonstrated by the 25 February attack, albeit unsuccessful, on USS MISSOURI, almost at the end of the conflict.⁵⁸

One further Iraqi operation that may have had a denial motive was the deliberate creation of an oil slick released from the Sea Island offshore oil-loading terminal. By opening the terminal's control valves the Iraqis were apparently attempting to disable the desalination plants on the Saudi Arabian coast. However, the slick also had the potential to limit inshore operations by surface forces and prevent an amphibious assault. Though the initial formation of the slick was not prevented, it was stopped from growing by a swift attack by USN aircraft which shut

⁵⁶. See Evans D E, 'With the Army and Air Force' in *US Naval Institute Proceedings*, June 1991, p. 64.

⁵⁷. Some 10 Iraqi Divisions were tied to the coast to defend against an amphibious landing. See Friedman N, 'The Seaward Flank', in *US Naval Institute Proceedings*, July 1991, p. 83.

⁵⁸. MISSOURI while conducting a naval gunfire support mission was engaged by at least two Silkworm missiles. One missile splashed just after launch, the other was shot down by HMS GLOUCESTER.

off the oil flow.

Subsequently the USN was forced to expend considerable assets in monitoring the oil slick. Aircraft were tasked to report on the slick's progress several times a day and great efforts were made to place Coalition containment actions in a favourable environmental light.

In common with Iraq's overall strategy the maritime element was characterised by an inability to take the initiative and react in any organised way to Coalition activities. The preoccupation with 'digging in' and trying to ride out the Coalition onslaught was doomed from the start to failure. Had Iraq attempted to make better and coordinated use of its assets it could have caused many more headaches for the Coalition.

Despite the Coalition's undoubted preponderance in maritime power it was hampered by the necessity to limit both materiel and human casualties. An early success by Iraq against even one of the Coalition's naval vessels would have meant not only an important propaganda victory but would almost certainly have caused all naval forces to move away from Kuwait and further down the Gulf. There they would have been less able to individually project power. If the success had been against a minor Coalition member it might even have resulted in the withdrawal by that member of other engaged forces.

Coalition Maritime Strategy

The contribution of the Coalition maritime forces was essential to the war effort for the simple reason that for most of the Coalition members the war was overseas and virtually all heavy equipment had to come by sea. The Coalition was indeed fortunate that several members had for some time maintained a forward naval presence.⁵⁹ By having powerful naval forces on station and ready from the

⁵⁹. The USA, UK and France had maintained a permanent naval presence in the region since well before the Iran/Iraq War.

outset the Coalition was able to ensure that sea control in most areas was never seriously challenged.

Coalition Objectives

Unlike the situation in Vietnam, the Coalition had a clearly defined aim and achievable objectives. Also unlike Vietnam, the military requirement to concentrate overwhelming force was accepted from the start. Though the primary political objective was the ejection of Iraq from Kuwait economic factors also played a major role. The United States had for a considerable time declared that guaranteed access to Gulf oil was a crucial component of its national security.⁶⁰ This perception reflected not so much on the United States's own oil requirements as on those of its industrial partners in Asia and Europe.

The Gulf region contains more than 50% of the world's proven oil reserves and is thus also critical to the stability of the world economy. The apparent danger of Iraq continuing its invasion to threaten Saudi Arabia and its own substantial proportion of oil reserves only served to reinforce the threat to global economic security and the need for significant international reaction.

Initial Maritime Reactions

Soon after the Iraqi invasion Saudi Arabia called for assistance under Article 51 of the UN Charter. The provisions for collective self-defence provided a suitable justification for the deployment of outside military force.⁶¹ However, though the first military reactions were predominantly designed for the defence of Saudi Arabia another factor soon came into play. Closely following the initial resolution, calling for Iraqi withdrawal from Kuwait, the United Nations Security Council (UNSC) implemented a series of mandatory economic sanctions banning the trade of

⁶⁰ . For a history of declared United States interests see Hickman W, 'Confrontation in the Gulf: Unintended consequences' in *US Naval War College Review*, Winter 1991, p. 55.

⁶¹ . Article 51 reads in part; "Nothing in the present Charter shall impair the inherent right of individual or collective self-defence..."

all goods to and from Iraq.

To enforce and support this trade embargo and with the primary backing of the United States, a multi-national naval force (MNF) was formed. From within this grouping the local US Commander, COMIDEASTFOR⁶², became defacto Commander of the Maritime Interception Force (MIF) with overall responsibility for coordinating the MIF operations. Though never formally constituted and having no United Nations standing the MNF provided a convenient rallying point for those countries choosing to become actively involved but not necessarily wishing to commit forces on the ground.

The provision of naval units rather than ground or air forces offered some significant advantages. Firstly, naval forces tend to be at a higher state of combat-readiness than other armed forces and normally operate fully ammunitioned and supplied. Secondly, naval forces are not dependent upon politically sensitive shore support in a foreign country. Thirdly, naval forces have comprehensive communications suites and can in theory at least, be controlled by government at all times. Fourthly naval vessels are inherently mobile and can therefore be withdrawn or committed as required. Finally, it was more politically acceptable in countries such as Australia and Argentina to only provide naval units. At least initially, ships were truly required to enforce the trade sanctions while aircraft or troops would only have been suitable for actual conflict.

As the MNF was not a formal body, allocation of forces was on the basis of loose association with the USN command, in this way individual governments still retained full command and control. Countries with a more substantial presence in the area such as the United States, United Kingdom and France allocated a small proportion of deployed vessels to the MNF while the others remained on independent national operations.

⁶². Commander Middle Eastern Forces.

Maritime Interdiction

The MNF fleet maintained an average of some 80 vessels in theatre and of these at least 20 were dedicated to MIF operations. The immediate objective of the MIF was to enforce the trade embargo against Iraq. To do this the MIF required to intercept, challenge, and at times visit, board and search merchant vessels to determine their cargoes, destination and last port of call.

Despite Iraqi criticism that this was in effect a 'starvation blockade' this was not the Coalition intention. Instead the embargo primarily sought to deprive Iraq of its oil export income and international support for its military forces. Though Iraq is virtually self-sufficient in small arms and ammunition it does not have the capability to manufacture spares for more sophisticated systems. A large proportion of the Iraqi fleet of MiG 21 aircraft for example, were in Yugoslavia being repaired when the embargo began.⁶³

The legality of the embargo was initially questioned, not least because a blockade has been defined as an act of war and the overt act of a declared belligerent nation. The Coalition forces had not declared war and were ostensibly in place to defend Saudi Arabia. Thus, some countries such as Australia and Canada initially planned to restrict their ships to monitoring observance of the sanctions and would not allow an active role in stopping ships or checking cargoes.⁶⁴

On 25 August however, the UNSC agreed to Resolution 665 which called for; "*...all UN member states with navies to take all necessary measures to stop ships in the Gulf area and check cargoes and destinations.*" This resolution was interpreted by the US and most other Coalition nations as allowing the use of necessary and proportional force as an exercise of collective self-defence under the

⁶³. See Friedman N, 'World Naval Developments, 1990' in *US Naval Institute Proceedings*, Naval Review Issue 1991, p. 177.

⁶⁴. See Lynch T, 'Canada in the Gulf - Operation Friction' in *Navy International*, November 1990, p. 391, and Stevens D, 'Operation DAMASK - The RAN Contribution to the Gulf War' in *Australia's Navy 1991-92*, AGPS, Canberra 1991, p. 15.

