REDEFINITION OF NAVAL MISSIONS IN THE POST COLD WAR ENVIRONMENT

A Thesis Presented By Özgür Altınyay To The Institute of Economics and Social Sciences in Partial Fullfillment of The Requirements for the Degree of Master of Science in International Relations

Bilkent University February 1995

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Özgür Altınyay tarafından bağışlanmıştıs

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I certify that I have read this thesis and in my opinion it is fully adequate, in scope and in quantity, as a thesis for the degree of Master of Science in International Relations.

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#### ABSTRACT

The world is again experiencing a new period of change today. The cold war has ended and the strategic environment is changing to reflect those developments. The objective of this study is to describe the changes in naval mission types after the end of the cold war.

An analytical method has been used in the study; the developments in the naval strategic environnment will be described in a detailed way. Then the study will try to analyse those developments and try to explain how the naval power missions will be redefined according the new factors.

The naval strategic environment is becoming littoral and also more prone to conflictual situations as more states try to seek their national interests, once they are free from the binding conditions of the old bi-polar strategic environment. Some naval missions that were the needs of the global scale confrontation of the cold war will not be of the same importance in this new period. Instead the mission types that can be described as regional and coastal will be more used by the navies of the world reflecting the rise of littorality in the new period.

IV

Dunya bugun buyuk bir degisme surecinin icinde. Soguk savasin sona ermesiyle beraber stratejik konjonkturde de degismeler olmakta. Bu calisma sozu edilen degismelerin donanmalarin gorevleri uzerinde olan etkisini arastirmakta ve bu gorevlerdeki degismeleri konu edinmektedir.

Calismada analitik bir metodoloji uygulanmistir. Ilk once soguk savas sonrasinda donanmalar ve denizlerdeki stratejik dengelerde olan degismeler incelenmekte sonrada bulunan sonuclarin donanmalarin gorevlerinde nasil degisikler yapacagi tartisilmaktadir.

Denizlerdeki yeni stratejik ortam superguc dengesini ortadan kaybolmasiyla bolgesel olarak tanimlanabilir. Ote yandan ulkeler soguk savas esnasindaki bloklasmadan kaynaklanan politik ve stratejik bagimliliklardan kurtuldukca, kendi cikarlarini kollamak icin daha cok israrli olmaktadirlar. Bu sekilde gelecekte denizlerde bolgesel catismalarin cikma olasiliginin artmasi beklenebilir. Tum bunlarin donanmalarin gorevleri uzerindeki etkilerinin ise eski global capli operasyon tiplerinden daha lokal projeksiyonlu modellere bir gecis seklinde olacagi dusunulmektedir. Bu dusunce de calismanin sonuc bulgusunu teskil etmektedir.

OZET

# List Of Abbreviations

- AA Anti-Air Craft
- AAW Anti Air Warfare
- ASW Anti submarine Warfare
- AEW/C Air Early Warning And Control
- ASuW Anti Surface Warfare
- ATBM Anti Tactical Ballistic Missile
- DDG Guided Missile armed Destroyer
- FFG Guided missile armed Frigate
- IC3 Shorthand for command, communication ,control and intelligence
- SAM Surface to air missile
- SLOC Sea line of communication
- SS Diesel electric submarine
- SSBN Nuclear powered ballistic missile submarine
- SSK Diesel and Electric powered submarine
- SSM Surface to surface missile
- SSN Nuclear powered torpedo attack submarine
- SSGN Nuclear powered guided missile submarine
- UNCLOS United Nations Conference On The Law Of Sea
- V/STOL Vertical or Short Takeoff and Landing

#### I INTRODUCTION

#### 1.1 Current Naval Context

Today the world is experiencing a new period of changes. Germany is again one nation; The European Community strives toward a United Europe; Eastern Asia continues to thrive economically and hints at playing a more prominent global role; China attempts to mix political antiquity with economic modernization; and most important of all, international politics is no longer centred on two poles.

The relationship between the United States and the newly independent states of the former USSR will greatly change the future of their strategic plannings. The previous state of hostility has decreased and eventually vanished in the last few years. Today a level of mutual understanding and co-operation between these groups exists. Russia has deviated from the policies of the former USSR. The sharp decline of activity of the former Soviet Union beyond its own borders and especially out-of area naval operations indicates this commitment of the present Russian government.

Like most of the major NATO navies, the United States Navy will shrink over the next decade. While some of the bases will be retained during rapid reaction programs, there will be also withdrawals from some of the bases and installations. A number of task force groups will be kept ready to intervene in

any crisis situation.<sup>2</sup> Some of the hardware intended primarily for a total war against the Soviet Fleet in the open seas will also be retired gradually or transferred to the allied countries. Similarly, even more comprehensive down-sizing efforts exist in the other major Western navies. This decrease in naval unit deployments and exercises will continue. Forward presence of these forces will decline, and revisit time to the remote areas will become longer.<sup>3</sup>

As indicated in the words of a former American official<sup>4</sup> there is a growing concern that the disappearance of superpower rivalry in the Third World after the cold war will cause the regional powers to fill the power vacuum created by the withdrawal of the superpowers from some regions of the world.

# 1.2 Objective Of The Study

Naval settings of the last half century are now in a period of transition. The end of the cold war, while phasing out the old environment, has opened up new dimensions to the naval environment. The new environment will not be like the previous one that rested on the two superpower pillars.

, Despite the passing away of the cold war, there are still areas of trouble where political developments may lead to serious conflicts. The security in the world today is equally hard to maintain as was in the cold war.

This study will focus on the change in the naval missions after the end of the cold war. Navies are the instruments of

states and are directly governed by them. The states, in turn are affected by the developments that take place in the international community and the ruling economic and political conditions of the period. Therefore a strong link exists between those conditions of the period and the type of naval operations undertaken by the states. Therefore due to the change in the political conditions, the states will ask the accomplishment of different types of naval missions from their navies.

The study aims to answer the question of how naval missions have been modified to include new dimensions. The study will try to show that some naval missions will emerge as more important than others since those types will be more suited to the conditions of the new naval strategic environment. It is vital to identify emerging conditions in the new naval strategic environment to predict which naval missions will be emphasized in the future.

Naval missions after the cold war will be adjusted to the requirements of the new strategic environment of the post-cold war era. Therefore it would be an important step of the study to analyse and identify the emerging conditions in the naval strategic environment in the new period. The important trend that appears in the political, economic and military dimensions will be analysed during the study.

### 1.3 Methodology Of The Study

Several different types of information sources have been used in this study. These include conventional sources such as books, yearly volumes of research institutes and periodicals, as well as information received from electronic databases, personal correspondence through E-Mail and normal mail. Due to the recent nature of the subject of the study periodicals, journals and other contemporary sources of information were frequently used. In addition, the study has also used books and dissertations.

The methodology used in the study can be described as follows : the developments of the new period will be presented in the chapters of the study whose outline is given below. The answer to the research question has been sought by the interpretation of these results. Therefore an analytical approach can be said to have been employed in the study.

#### 1.4 Outline Of The Study

The study will commence with the effort for the construction of a framework for naval missions. The framework is important since developments of the post-cold war period will be examined under this perspective. The roles of the naval powers are grouped into three main topics and definition of these roles are documented in detail in the rest of the second chapter. The aim of the framework is to present a

systemic approach to the analysis of the factors that will be examined in the other chapters of the study.

The third chapter will study the developments in the naval military technology which is vital for the understanding of factors that will shape the nature of future operations. A greatly accelerated technological advance has left its mark on the world in our decade. The military technology in use by the naval forces is certainly affected from this technological revolution. This chapter will try to examine the increasing availability of the high-technology weapons systems that affect naval operations. The diffusion of vital high technology weapons into some of the navies of the Third World countries will also be studied.

The fourth chapter is devoted to a description of the new strategic environment after the cold war. A number of specially selected areas will be examined. New geopolitics in those areas with a high probability of conflict will be detailed with an eye on the naval environment.

Change in the naval missions is explored in the concluding part of the study. The aim of this chapter is to further strengthen the argument that the naval missions of the post-cold war era will be different from the missions of the cold war era. After analyzing the cumulative changes observed in the factors that shape the naval environment, this part of the study will try to identify new naval missions that will rise in importance and those that will be pushed back in priority because of their unsuitability to the conditions of the new period.