UN Charter.⁶⁵

As Ronzitti has argued in his treatise on the law of naval warfare, measures of economic warfare are not in themselves inconsistent with the right of self-defence.⁶⁶ Thus the resolution effectively removed any ambiguity and silenced most of the remaining criticism. However, to further allay political sensitivities the actual term 'blockade' was deliberately never used by the Coalition when referring to the embargo.⁶⁷

Once instituted, the maritime embargo was extremely effective and no goods were able to enter Iraq by sea. The Coalition forces were unquestionably superior to the Iraqi Navy and a close blockade was not necessary. The MIF could easily control access to Iraq via the remote choke points of the Strait of Hormuz and Gulf of Aqaba. Other than the occasional sign of obstinacy by some of the merchant ships intercepted, Iraq did not attempt to cross the blockade.⁶⁸

The vast majority of boardings were carried out in the Red Sea. Here every vessel bound for the port of Aqaba in Jordan had to be boarded. This precaution was necessary because of Jordan's announced sympathies with Iraq and the likelihood that contraband would be moved from the port overland to Iraq, thus avoiding the embargo. In the Arabian Gulf however, seaborne traffic to and from Iraq and Kuwait virtually ceased with only the occasional Iraqi vessel coming to attention, usually returning empty from overseas.

The Iraqi merchant fleet comprised only some 50 vessels and from the

⁶⁵ . See Delery T, 'Away, the Boarding Party' in *US Naval Institute Proceedings*, Naval Review Issue 1991, p. 66.

⁶⁶ . See Ronzitti N, *The Law of Naval Warfare*, Marinus Nijhoff Publishers, The Netherlands 1988, p. 4.

⁶⁷ . To avoid legal problems and troubles with neutral nations in neither of the two world wars was a blockade of Germany ever actually declared by the UK. See Roskill S W, *op. cit.*, pp. 107-110.

⁶⁸ . Iraqi merchant ships had been ordered by Saddam Hussein not to stop for boarding and search by Coalition forces. To force these ships to stop warning fire was initially used, later it was found to be more effective to insert boarding parties by helicopter and physically seize control of the ship.

very beginning of the crisis the movements of these were closely monitored by the US surveillance and intelligence network. However, the number of other merchant vessels plying the area was considerable and in the period August 1990 to April 1991 over 9200 merchant ships were challenged, over 1200 boarded and at least 67 diverted for carrying prohibited cargo.⁶⁹

The Coalition embargo could not achieve its fundamental objective of forcing Iraq to leave Kuwait for the simple reason that during the crisis Iraq was not fundamentally dependent upon imports. With rationing, Iraq could be virtually self sufficient in food and as Iraq was not engaged in offensive war it was not using up war material. Therefore, in the long term the economy might collapse but Iraq could not be completely choked.

Military Sealift and Sea Lines of Communication

Some of the most memorable initial images from the Gulf War were of heavy transport aircraft disgorging troops and supplies, yet despite the use of these aircraft more than 90% of material to support the US campaign still came by sea.⁷⁰ For the Coalition as a whole the total is closer to 95%.⁷¹ On completion of the operation, with some of the urgency removed, over 95% of US cargo was sent back by sea.⁷²

Though US Air Force and other aircraft were flying into Saudi Arabia from the very beginning of the crisis they could not bring sufficient quantities of ordnance or fuel with them. The only oil refinery in the region able to produce aviation quality fuel was in Kuwait, while the massive amounts of ordnance required rendered air transport impractical. The Coalition Armoured Divisions were also not air transportable.

⁶⁹ . *The USN in "Desert Shield"/"Desert Storm"*, p. vi.

⁷⁰ . *Ibid.*, p. vi.

⁷¹ . Wettern D, 'Euphoria hides shipping deficiencies' in *Asia-Pacific Defence Reporter*, April 1991, p. 19.

⁷² . *Ibid.*

The eventual success of 'Desert Storm' also owed much to the worldwide logistic prepositioning and enhancement of strategic sealift that the USN had undertaken in the 1980s. The strategic sealift requirement included both the initial surge capability and sustainment shipping for resupply. The assets from stockpiles onboard Maritime Prepositioning Squadrons in such places as Diego Garcia and Guam provided most of the essential fuels and cargo in the first weeks of the crisis. The US Military Sealift Command (MSC) delivered the first heavy ground equipment to Saudi Arabia on 15 August only eight days after the decision to deploy US forces.

Overall, according to the USN, only 4.4% of the strategic sealift capability was used for the in-theatre support of naval forces.⁷³ Naval forces by their very nature relied instead on self-sustained logistic support capability.

It must be also be noted however, that the Coalition was very fortunate that Saudi Arabia had a suitable infrastructure,⁷⁴ that an extended deployment period was available and that no major threat to the SLOC eventuated. While Iraq itself did not have the military capability to directly interfere, there were concerns that other countries might try to assist the Iraqi cause.

Though perhaps not willing to risk overt action Libya had demonstrated in 1984 how a few mines deployed from a merchant ship could cause enormous disruption.⁷⁵ The possible threat from this direction resulted in elements from the NATO naval formations NAVOCFORMED⁷⁶ and STANAVFORCHAN⁷⁷

⁷³. The USN in *"Desert Shield"/"Desert Storm"*, p. 62.

⁷⁴. Saudi Arabia had for the previous 20 years; "...been over-building industrial, commercial and transportation facilities, including more than 30 air bases and eight modern port facilities." See *The USN in "Desert Shield"/"Desert Storm"*, p. 52.

⁷⁵. In 1984 about 20 ground mines were covertly laid in the Red Sea causing damage to 18 different merchant ships and virtually closing the Red Sea for 6 weeks. The Libyan Ro-Ro vessel GHAT was the likely culprit. See Moore J, 'Red Sea mines a mystery no longer' in *Jane's Naval Review*, Jane's Publishing, London 1985, p. 64. In addition Libya possessed several submarines which could also have caused severe disruption to merchant traffic.

⁷⁶. Naval On-Call Force Mediterranean.

patrolling Mediterranean shipping routes throughout the conflict.⁷⁸ Though NATO, as an alliance, did not directly intervene in the Gulf War the patrols did act to protect shipping and guarantee freedom of navigation in the Mediterranean.⁷⁹

Other countries with pro-Iraqi or ambiguous leanings were also suspect. Yemen could have caused problems to shipping in the southern Red Sea, while Iran with its avowed anti-Western stance held a commanding position over the Strait of Hormuz. One of the most credible threats though, was terrorist activity, particularly against a shipping bottle-neck such as the Suez Canal. The prolonged blockage of the canal would have added some 3,500 miles to the transit of material from America with attendant delays and reduction in shipping capacity. Egypt initiated increased security precautions to prevent such an attack, particularly during the transit of high-value units. Daily minesweeping operations in the canal also became routine.⁸⁰

Power Projection and Conflict Operations

In the Gulf War maritime forces undertook both direct support of land operations and independent action at sea. Surface combatants carried out aircraft, gunnery and missile strikes against land and sea targets, amphibious forces conducted landing exercises and feints to confuse Iraqi planning and the MCM forces cleared paths through the minefields. The USN was eventually to describe the operation as:

*"...the most complex, fast moving, successful, major joint power projection operation in history."*⁸¹

⁷⁷ . Standing Naval Force Channel.

⁷⁸ . See Wettern D, 'Sea lines cause concern' in *Asia-Pacific Defence Reporter*, March 1991, p. 5. and *NATO'S Sixteen Nations*, May/June 1991, p. 87.

⁷⁹ . NATO does not have authority to deal with situations outside its borders. Instead the Western European Union (WEU) coordinated the military deployments of its member states. This was the first time in the history of the WEU that its military chiefs had met to organise specific military measures.

⁸⁰ . 'War in The Gulf' in *Navy International*, February 1991, p. 38.

⁸¹ . *The USN in "Desert Shield"/"Desert Storm"*, p. v.