#### II A SYSTEMIC APPROACH TO THE CONCEPT OF NAVAL POWER

#### 2.1 A Framework For Naval Missions

This study has focused on the role of navies in the post-cold war period, and therefore, a systemic approach to the role of navies must be attempted to gain insight on the role of international navies. An understanding of the workings of the concept of naval power is imperative for analyzing the changes brought about by the developments of the last half decade. Therefore, the formulation of a framework is essential. This framework will also provide the reader with a perspective throughout the study.

The roles that can be performed by naval forces and the extent to which they can be executed are indicators of the significance of a navy. In the light of national interest priorities and economic constraints, decision makers try to give the best decisions for the ultimate balance between functionality and size of naval forces.

Authors in the field of strategic studies have defined the role of sea power in various ways. While all of these definitions have been essential for understanding the missions of naval forces, there has been a general tendency in all of these systematic representations, to segregate the role of naval forces into specifically defined classes.

However, many of the tasks that are performed by navies are highly complementary of each other. Conventional naval

The use of the sea for mobility is important. While air and land lines may be faster, they can not cope with large amounts easily. By airlift, smaller pieces can be brought in as well as personnel, however it's not possible to move large loads by this way. Land transportation networks may not always exist to carry the lift over long distances. It is much cheaper and efficient in moving large amounts of materials using the maritime routes. In the words of Mahan, sea is something like a great highway over which men and materials pass on all directions.<sup>6</sup>

The exploitation of the sea as the source of precious minerals, food and valuable energy deposits is another important type of sea use. Utilization of marine resources has become very important, particularly in this century. With the increasing population of the world and the decreasing deposits of precious minerals and sources of food, man has increasingly sought these resources in the oceans. This type of the use of the sea plays a very important part in the economies of some countries.

Passage of military forces and the use of naval forces against the targets at land or sea constitutes the basis of the military use of the sea medium. The military use of the sea is actually the reason for the creation of the naval forces.

# 2.3 Naval Missions

Naval missions are formulated under direct influence of the concept of the use of the sea. The uniqueness of naval force brings its missions a multi-faceted aspect. A naval mission is formed and carried out on the basis of a number of military, economic or political rationales.

While naval missions can be grouped under headings, some types of naval missions can be seen as the extension of other naval missions under a different heading. They are linked with each other to a great extent.

The naval missions are studied under three guidelines that are the main roles of a navy; they can be divided into the following groups :

- 1. Military Roles
- 2. Diplomatic Roles
- 3. Constabulary Roles

As some authors have suggested, the military roles of the navies form the basis of the their other roles.<sup>7</sup> Since the real meaning of the navy lies in its ability to use force and form a threat, that actually shapes and gives meaning to the missions it carries out. Missions that fall under the military role of the navies are the operations that a state uses in pursuing its foreign policy objectives in a conflict.

The diplomatic role of a navy is dependent on its military essence. It also carries out the task of representing the foreign policy objectives of a state, however it does not

extend into waging a formal conflict with naval forces of other states in while doing so.

The constabulary role of a navy is less dependent on the use of actual force and the extent of naval power. Due to its nature that covers sovereignty issues and management of good order, it is a both internally and externally oriented role of the naval forces.

Under the light of the above definitions, naval missions that fall under these three roles can be described as follows:

#### Military Roles

# Command And Control Of The Sea

Command and control of the sea is perhaps the most frequently used term of the naval strategic terminology. It has been described as "... nothing but the total control of the sea communications" by Julian Corbet.<sup>4</sup> This is considered as a rather loose and incomplete definition by some leading writers who argue that the total command over all the lines of communication may not be practically possible since these may cover vast sea areas which require great numbers of naval units.<sup>9</sup> In this framework, the size of the zone of control of each unit is small. The basic characteristic of the sea environment does not allow for the expansion of this zone due to several natural factors such as non-penetrability of underwater by radar or acoustic barriers that baffle sonars. The command of the sea is therefore directly related to the number of assets deployed in the area, specifically intended

for command. Despite the advances that increased the radius of control from the maximum line of sight of a mast-placed lookout to a range of 100-150 km,<sup>10</sup> it is still not possible to use all these actively in all situations. Using a radar to increase the range of detection to this range may be risky in war because of the presence of radiation homing anti-radar weapons such as the American *Harm* or British *Martel*. Besides, using a radar also means that once an enemy is detected, it will also be able to detect the emitter by the help of its radar warning receiver instruments. Therefore, achieving even this range has some disadvantages such as giving up the element of surprise. Without the benefit of this technology, it is only possible to command limited areas of the sea.

No sea power managed to rule the sea in history so completely that no intruder was able to slip by its guard. There has always been the chance that a craft may lurk in a part of the sea that is believed to be under one's command. The successes of the German commerce raiders of World War I and II which, despite the constant Allied air and surface patrols managed to prey upon shipping until the end of the war, are good examples that illustrate this fact.

Some writers have also brought forward a limited "control" concept as the command of the sea around a point with tightly drawn boundaries rather than vaguely defined regions.<sup>11</sup> "Control" of the sea can be sought to be provided in a well-defined area of strategic or tactical importance. The protection provided by the anti-submarine or anti aircraft ring around a carrier group or a convoy are good examples for the control concept. The concept itself can also be expanded

into a sea area with clearly defined borders such as maritime routes, fishing areas, exclusion zones and approaches to important naval bases or straits.

### Denial Of Sea

The denial of the sea is directly related with the use of the sea. Whereas a state would try to increase its share of sea under its control and use it, it would also try to prevent the other sides from doing so at the same time in a conflict. The denial of the sea or "challenge and the prevention of the use of the sea to other states" according to Ken Booth, actually formed the basis of the national policies of some states such as USSR during the cold war and France in the 19<sup>th</sup> century.<sup>12</sup> The denial of sea operations have varying efficiencies; the state that has more economic ties with the outside by sea lines is more sensitive to such operations.

Denying a zone of sea to the enemy completely is a difficult task to perform. The allied offensive to drive German submarines from the Atlantic failed since the Germans always managed to counter it; either by dispersing when hunter killer groups operated in their area or moving away from the likely patrol areas of such groups.<sup>13</sup> It is clear that in the face of a resourceful and skilful opponent sea-denial may not always work, since the defender, taking advantage of the sea medium can always find weak spots in the attacker's plans and neutralize its efforts.

The command or control of the sea is not a prerequisite for mounting a sea-denial operation, nor does it ensure success. Indeed, the German navy and air force effectively

implemented this strategy during World War II, in the Bay of Biscay, Norwegian and Barents Seas, where Germany had partial or no command at all. In contrast, the allied antisubmarine "offensive" in the Atlantic that was performed by groups of ships that searched and attacked submarines independently amounted to little.<sup>14</sup> Thus it can be suggested that sea denial operations can be advantageous to both sides and do not really rest only on the superiority of one's military assets.

The tools of sea-denial generally have offensive oriented capabilities and are of limited use in other types of missions. The introduction of aircraft, missile carrying boats and submarines in the 20<sup>ch</sup> century may have greatly increased the effectiveness of the sea-denial operations. However, apart from engaging the enemy, they cannot be expected to control and defend the area they are ordered to deny. Therefore, with its operational objectives clearly defined, sea denial may continue to be one of the most frequently used type of naval missions.

#### Naval Deterrence

It has been stated by some naval writers that strength at sea is the best preserver of peace and national security.<sup>15</sup> Similarly, Mahan also wrote that the surest way to maintain peace is "... to occupy a position of menace".<sup>16</sup> It was on the basis of this factor that the Royal Navy deterred any potential aggressors during the 19<sup>th</sup> century. Strength and general capacity to prevail, or at least to give a sufficient account of oneself, is the main constituent of deterrence. As stated by Geoffrey Till, the extent of a navy's deterrence may

be judged from its ability to respond to any level or form of aggression anywhere, anytime.<sup>17</sup>

Nuclear deterrence has played an important part in cold war strategy, dominating all other strategies until the passing away of the cold war. This also affected and led to changes in naval deterrence. The deterrence of seapower is loosely and indirectly related with nuclear means. Some navies designed several types of tactical nuclear anti-ship, anti-aircraft and ASW weapons in the 1950 and 1960s.<sup>18</sup> These weapons have never been used in any engagement; the after-effects of such weapons are undesirable and could affect friend and foe alike.<sup>19</sup>

The conventional dimension of naval deterrence is much more important in naval strategy. When planning to invade the Falkland Islands in 1982, the Argentinean navy was not deterred by British nuclear fire power. The reason was simple, no navy can fire a tactical attack, let alone a strategic nuclear weapon in a situation short of global nuclear war. A few years after the Falklands incident, a tiny Libyan navy in 1986 did not even hesitate to try to engage the nuclear armed US carrier battle group operating in the Gulf of Sidra. Many other incidents are present where the presence of nuclear weapons in one side did not quite bother assailants. That reflects the need to assess the deterrent power of a navy.