USN aircraft carriers formed the most obvious and effective instrument of power projection, offering the substantial advantages of long range, staying power and mobility. With the fortunate proximity of the USS INDEPENDENCE and USS EISENHOWER CVBGs the USN was able to provide sustainable combat capability within three-and-a-half days of the initial Iraqi invasion. For a considerable time these carriers provided the only air power fully available for action.

The view of many in the USN and even General Schwarzkopf is that Saddam Hussein was deterred from continuing his invasion into Saudi Arabia by the immediate response of the carriers in establishing sea superiority.⁸² However, even if Saddam was not stopped at Kuwait because of the rapid arrival of the CVBGs and their power projection potential, he was at least forced to pause and rethink his strategy. This delay allowed the rapid deployment of ground and air forces to get under way and eventually remove the option of any further Iraqi expansion.

Carriers by virtue of their positioning enjoyed other advantages over land-based air. Those in the Red Sea were able to strike targets in Western Iraq without having to fly over major concentrations of Iraqi surface-to-air missiles (SAMs). While those carriers in the Arabian Gulf were closer to Iraq than any airfield ashore and thus able to deliver very high sortie rates. These details should not however, obscure some of the limitations that were also demonstrated. The Red Sea carriers for example, were heavily reliant on Air Force land-based tanker aircraft. It has been estimated that the sortie rate would have been reduced by more than two thirds had the carriers been forced to rely on organic tanking.⁸³

A previously untested tool of maritime power projection was the use of the Tomahawk Land-Attack-Cruise-Missile (TLAM) in strike warfare. These weapons were primarily used in situations where the risk to manned aircraft was deemed to be unacceptable. The TLAM had its most significant successes in destroying heavily defended targets in Iraq and in seriously degrading enemy air

⁸² . See Schwarzkopf N, *op. cit.*, p. 44.

⁸³ . See Mixson R D, 'Where We Must Do Better' in *US Naval Institute Proceedings*, August 1991, p. 38.

defences.⁸⁴ The success of the cruise-missile was seen by most commentators as a graphic demonstration of how advanced technology can achieve strategic and tactical advantage.

Command Control and Communications

The political and strategic direction of the Gulf War came initially from the UNSC. However, this direction was extremely limited and the United Nations did not, as it had done in Korea, provide a single UN Command. Thus it was only natural that the United States as the provider of the bulk of military forces would assume the role of Commander-in-Chief and Coalition coordinator.

Though retaining national command, several of the Coalition navies did place their vessels under USN tactical control prior to the opening of hostilities. This provided a much tighter and more effective degree of control during combat. Rules of Engagement (ROE) were a particularly difficult area with a serious potential for misunderstandings to arise.⁸⁵

As each nation was working under its own political restrictions arranging coordinated action was at times difficult. Restrictions usually involved a prohibition on ships assuming a direct offensive role or imposing geographical limits on operations.⁸⁶ These problems were circumvented by having restricted ships act as escorts and surveillance assets in the Strait of Hormuz and Southern Gulf. These were essential tasks but would have been a mis-employment of the more highly capable units of the major navies.

Prior to 'Desert Storm' it was rare to find two USN carriers working together in an integrated command and control structure and claims had been made

⁸⁴ . *The USN in "Desert Shield"/"Desert Storm"*, p. i.

⁸⁵ . For a more detailed discussion of ROE during 'Desert Storm' see Parks W, 'Rules of Engagement: No More Vietnams', in *US Naval Institute Proceedings*, March 1991, p. 27.

⁸⁶ . Navies limited to the Southern Gulf included those of Denmark, Belgium and Argentina.

that any more would be too complex to operate effectively.⁸⁷ Battle Force Zulu, the Arabian Gulf naval force, eventually comprised four carriers, their escorts and a large number of multinational forces, and no insurmountable problems developed.

One of the most impressive features of the naval war in the Gulf was the way ships from different nations were able to operate together with such a remarkable degree of cooperation and that no 'blue-on-blue' engagements occurred.⁸⁸ Many of the nations were either members of NATO or used NATO procedures but the ability to integrate without any previous experience was by no means inevitable.

The smooth integration of the MNF and the international cooperation displayed, even without a formal structure, is in marked contrast to the experience ashore. In his preliminary report General Schwarzkopf stated that on land;

*"Establishment and implementation of Coalition command relationships were difficult ... national pride, politics and public perception ... resulted in formal command relationship structures which ... complicated rather than simplified the commands ability to execute the mission."*⁸⁹

MARITIME LESSONS OF THE GULF WAR

Though not all areas of maritime strategy were tested during the Gulf War the maritime activities of Iraq and the Coalition did bring out a number of new and old lessons regarding the use of maritime power.⁹⁰ Those points which follow should by no means be regarded as comprehensive but do serve to illustrate the

⁸⁷ . Palmer M, 'The Navy Did Its Job' in *US Naval Institute Proceedings*, Naval Review Issue 1991, p. 88.

⁸⁸ . A 'blue-on-blue' engagement describes the unintentional firing by units at forces on their own side.

⁸⁹ . *The USN in "Desert Shield"/"Desert Storm"*, p. 24.

⁹⁰ . Some areas not tested included; limited access to support bases, an opponent who receives support from a powerful ally, rapid transition to hostilities and a significant submarine and surface threat.

scope.

Utility of Maritime Power

Despite idealistic claims that war has become too costly to be used as an instrument of political policy, the Gulf War demonstrated that armed force still has a very real role to play in government thinking. Military forces will continue to be seen as a significant component of national power and prestige. It would also seem from the Gulf experience, that navies, despite their cost, remain a particularly flexible instrument in advancing political and economic security.

Sea Denial

Though the overall Iraqi strategy failed, the lessons drawn from the Iraqi experience will not be lost on other third-world countries. The Iraqi minefields in particular, demonstrated once again how relatively simple measures can require significantly greater countermeasures in response. Echoing the lessons of earlier wars, the US naval commander, Vice Admiral Stanley Arthur, made the comment:

*"Low-technology mines are one of the most cost-effective weapons in existence."*⁹¹

The effective use of such low-cost weapons combined with the possession of more capable guided weapons, will increase the ability of smaller powers to influence what goes on in their own coastal regions. The Gulf War demonstrated that in regional conflicts western powers are less willing to accept losses. If a Third-World country can achieve a realistic sea denial capability it may reduce the likelihood of foreign intervention or, by inflicting disproportionate losses, ensure that further intervention will be deterred.

⁹¹. Arthur S, 'Desert Storm at Sea' in *US Naval Institute Proceedings*, Naval Review Issue 1991, p. 86.

Sea Control

Despite the reduced threat to SLOC in the open ocean, the possession of local sea control has again been shown to be a primary prerequisite for the successful projection of maritime power. With the notable exception of the Kuwaiti coast, the Coalition possessed control in most sea areas from the beginning of the crisis and fortunately did not have to fight for it.

Without sea control in the central and southern Gulf the Coalition build-up and final offensive could not have taken place. Without guaranteed sea control, foreign ships would have been less likely to accept charter. With sea control, important Middle East commercial trade routes were kept open and oil continued to be exported out of the Gulf throughout the conflict.

Maritime Interdiction

Though the UN embargo failed to force Iraq to withdraw from Kuwait the operations were technically successful and did reduce Iraqi war preparedness.⁹² As stated by Admiral F B Kelso, USN Chief of Naval Operations:

"Interdiction of Iraqi seaborne trade ... cut enemy resupply, dampened their will to fight and significantly impacted Iraq's economic health".⁹³

The cooperative operations of the MNF also had important political implications. The embargo provided a reasonable alternative to war while at the same time expressing international concern over the Iraqi invasion. The international nature of the Coalition was continuously stressed in public pronouncements concerning interceptions and boardings. The use of large numbers of Coalition ships in single boarding operations could hardly be classed as economy

⁹². According to General Schwarzkopf, overall commander of the Coalition forces, Iraq lost 90% of its imports, 100% of its exports and had its GNP cut in half. See Schwarzkopf N, 'A Tribute to the Navy-Marine Corps Team' speech quoted in *US Naval Institute Proceedings*, August 1991, p. 44.