The different characteristics of the medium of the sea make the concept of deterrence different from those of land operations. The process of escalation that is central in the deterrence concept moves at a faster pace in the naval environment; slightest misunderstanding of one's move during

encounters between the naval forces of countries with problematic relations may easily result in armed clashes. It may be argued that there is less refrain to open fire by naval forces in situations where other types of forces may hold back from opening fire. The reason may be the that peripheral properties of naval operations seldom make them individually decisive in the outcome of the wars. As Julian Corbet has noted;

> "Since men live upon the land and not on the sea, great issues between nations at war have always been decided - except in the rarest cases -by what your army can do against your territory and national life or else by the fear of what the fleet makes it possible for your army to do.<sup>20</sup>"

The sea power may have contributed to many victories but it has remained far from achieving a decision on its own. Therefore the escalation in naval environment has a different pace than the escalation process at other media.

The central idea in naval deterrence is the ability to bear power against the enemy instantly, should the need arise. This ability of navies provides credibility which Ken Booth describes as "Naval Prestige".<sup>21</sup> It was this kind of a credibility, that deterred the German naval commanders from actively engaging the English Fleet in the major naval actions of the First World War. Despite having capital ships and crews the German High Seas Fleet usually restrained itself from taking on the British Fleet.

A low level of credibility ultimately means less deterrence for a navy. This was the case for the Russian Fleet in 1904. Japanese naval planners viewed the Russian fleet as an opponent which could be defeated by the smaller Imperial

Japanese Navy. Similarly the Japanese also regarded the United States Fleet in the same way. Before embarking upon their plans to create a "co-prosperity sphere" in Asia, they attempted to neutralize it. The notion of deterrence in all cases is common: assessment of strength through the eyes of the adversary. Particularly, the lesser susceptibility of naval strength to information gathering and estimation methods should be taken into some consideration. History of naval conflicts has a large number of such examples of misinterpretation of the deterrence capability of the enemy.

In conclusion, naval deterrence is largely conventional and must work at all levels of a conflict. In the words of an analyst it must be prepared in a "seamless robe" fashion.<sup>22</sup> However this requires a high level of naval capability, though that is difficult to achieve for most of the states since the cost of such a naval force will be prohibitively expensive.

### Power Projection

The introduction of longer range weapons to ships ( and eventually to submarines ) and the extension of endurances beginning in the mid 19th century have enabled the naval forces to increase their area of control over the land as well. While the definition of basic naval power projection mission has been accepted as; "... a navy's ability to launch sea-based air and ground attacks against enemy targets onshore. It also includes naval gun bombardments of enemy naval forces at ports and installations<sup>23</sup>" , the scope of naval power projection missions has been defined in a wide range. While the lowest level of power projection is given by

Stansfield Turner who has written about "projection of power through presence" of naval units, the definition of highest level of power projection as "nuclear strikes against the enemy land targets" is commonly accepted by many sources.<sup>24</sup>

Operations of fleets ashore which include the operations of the surface units, submarines and naval aviation against a ground target, or in short the projection of naval power on land is one of the key concepts of the military use of navies. In this study the power projection will be examined in the following stages. At one end, there's the reactive, preventive presence of warships, the middle range is occupied by air and naval bombardment, higher up are amphibious assaults. The ultimate form of power projection links with another mission of navies; the strategic deterrence. The presence of SSENs with their missiles ready to reach anywhere in the territory of the targeted nation, allows a country to gain the highest level of power projection; exercising its military might over the whole of the enemy area if the need arises.

Power projection ability gives naval forces the power to strike in any direction and anywhere along the coasts of enemy territory. This is actually the main advantage of naval power projection. The tactical and strategic surprise provided by amphibious attacks has always been found to be critical in the achievement of victory. While the possibility of an amphibious attack on its coast may be known to a state, the information about the exact timing and the location of the landing will be quite difficult to obtain. The surprise on the German side about the timing and place of the Normandy landing in 1944 despite signs showing that the imminence of the invasion, is a

good example that illustrates this. Similarly, each of the Anzio and Torch landings in the European theatre and Guadacanal operation in the Pacific came as strategic and tactical surprises to the defender.<sup>25</sup> This aspect of amphibious operations against the enemy territory has also been acknowledged by Admiral Gorskov, who went on to note that the amphibious operations of the World War II were always successful due to the reason described above.<sup>26</sup> Perhaps it was because of such motives in Soviet thinking that the Soviet navy vigorously upgraded its naval power projection capability in the 1970s and early 1980s.