⁹³. *The USN in "Desert Shield"/"Desert Storm"*, p. ii.

of effort but politically was considered an important way of demonstrating resolve.⁹⁴ The embargo also had the indirect effect of providing a secure foundation for the future conflict by allowing countries time to acclimatise themselves before finally committing forces to offensive action.

Power Projection

The USN CVBG was yet again shown to be a flexible and effective asset for power projection. The embarked carrier air wings were vastly superior both in training and quality of equipment to any of the Middle Eastern air forces. Thus the arrival of the carriers immediately stabilised the situation, reducing Iraq's military options and exposing their forces to attack. The carriers were also a very visible and practical method of demonstrating US resolve to defend Saudi Arabia and other friendly Gulf countries.

Despite claims to the contrary, carriers and their escorts are relatively difficult to successfully attack. It has been noted for example, that a single 'Scud' SSM armed with a chemical warhead could have put a land airbase out of action. In contrast a carrier, despite the threat of guided weapons, might well have been immune, not only because of its layered defences, but also because Iraq lacked the means to locate surface ships and track them well enough to attack them.⁹⁵

Another important point is that warships of whatever nationality were sovereign territory, unlike the land bases which ultimately were under the control of the host country. USN ships could thus possess nuclear weapons which could not otherwise be allowed ashore and out of national control. Without useable weapons in theatre the US could not have realistically provided the implicit threat of 'terrible escalation' should Saddam resort to chemical or biological weapons.⁹⁶

⁹⁴. For example the boarding of the single Libyan sponsored 'Peace Ship' IBN KHALDOON was effected through the combined efforts of 7 USN, Royal Navy and Australian ships. A Danish warship had also volunteered but was unable to reach the scene in time.

⁹⁵. Friedman N, 'The Seaward Flank' in *US Naval Institute Proceedings*, July 1991, p. 81.

⁹⁶. *Ibid.*

As noted by Admiral Dunn of the USN:

*"With nations understandably sensitive about foreign bases on their soil and nervous about foreign military aircraft overhead, only naval forces can guarantee an immediate response in support of allies."*⁹⁷

The Gulf War has also demonstrated the way the cruise-missile has extended the reach and flexibility of sea power. Though the actual number of TLAMs deployed was small they did show that they could achieve delivery accuracy as good as, if not better than a manned aircraft. By being unmanned, weapons such as the TLAM also had a psychological effect that may well have been in excess of the physical effect of the warhead. The cruise-missile is still not a complete solution however, and retains the major disadvantages of cost and lack of flexibility when compared to manned aircraft. The TLAM, for example, cannot be recalled after launch or engage targets of opportunity.⁹⁸

The other guided weapon that achieved significant success was the helicopter launched air-to-surface missile (ASM). This weapon was effectively deployed from both Royal Naval (RN) and US Marine helicopters and was responsible for a significant proportion of Iraqi naval losses.⁹⁹ In terms of weapons expended and immediate effectiveness the helicopter launched ASM proved more effective than both unguided and precision ordnance delivered by fixed-wing aircraft.¹⁰⁰

⁹⁷. Dunn R F, 'Always There - Always Ready' in *US Naval Institute Proceedings*, October 1990, p. 12.

⁹⁸. For a detailed criticism of TLAM see Froggett S, 'Tomahawk in the Desert' in *US Naval Institute Proceedings*, January 1992, p. 71.

⁹⁹. According to Commodore C Craig, Commander of the RN Task Group, RN helicopters neutralised more than 25% of the prime Iraqi surface units. See 'Desert Shield/Desert Storm - The Right Flank', in *The Naval Review*, Vol 80 No.1, January 1992 p. 7.

¹⁰⁰. See Grove E, 'Navies in Future Conflicts', paper prepared for Conference Naval Power in the Pacific Towards the Year 2000, Australian Defence Force Academy Canberra, 13-14 May 1991.

Sea Lift

The Coalition sealift capability was vital to the assembly and sustainment of such a large force. Air transport in contrast served as a supplementary rather than a substitute service. To illustrate the difference in capability, at the peak period of deployment on January 2 1991, the US MSC had 172 ships underway.¹⁰¹ Any three of these ships carried as much cargo as the combined capacity of the total US airlift.

There were however, weaknesses in the logistics train. For example there were too few crews to man the US reserve-force ships, while even before January 16 there were several instances of merchant crews refusing to sail for the Gulf with military stores embarked.¹⁰² If any cargo ship had actually been sunk or damaged there may well have been difficulties in finding sufficient crews to maintain the necessary level of supply.

Moreover, US shipping requirements had been calculated on trans-Atlantic voyages to resupply Europe, the much longer voyage to the Gulf required many more ships for the same transport capacity. Post-war US reports admit that US sealift fell behind schedule and, that there was a shortage of pre-positioned supplies.¹⁰³ Because of hull shortages both the US and UK also had to rely on chartered, flag of convenience, ships for much of their cargo carrying.¹⁰⁴ The MSC for example carried only three quarters of the seaborne cargo on prepositioned ships, fast sealift ships and vessels activated from the Ready Reserve Force.¹⁰⁵ Chartered merchant ships made up the difference.

¹⁰¹ . *The USN in "Desert Shield"/"Desert Storm"*, p. 30.

¹⁰² . Wettern D, 'Euphoria hides shipping deficiencies' in *Asia-Pacific Defence Reporter*, April 1991, p. 19.

¹⁰³ . See 'Gulf report lists US shortcomings' in *Jane's Defence Weekly*, 27 July 91, p. 135.

¹⁰⁴ . Of the 142 ships chartered by the UK government only eight were British flagged. figure quoted in Wettern D, 'Unofficial Navy add-ons worked well' in *Asia-Pacific Defence Reporter*, May 1991, p. 12.

¹⁰⁵ . Rost R, 'Studies in Logistics' in *Center for Naval Analyses Biennial Report 1989-1990*, Virginia, p. 14.

Technology

The Gulf War has for many analysts demonstrated the strategic and tactical advantages of high technology. One of the more commonly quoted axioms from the war was the claim that; "*high technology works*" and that this would cause major reassessments of third-world military strategies.¹⁰⁶ A particular example used was the success of helicopter-launched ASM against fast patrol boats, thus, according to some, rendering these vessels and hence most small navies, obsolete.¹⁰⁷ Such shallow analysis only serves to cloud more reasoned examinations. It would presumably be just as true to say that "*low technology worked*" if you are referring to the Iraqi mining effort.

Though important, the advantage of high technology should not be overstressed. Precision weapons are only as good as the mapping, tracking and intelligence information supporting their targeting. The acquisition of this information can involve many assets and require significant effort.¹⁰⁸

Historical experience has shown that the technology advantage is at best transient, while technology itself is simply the next level down below tactics, strategy and grand strategy. Technological advances have been evolutionary rather than revolutionary and do not, as a rule, mean that the fundamental principles of strategy have altered.¹⁰⁹ What is more usual is that advances in countermeasures proceed at the same pace and that a 'see-saw' battle develops on the tactical level.¹¹⁰

¹⁰⁶ . Dunn R, 'Early Gulf War Lessons', in *US Naval Institute Proceedings*, March 1991, p. 25.

¹⁰⁷ . See for example Slade S. 'The FAC's End Approaches' in *Naval Forces*, 3/91, p. 12.