Power projection in the global or regional dimension is a rather expensive luxury enjoyed only by a small number of navies in the world. Even in a regional dimension projection of force demands sizeable and balanced naval or naval air force that can penetrate through any naval defensive barrier, and defeat land-borne aerial attack intending to deny the area of operations. Previous experience has shown that a presence of a carrier or at least amphibious assault ships is a prerequisite for a successful conduct of operations. The availability of immediate anti-aircraft defence in the form of fighter aircraft operating from nearby platforms is very important. This fact has been demonstrated in the course of the Falklands War, where the availability of low performance Harrier aircraft to the British enabled them to fend off many Argentinean air attacks. Global projection of power, on the other hand can only be carried out by one remaining superpower. Only, the United States navy deploys the surface

action and carrier battlegroups that have the capability to project power on any part of the globe.

Naval power projection is a multi-faceted mission. At one extreme, the ultimate power projection is nuclear strategic deterrence - which is actually another military role of the navies. At the other extreme, naval power projection is linked to the diplomatic role of the navy. Some exercises of land operations performed by navies for projecting their power overland such as the landing of small contingents actually overlap with some practises of gunboat diplomacy where similar operations are undertaken. The operations of the Royal Navy in the Yellow Sea during the early 1920s are good examples of this.<sup>27</sup>

# Diplomatic Role Of The Navy

# Gunboat Diplomacy

The most commonplace of diplomatic roles for the navy has been gunboat diplomacy. This aspect of navies has been long recognized by the authors of the subject as a positive spin-off of the employment of navies.<sup>28</sup> Gunboat diplomacy is considered by some writers as the type of missions carried out by the naval forces whose governments

"... try to affect the thinking and behaviour of the other governments with little or no use of force with their navies."  $^{29}\,$ 

The employment of navies in a diplomatic mode of operation may widely vary in character. While some writers

like Eric Grove have covered the diplomatic role of a navy under a number of headings such as "gunboat diplomacy" and "showing the flag" in accordance with the level of force and degree of political resolve employed,<sup>30</sup> this study examines the subject under the single heading of gunboat diplomacy. However the mission of gunboat diplomacy has been divided into four classes as James Cable -a noted writer of the subject, has classified :

"1. Definitive - When A fait accompli is created.

2. Purposeful - to induce 'someone else to take a decision which would otherwise not have been taken : to do something or to stop doing it or to refrain from a contemplated course of action.

3. Catalytic - 'a situation arises pregnant with a formless menace or offering obscene opportunities. Something that is felt is going to happen which might otherwise be prevented if force were available at the critical point. Advantages , their nature and the manner of their achievements still undetermined , might be reaped by those able to put intermediate power behind their sickle.

4. *Expressive* - 'to express attitudes , to lend verisimilitude to otherwise unconvincing statements or to provide outlets for emotion."<sup>31</sup>

This function of naval power can be exercised by almost any naval power, at almost any level. The determination and the timing of such a move is much more important rather than its strength; the display of force is used to affect the perception of the other side about the question at hand.

A much inferior opponent may have the opportunity of humiliating its adversary by skilful use of naval assets. This leads to the fact that even a small state can be successful with its small fleet. In the words of a writer; "the trappings

of naval diplomacy have made all states equal."<sup>32</sup> Highlighted by incidents like the case of the *Pueblo*,<sup>33</sup> even superpowers were not immune from effects in this type of combat.

The hardware needed for naval diplomacy is different from other naval missions. Only surface assets can be effectively used in such a process. As Ken Booth has pointed out submarines are almost of no use; a submarine must sink a vessel to signal its presence.<sup>34</sup> Ships must use their less lethal weapons such as light guns and refrain from seriously damaging the target. Sending a unit armed with missiles as the only armament is not appropriate because those weapons are considered as shoot-to-kill weapons. Their use will most certainly escalate tension since the use of shoot-to-kill weapons usually results in the destruction of the target or near-destruction of it, leaving less room for negotiation manoeuvres. On the other hand the weapons that offer flexibility such as naval guns or depth charge projectors may be better suited for such operations. A warship may fire a gun across the bows of a merchantman to stop her, however she can not fire a missile to achieve the same purpose. The first move will cause the other side to wait and think, whereas the second action that in all likelihood would destroy the target, will provoke the other side to retaliate.

Naval diplomacy is now realized as an important function of naval power. Therefore, it will continue to be one of the available options for naval planners for a long time into the future.

# Constabulary Roles

# Crisis Management And Maintenance Of Good Order

One of the functions of crisis management may be defined as ensuring that a potential conflict does not escalate from a crisis situation. As noted by most authors the flexibility provided by naval power allows navies to manage and prevent the conflictual situations successfully which makes them efficient tools in handling of crisis situations.<sup>35</sup>. It can be remembered that during the Spanish civil war this flexibility of naval power was used by the Royal Navy to deter potential aggressors such as Royalist Spanish and Italian naval units from interfering with the evacuation of and humanitarian aid to the civil population without starting a conflict.<sup>36</sup>

In this study ,the concept of naval crisis management will be viewed from this perspective. Naval forces usually follow the directives of the decision makers. On the other hand most of the tactical handling of a case is done by the local naval commanders. A tactical commander may be a better judge of the situation and act more decisively than the distant higher levels of command since he is near to the scene and adapted to the conditions of the situation. Flexibility offered by the use of the naval powers comes into the use in this stage.

According to some naval writers, naval forces can be employed by the United Nations in naval operations that need more flexibility in handling , especially in the political dimension.<sup>37</sup> It is further argued by some of these writers that

naval forces can give support to United Nations` efforts in its operations.<sup>38</sup>

During crisis situations, tactical handling of the situation can be carried out by naval forces that happen to be close to the area of the crisis if they are present. Timely deployment of the forces close to the area of potential problem increases the chances of prompt and decisive intervention to defuse the crisis, adding even more flexibility to the handling of the crisis.

# Safequarding Of National Resources

The sea has great amounts of raw materials, sources of food and energy. The presence of such resources in the sea requires safeguarding against accidents and hostile acts. This is only possible by carefully designed and enforced marine protection regimes.

As an example the fishing activities can be taken. While people have caught fish from the sea for a long time, only for the last few decades fishing has evolved into a massive industry. Each year approximately seventy million tons of fish are caught.<sup>39</sup> It has become a vital component of some countries' economy such as Japan, Iceland and Norway. However due to the lack of an effective regime, some fish species have been caught to the point of extinction. There have been disputes over the maximum sustainable yield and its allocation. This is only one of the problems that are encountered over the management of maritime resources. This and similar problems have been voiced by some authors who state the need for an effective international regime :

"... to ensure that vessels comply with rules. It has been a tendency for countries with seabed to increase their areas of maritime jurisdiction. They have to identify, plot and monitor the activities of all vessels, ensuring that individuals are not breaking the rules in these areas."<sup>40</sup>

The safeguarding of off-shore resources also requires controls on sea traffic. Frequent sea accidents cause a significant amount of pollution. The increase in the sheer volume of sea transport is also another reason. World's maritime fleet has gone up over four times in the last 35 years.<sup>41</sup> It is clear that the shipping routes must be regulated as the air routes. Especially in focal points, like the English Channel, Bosphorus, Suez and Panama canals local states are likely to be involved in surveillance, traffic schemes, identification, interception and arrest of offenders.

The navies have all the necessary qualifications to pursue such objectives, and they have the staying endurance that will allow them to patrol the areas for a long period. Naval forces also have a wide range of responses ranging from notification to prompt preventive action through use of arms, to give when there is need for a response to an offender. These properties give the naval forces an advantageous position for such operations.

The preservation and the safeguarding of the maritime resources are best done by area rather than point defences. This is due to the geographical conditions; generally the resources occupy large areas. In such cases aerial surveillance becomes necessary. Ships must be able to respond actively and immediately in emergencies. Their response must

also be proportionate to the threat or situation. Therefore their properties, such as being impressive, having clearly visible weaponry, high speed, and good sea-keeping are important for naval forces that will indulge in such tasks. The endurance characteristics and manoeuvrability are also positive attributes.