¹⁰⁸ . The TLAM uses terrain matching for navigation and prior to 17 January much work had to be done to map and plan the missile missions. The mapping of the theatre that the USN had achieved during the previous Iran/Iraq War had been directed primarily against Iran and though still useful, was insufficient for targets in Iraq.

¹⁰⁹ . For a discussion of evolutionary and revolutionary change see Pugh P, *The Cost of Sea Power*, Conway Maritime Press, London 1986, p. 222.

¹¹⁰ . In this way the struggle between submarine and anti-submarine forces has swayed back and forth all this century, with neither maintaining a permanent advantage.

Naval Presence

The presence of Coalition naval forces in the Middle East prior to the Gulf War had important implications for the future conduct of the war. Without the experience of an established presence to draw on, Coalition forces would have taken much longer to adapt to local conditions. Without the previous presence of naval forces, regional nations would have been much more reticent in providing the increased support infrastructure required.

Though the war has now ended MNF vessels remain on patrol. In this way pressure is being maintained on Iraq to comply with the provisions of the ceasefire agreement. As ground and air forces deployed overseas diminish due to political and economic pressures the naval presence role will assume even more importance as a highly visible means of demonstrating capability, interest and if required, direct support.

Joint and Combined Military Operations

Few if any nations can now hope to ensure sufficient military capability across the entire range of military options available to an opponent. As it eventuated, even the United States would have had difficulty absorbing the cost of the Gulf War had it not been for the international contribution.

Joint operations at all levels in the Gulf helped to provide an effective combination of force components, and strengthen diplomatic cohesiveness.¹¹¹ Naval cooperation is regularly practised around the world and is generally seen as an important means of strengthening defence ties. As already noted it also has the advantage of infringing no foreign territory. The Gulf War has already been seen by many analysts as an example of the type of joint power projection operations that

¹¹¹. During the Gulf War the contribution of the European minesweepers helped to fill a significant capability gap in the USN inventory.

may be anticipated in the post-Cold War world.¹¹²

The Gulf War In Perspective

Before deciding how relevant the lessons of the Gulf War are to future maritime strategy and roles, the war itself must be put into its correct strategic perspective. Like the Falklands War before it, the Gulf War can be seen as the result of a unique set of circumstances and care must be taken when drawing up conclusions. Certainly, future conflicts may not occur in regions where comprehensive friendly support is available and where a six month period is available for an offensive build-up.

The pace of change in the last few years has shown that the world's geo-political climate will continue to be unpredictable. There are however some general and identifiable strategic principles which can provide a reliable foundation, regardless of future directions. Some of these key elements, which will characterise the future strategic environment, are as follows:

- The high levels of destruction inherent in modern weapons, the interdependency of the world economy and the lack of a serious military challenger to the United States, means that the likelihood of global or intercontinental warfare will continue to decrease.
- Without the need to provide a strategic balance to the Soviet Union, the West and the US in particular may be able to base decisions on a more objective view of national interests. However, economic interdependency will still mean that major economic powers such as the US and Japan cannot afford to remain isolated from international developments.
- Worldwide commerce and hence the importance of sea lines of

¹¹². See for example Watson B W, in *Military Lessons of The Gulf War*, Greenhill Books, London, 1991, p. 214.

communication will not diminish. In areas of economic growth such as the Asia/Pacific region, many nations have large and expanding national-flag merchant and fishing fleets and have an increasing concern for the security of seaborne trade.

- Emerging global powers like China, India and Japan are including a large naval element in force expansion. These nations are likely to be more prepared to make use of maritime operations to influence and control events, at least within their own region.
- Internal conflicts will remain and in a multi-polar world, the need for developing nations to assert their statehood and independence means that rivalry, complexity and uncertainty will still arise.
- Regional conflicts will provide the most likely area for international military involvement and perhaps an increasing requirement to contribute to UN or other collective security arrangements, albeit on a smaller scale than in the Gulf.
- The proliferation of navies has provided the capability for local conflicts to extend outside local boundaries, thus increasing the risk that the reach and scope of that conflict may be extended.¹¹³
- In the West there will be continuing pressures to reduce overall defence costs, eliminate redundancies and economise on operations. Elsewhere, in areas of economic growth there will be a general rise in technological competence including defence capability.
- Worldwide interest in exploiting offshore areas for economic and strategic defence purposes will continue and expand.

¹¹³. A good example of this is the way that the Iran-Iraq 'tanker war' spread to involve many countries other than the two combatants.

THE FUTURE FACE OF MARITIME POWER

To cope with the unpredictable nature of future circumstances and contingencies the elements of military force must be highly adaptable. Flexibility and versatility are the key issues but are unfortunately very difficult to quantify. For a fleet, flexibility will most probably mean a mix of mobility and the ability to carry a wide variety of weapons. Though future naval development will vary widely according to individual security perspectives and economic circumstances the preceding analysis has at least identified some common trends.

Naval Vessels

Despite the relatively high cost of naval vessels the priority placed on maritime development by smaller states is likely to remain high.¹¹⁴ As an example, in South East Asia, far from Europe and where the fear of Chinese and Vietnamese expansionism remains, there appear few signs of the 'peace dividend' so vigorously pursued in the West. Other than in the Philippines the defence budgets of all other ASEAN nations have increased during the past three years.¹¹⁵

In the West if further reductions in naval forces cannot be achieved without reducing commitments, then declining construction budgets dictate more affordable ships. If however, lower unit costs cannot be achieved, then the smaller number of remaining ships must be made to last longer. Combatant capabilities will, more than ever, need to keep pace with an evolving threat and changing mission requirements. Part of future design will therefore be durability, both in material and technology.

Modern ship builders, such as the German firm Blohm and Voss, have

¹¹⁴. The authoritative reference, *Jane's Fighting Ships*, listed 67 navies in the 1958-59 edition, 91 in 1966-67, 135 in 1976-77 and 150 in 1986-87.

¹¹⁵. See Lewis Young P, 'Southeast Asian nations see no sign of "Peace Dividend"', in *Armed Forces Journal International*, February 1992, p. 30.

for several years been stressing flexibility in their basic designs. This approach has already achieved substantial export success.¹¹⁶ To allow for future variations in role and threat, containerisation of weapons and other ship systems is another option gaining increasing favour.¹¹⁷ Also being widely fitted is the vertical launch system, which can handle a variety of different ordnance in the same basic design.

For the USN the reduction or complete elimination of overseas basing will mean that very long endurance is likely to be emphasised. With reduced assets USN forces may no longer be tied to specific regions. More emphasis will be placed on the ability to move between theatres and concentrate when necessary. The priority on expensive assets such as SSNs will continue to reduce. Though SSNs have proved useful in limited wars such as the Falklands, other types of vessels are more flexible in local wars.

Endurance, habitability and seakeeping will also be major considerations for those nations wishing to conduct effective patrols of large EEZs. High speed and a capable weapon fit will also be needed if the vessel is to have credibility in enforcing state interests.

The patrol craft has been and will continue to be the primary asset of the smaller navy. The number of missile armed patrol boats will continue to increase as smaller nations seek to acquire credible sea denial capabilities.¹¹⁸ The numbers of these small combatants will also increase in larger navies because of budget constraints. At the same time smaller vessels will have difficulty avoiding increases in cost as they attempt to attain the necessary level of capability performance to meet modern threats.

¹¹⁶ . Blohm and Voss have sold variants of their Meko design to Argentina, Nigeria, Turkey, Greece, Portugal and Australia.

¹¹⁷ . The Danish StanFlex 300 corvette was designed with a varied suite of containerised weapons and sensors that can be changed in less than 24 hrs to suit a particular role.

¹¹⁸ . In 1960 only the Soviet Union possessed missile armed patrol boats. By 1974 there were 450 of these vessels in 31 countries and by 1986 over 1000 boats in 60 countries. Figures quoted in Boothby D, *op cit.*, p. 79.

Sea Denial

The trend to powerfully arm third-world countries will continue, assisted by arms manufacturers and governments seeking to reduce development costs by ensuring export. Western navies will however, continue to hold the lead in technical and operational matters for some time and larger navies could normally deploy sufficient strength to obtain local sea control against a third-world threat. But with an increasingly sophisticated threat the possibility of high levels of destruction will make political decision-making more complex. This will pose particular problems for medium-sized powers such as Australia which cannot afford the multi-layered naval defences available to the larger powers.

Thus developments in technology, which were previously perceived to favour the Coalition in the Gulf War, can also be seen to have had a levelling effect between developed and third-world countries. At times giving the smaller navy the chance to bully the larger in situations short of war and allowing it to exert more authority in its coastal waters.

Sea Control and Power Projection

The United States will remain the most important maritime power for the foreseeable future. With the reduction in forward-deployed forces and less access to overseas facilities only a credible power projection capability will deter other nations wishing to threaten US interests. The ability of the aircraft carrier in particular, to flexibly and forcefully express national interest and concern is unlikely to diminish while these vessels remain in service.¹¹⁹

The current cost of cruise-missile technology will put it out of reach of most nations, but for the USA the requirement to base power projection capability on manned aircraft is in future likely to reduce. The USN has already fitted TLAMs

¹¹⁹. The USN continues to maintain aircraft carriers around the globe in support of US policy. As recently as March 1992 the USS AMERICA moved into the Arabian Gulf to provide a demonstration and "...a clear signal to Saddam Hussein" to comply with UN directives to destroy Iraq's weapons of mass destruction. Quoted in 'Warship Ready to Bomb Iraq' in *Sunday Telegraph*, March 15 1992, p. 5.

to a wide variety of vessels as part of the distributed firepower concept. Thus in future even small surface combatants may be considered to have a distant land-strike capability. This will provide a more widespread deterrence capability and allow the US to maintain a credible protection of its interests even with a smaller fleet. It will also create even more problems for an adversary attempting to keep opposing forces at arms length.

For nations other than the USA the threat of enhanced sea denial capabilities, will make power projection more costly and more difficult. Particularly in the face of a determined air force, sea control will be difficult to achieve without local air superiority.¹²⁰ The ability to utilise embarked air power already looks attractive to rising naval powers such as China and India seeking to acquire a power projection capability. The proliferation of small carriers will therefore probably continue, not only for their air defence capabilities but because they can be used for a wide range of other purposes such as carrying troops and disaster relief. The availability of low cost assets from the former Soviet Union will no doubt assist this trend.¹²¹

Naval Diplomacy

The importance of the naval presence mission for maritime powers will not diminish. Unlike ground and air forces, naval forces are not limited to single theatre roles. With the ability to sail to different ocean areas as required, naval forces have a global role. Navies can provide strong, mobile, forces able to respond immediately and sustain themselves at a distance until ground and air forces can mobilise and react. Naval vessels will thus remain as a useful tool of diplomacy and a unique means of escalation control.

¹²⁰ . This was one of the major lessons of the Falklands conflict.

¹²¹ . See 'China, India eye former Soviet aircraft carrier' in *Jane's Defence Weekly*, 8 February 1992, p. 181.

The days of 'gunboat diplomacy' are far from over.¹²² For the foreseeable future naval vessels will remain potent instruments of foreign policy, providing both a symbolic presence and a visible instrument of power. An instrument that can initially be used with moderation and then with increasing pressure to access a complete hierarchy of naval activities. Though the cost of individual ships has increased their capability compared to an earlier ship of similar displacement has increased even further. A modern warship can usefully extend national influence over a wider maritime area and more forcefully than in the past. In the words of the US Deputy Chief of Operations:

"...naval forces... provide a visible demonstration of US support for commitments abroad. They strengthen our ties to allied or friendly nations and deter aggression by adversaries".¹²³

Maritime power will remain a strategic imperative for the larger powers if they are to maintain ties to global commerce and overseas interests. The USN in particular will continue to attach a high priority to the ability to freely use the sea.¹²⁴ The Pentagon has already stated that sealift programs will receive high procurement priority. This will assist the ability of US forces to meet diverse geographic threats as part of the Regional Defence Strategy announced by President Bush in August 1990. This strategy aims to place more emphasis on prepositioning and the rapid reinforcement of forces from the USA.¹²⁵

For emerging naval powers the value of the naval presence mission is already well established. Countries like China and India have in the past few years

¹²². The traditional model for 'gunboat diplomacy' was the armed naval vessel of a colonial power, able to independently exert political and military pressure.

¹²³. Statement of RADM A Less USN, DCNO, before the Subcommittee on Seapower and Strategic and Critical Material of the House Armed Services Committee on 12 March 1991.

¹²⁴. Two recent examples of US unwillingness to accept local constraints on its naval forces include the 1986 cutting of defence ties with New Zealand, in reaction to New Zealand's decision to ban visits from nuclear armed or powered ships and the US refusal in 1987 to sign the protocols to the South Pacific Nuclear Free Zone Treaty.

¹²⁵. See 'US Puts New Weight on Air, Sealift Programs' in *Defense News*, March 2 1992, p. 20.

conducted several extensive deployments for the purpose of protecting their own vital political and security interests. These countries have also demonstrated a willingness to offensively employ these naval forces overseas if so required.¹²⁶

Naval Cooperation

Already hard pressed to maintain its current obligations the USN is in future more likely to look to its allies to shoulder some of these responsibilities. With the continuing contraction in the size of all armed forces and despite advances in automation and simulation, Western powers are likely to find it difficult to maintain skills in all areas of maritime warfare. Joint operations and exercises can help to reduce this decline by allowing nations to gain experience in a wider variety of warfare areas without the expense of individual national operations.

Though admirable in concept such joint operations may be difficult to achieve without a clearly defined monolithic threat such as the Soviet Union and may bring their own unique problems. Of the Coalition forces during the Gulf War, only the UK and France were comparable to the US in sustainment capability. Other allies required US assistance in some or all of sealift, provisioning, communications, medical treatment and often spare parts. In the future the USN will in all likelihood need to plan not only for its own needs but also for those of its partners in contingencies.

Other Peacetime Tasks

In future the trend will increase for both developed and third-world nations to pay more attention to what goes on in their own EEZ, particularly with regard to the management and protection of marine resources. With an ever increasing world population demand for ocean fisheries will continue to expand,

¹²⁶. See Stevens D, 'Seapower and the Chinese and Indian Naval Expansion' *op cit.*, p. 19.

increasing the potential for disputes over fishing rights and resource exploitation.¹²⁷ Developing countries in the South Pacific are already facing the problem of not only how to exploit their ocean resources but also how to protect their own national interests.

Internationally, more interest is being taken in offshore patrol vessels. These vessels will be used for fishery protection, anti-smuggling, anti-pollution, fire fighting, counter-piracy, search and rescue and supply tasks as well as simply to patrol the EEZ.¹²⁸ Security planning for maritime forces will also have to include relevant humanitarian missions such as the provision of peacekeeping forces and disaster relief.

This does not mean that naval forces will cease to demonstrate their capability to operate globally but simply that operations will involve more than just primarily military interests. Navies both from a practical and a public relations perspective will increasingly have to conform to this trend, focusing operations on areas other than simply training for a conflict that may never come.¹²⁹

CONCLUSIONS

Whether this is truly the dawn of an era of cooperative rather than coercive diplomacy in a 'New World Order' remains to be seen. Certainly the historical record would tend to indicate otherwise. Though waging a general war faces increasing economic and political constraints, the removal of superpower competition may well mean that regional powers will face fewer restraints in the

¹²⁷ . At present more than 95% of the world's annual fish catch is caught within 200 nautical miles of shore. Quoted in Boothby D, *op cit.*, p. 83.

¹²⁸ . For an insight into the Royal Malaysian Navy's need for an OPV and expected tasking, see 'Italians bid for contract' in *Jane's Defence Weekly*, 21 March 1992, p. 488.

¹²⁹ . For a useful discussion of 'global issues' for navies see Weeks S, 'Crafting a New Maritime Strategy' in *US Naval Institute Proceedings*, January 1992, p. 35.

acquisition and use of military force. The possession of capable naval forces by a growing number of nations and the need to exploit ocean resources increases the potential for misunderstandings and disputes to arise and escalate.

The USN and other large naval powers cannot be regarded as having an unchallenged ability to influence events. With current and future weapons the sea denial ability of even minor maritime powers cannot afford to be ignored. Third-world forces will continue to embrace sea denial strategies because even the ability to inflict relatively small losses can cause problems for Western forces in a weak political position.

In the larger states there will be greater pressure to reduce the resources expended on military power as a whole. Maritime forces as particularly large consumers will find it difficult to avoid reductions as governments realise that fleets designed for high capability power projection and war at sea will not always be the ideal implements for lower level contingencies. Force size will instead be shaped more by regional contingencies and peacetime presence missions, increasing the tendency for naval forces to become numerically and physically smaller. To maintain political support navies will in future place more stress on the abilities of maritime forces to fulfil humanitarian and non-defence missions. This will result in an increasing trend for navies to assume more of a coast guard function.

Despite these changes maritime power still has a vital role to play in security affairs and its deliberate and considered use in times of crisis and conflict is unlikely to reduce. Naval vessels will still require to be multi-mission capable and flexible enough to counter diverse future threats even in the face of reduced defence spending. To cope with the continuing variety of tasks despite widespread budget reductions, multinational naval cooperation is likely to increase.

Technological advances in weapons and equipment will continue but in an evolutionary rather than revolutionary manner. The basic purposes or roles of sea power have not yet been fundamentally altered and as recently demonstrated, the common maritime themes of sea denial, sea control and power projection will continue to form the basis for maritime strategic planning. As technology advances it

will be the understanding of the application of new technologies to the principles of sea power which will become more important.

Turning to the Gulf War, maritime power by itself did not have a decisive impact but was crucial to the speed of the final victory. The war's successful prosecution by the land and air forces depended to a large extent on the Coalition capability to use the sea and strike from it. The maritime elements of the Coalition force were effective because of their rapid response, self-contained infrastructure, mobility, flexibility and worldwide reach. The maritime components provided the capability to exploit the elements of concentration, surprise and economy of force. These elements came together in the Gulf War as a classic demonstration of the use of sea power to affect the outcome on land.

Though the Gulf War itself was unexpected the type of war it represented was not; an extended local crisis requiring highly mobile forces on short notice. As military forces of all types decline, the flexibility and mobility of maritime power will become even more important in protecting national interests.

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- CHRONOLOGICAL SUMMARY OF KEY NAVAL EVENTS
DURING THE GULF WAR
1. Iraq invades Kuwait in the process of seizing a 'free petroleum government'.
 2. The United States sends USNS *North America* Sea.
 3. Iraqis cut off the flow of all goods to and from Iraq.
 4. USNS *North America* CVR-10 arrives in Gulf of Oman.
 5. USNS *North America* CVR-10 crosses Suez Canal en route Red Sea.
 6. USNS *Wisconsin* USS-12 and USNS *Wisconsin* depart US west coast.
 7. USNS *Wisconsin* USS-12 and USNS *Wisconsin* arrive in South Arabia.
 8. USNS *Wisconsin* USS-12 and USNS *Wisconsin* depart South Arabia.
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CHRONOLOGICAL SEQUENCE OF KEY MARITIME EVENTS DURING THE GULF WAR

August

- 02 - Iraq invades Kuwait on the pretext of assisting a 'free provisional government'.
- 04 - USS INDEPENDENCE CVBG en route North Arabian Sea.
- 06 - UNSCR 661 bans the trade of all goods to and from Iraq.
- 07 - USS INDEPENDENCE CVBG arrives in Gulf of Oman.
 - USS DWIGHT D EISENHOWER CVBG transits Suez Canal en route Red Sea
 - USS SARATOGA CVBG and USS WISCONSIN depart US east coast.
- 08 - First elements of US 82nd Airborne Division arrive in Saudi Arabia.
- 10 - First USAF aircraft deploy to Saudi Arabia.
 - Hospital ships USNS MERCY and USNS COMFORT activated and prepare to deploy.
- 14 - Advanced elements of 1st Marine Expeditionary Force arrive in Saudi Arabia.
 - USNS COMFORT deploys.
- 15 - USS JOHN F KENNEDY CVBG departs US east coast.
 - Ships from Maritime Prepositioned Squadron 2 (Diego Garcia) begin unloading in Saudi Arabia.
- 16 - MNF maritime intercept operation began intercepting ships going to or from Iraq and Kuwait.
 - 13 US amphibious ships announced to be deploying.
- 17 - First MSC Fast Sealift Cargo Ships depart Savannah carrying the 24th (Mechanised) Infantry Division.
- 18 - First warning shots fired by intercepting ships across the bows of two Iraqi tankers leaving the Arabian Gulf. First diversions by Navy ships.
- 24 - USS WISCONSIN enters Arabian Gulf.
- 25 - UNSCR 665 authorises member states deploying maritime forces to the Middle East to use measures as necessary to halt all shipping in order to inspect their cargoes and destinations and to enforce UN sanctions.
- 27 - First Fast Sealift Cargo Ships arrive in Saudi Arabia.

- 29 - 4 US MCM ships depart Norfolk en route Arabian Gulf.
- 31 - First boarding of Iraqi merchant vessel, the AL KARAMAH.

September

- 07 - USNS COMFORT arrives in Gulf of Oman.
- 14 - USS JOHN F KENNEDY CVBG transits Suez Canal into Red Sea.
- 16 - 1000th merchant ship intercept since multinational operations began.

October

- 01 - USS INDEPENDENCE transits Strait of Hormuz and enters Arabian Gulf. First carrier to enter Gulf since 1974.
- 02 - USS MIDWAY CVBG deploys from Japan.
- 30 - Amphibious forces begin Exercise Sea Soldier II off the coast of Oman.

November

- 01 - USS MIDWAY CVBG relieves USS INDEPENDENCE CVBG.
- 13 - USS MISSOURI deploys from Long Beach.
- 15 - Joint combined Exercise IMMINENT THUNDER begins. Includes amphibious exercises in the eastern province of Saudi Arabia.
- 27 - 500th merchant ship boarding since multinational operations began.
- 29 - UNSCR 678 authorises the use of military force unless Iraq vacates Kuwait by 15 January 1991.

December

- 01 - USN deployed ship strength: 19 Arabian Gulf, 21 North Arabian Sea/Gulf of Oman, 9 Red Sea, 15 Mediterranean.
- 08 - USS RANGER CVBG deploys from the US.
 - Amphibious exercise begins off the coast of Oman.
- 18 - US Sealift update: 253 ships in support, 200 under MSC operational control, 188 offloads completed (approximately 10.2 billion pounds of unit equipment and petroleum products).
- 21 - First floating contact mine found in Arabian Gulf.

- 26 - 7 Australian, USN and RN units involved in the interception and boarding of the Iraqi ship IBN KHALDOON. Vessel is found to be carrying prohibited cargo and is diverted.
- 28 - USS THEODORE ROOSEVELT and USS AMERICA CVBGs deploy from Norfolk.
- 30 - Iraqi combat aircraft commence series of probing feints into the northern Arabian Gulf.

January

- 01 - USS MISSOURI arrives in the Gulf of Oman.
- 12 - USS RANGER CVBG arrives on station in North Arabian Sea.
 - USS MIDWAY CVBG enters Arabian Gulf.
- 14 - USS THEODORE ROOSEVELT CVBG arrives on station in Red Sea.
- 15 - USS AMERICA CVBG arrives on station in Red Sea.
 - USS RANGER CVBG transits to station in Arabian Gulf.
 - US Navy ship strength in theatre: 34 Arabian Gulf, 35 North Arabian Sea/Gulf of Oman, 26 Red Sea, 13 Mediterranean.
 - Total of 17 floating mines found in Arabian Gulf.
- 16 - UN deadline for Iraq to withdraw from Kuwait expires.
 - Total naval forces include 100 US ships (80 combatants) and 50 multinational ships from 14 countries. Intercepts so far carried out - 6960, boardings 832, diversions 36.
- 17 - Operation DESERT STORM commences.
 - Over 100 Tomahawk cruise-missiles fired from 9 US ships in Red Sea and Arabian Gulf.
 - Navy launches 228 combat sorties from six aircraft carriers.
- 18 - USS NICHOLAS engages and neutralises Iraqi forces operating on 11 Kuwaiti oil platforms.
- 19 - First combat firing of Standoff Land Attack Missile.
 - USS LOUISVILLE fires first submarine-launched cruise-missile.
- 21 - USS THEODORE ROOSEVELT arrives on station in Arabian Gulf.
- 24 - USS CURTS, LEFTWICH and NICHOLAS liberate Jazirat Quarah Island.
 - Amphibious exercise Operation Sea Soldier IV begins using elements of IV and V Marine Expeditionary Brigades and 13th Marine Expeditionary Unit. The largest amphibious force assembled since the 1950 landing at Inchon.
- 25 - Iraq dumps several million barrels of oil into the Arabian Gulf from the Sea Island crude oil tanker loading terminal.

- 26 - Air campaign shifts from strategic interdiction to battlefield preparation.
- 27 - 8 Iraqi vessels presumed destroyed and 10 sunk to date.
 - Iraqi aircraft begin flying to Iran.
- 29 - 256 Tomahawk missiles launched to date.
 - Marines from USS OKINAWA recapture Umm al Maradim Island.
- 30 - To date US Navy has flown 3500 sorties.
 - Battle of Bubiyan results in destruction of large proportion of Iraqi Navy .
 - To date 60 Iraqi vessels sunk or disabled.

February

- 02 - Total of 35 Iraqi naval craft sunk or damaged. With the destruction of all Iraqi patrol craft capable of delivering missiles Iraqi naval forces are now considered combat ineffective.
- 03 - USS MISSOURI conducts first combat firing since Korean War.
 - Mine explodes near USS NICHOLAS, shrapnel causes light damage.
- 06 - USS WISCONSIN conducts first naval gunfire support mission since Korean War.
- 13 - USS AMERICA enters Arabian Gulf.
 - MCM operations continuing.
- 18 - USS TRIPOLI AND USS PRINCETON strike mines while supporting MCM operations.
- 19 - To date 153 mines discovered in Arabian Gulf.
- 21 - First air strikes conducted from amphibious ship USS NASSAU.
- 24 - Allied ground offensive commences. Four aircraft carriers in the Gulf providing continuous close air support.
- 25 - Minesweepers clear additional fire support areas for battleships.
 - MISSOURI and WISCONSIN continue NGS missions.
 - HMS GLOUCESTER destroys Silkworm missile aimed at USS MISSOURI.
- 28 - Ceasefire commences.

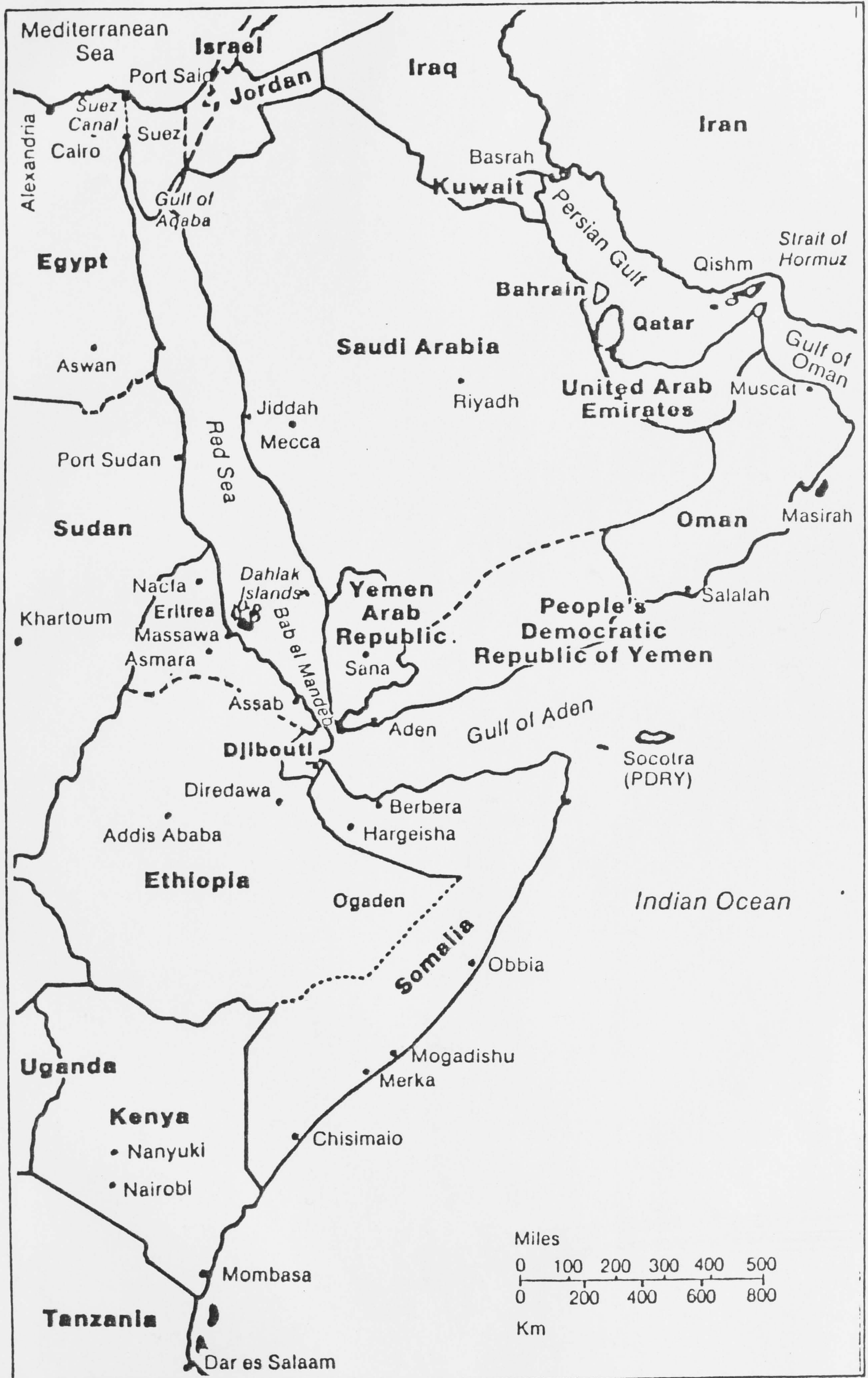


FIGURE 1