Navies have units that are dedicated for this type of mission. Often called the Coast Guard, resource safeguarding is usually carried out by these units which are composed of the lighter vessels of a navy. The past record also shows that navies may even use their capital ships for these missions if the situation needs their deployment.

In the list of naval missions, the safeguarding of offshore sea resources is a hybrid mission of three roles at the same time. It encompasses military, diplomatic and the constabulary roles of the naval forces. The growing importance of the economic aspects of the use of sea makes the safeguarding of one state's exploitation of such resources an important mission.

#### The Framework Of Analysis

The framework constructed above will be used in this study to provide a perspective for the comparative analysis of the developments that will be presented to support the main idea of the thesis. The model will also help our understanding of the naval power theory.

In the cold war some of the missions defined above were more frequently utilised than others by the naval forces.

However, needs of the post-cold war environment will result in a reappraisal of naval missions and the redrawing of priorities.

#### III FUTURE OF MILITARY TECHNOLOGY AND NAVAL MISSIONS

Navies have always been sensitive to the developments in military technology. It has generally been a technological factor which has led to modifications in existing missions or creation of new ones. The capabilities offered by the technological developments directly affect the naval missions. It must be stated that, the political needs arising from the situations at hand formulate the general objectives of naval missions. However, technological constraints define the limits within these mission objectives can be pursued.

Naval missions are actually the product of the technical and political objectives. In that respect, political formulations without consideration of the technological limits will not be sufficient. Similarly, technical capabilities are by definition not ends but means and therefore do not have an independent mission definition aspect.

Technological developments play a critical role in the development of naval strategy. In fact naval power is more sensitive to technological developments than land forces since its units are more technology intensive. This extensive dependence on technology makes the examination of the developments in this field vital to the study's efforts to focus on the future of naval power missions.

The first part of this chapter deals with the technological developments that are taking place which may

affect the naval operations. This section will focus on the military side of developments that will shed light on the probable new formulations in the naval operation profiles. The next part is devoted to serious developments that have taken root in the last decades: proliferation of high military technology, and its products, into the Third World. This subject is critically linked to international security. The naval dimension of the proliferation is equally important especially if the procurement of capable naval weaponry by radical authoritarian states is considered.

## 3.1 The Emerging Naval Military Technologies

# Small Combatants And Anti-Ship Missiles

Technological developments of the cold war was centred towards the major naval actions, such as global scale power projection, amphibious operations, surface engagements with major combatants at long ranges. All of these were designed for use by major naval powers at high seas. The introduction of the anti-ship missiles for example gave a chance to surface ships ( as well as submarines onto which they were mounted later ) to engage their enemy over-the-horizon ranges. The anti-ship, anti-aircraft missiles, guided torpedoes have all found their way to most major navies of the world, and has been used with effect in conflicts.

The military experience in recent operations such as Persian Gulf has shown that the technological edge still remains a major battle winning factor. Numerical inferiority can be nullified and reversed by superiority in quality. The naval dimension of the military technology will also take its share from the developments. However the chief benefactor of the new developments will be the smaller naval powers.

The concept of a small and capable navy has always been favoured by writers on naval strategy for quite a long time. This theoretical concept seems to be closer to practice today than in any other previous time. Regional conflicts are usually made up of naval warfare between states with limited resources. Such a war will be conducted with a number of Fast Attack Crafts (FAC) and land-based aircraft armed with anti-shipping missiles.

These small naval assets were the focus of constant technological development for the last few decades. Especially anti-ship missiles were upgraded in performance and lethality in the last decade.<sup>42</sup> The advent of VLSI - the very large scale integration is one of the reasons behind this advance.<sup>43</sup> The decreasing size of engine and sensory systems allows missiles to penetrate the defence more easily, pack more explosives and fly to longer distances with an increased amount of fuel.

After the sinking of the *Eilat*, anti-ship missiles have been watched with caution.<sup>44</sup> Ever since their deployment in the navies of Soviet clients, they made United States and NATO members quite susceptible to sudden and destructive attacks. These missiles, packing onboard target seekers of various kinds<sup>45</sup> carry enough destructive power to cripple and even sink

a destroyer-sized opponent. The terrible punishment taken by the H.M.S. Sheffield and its subsequent abandoning after beinghit by a single *Exocet* (which has a far less destructive potential than pact-built missiles) well illustrates the lethality of these missiles. Today missile technology has improved even further and with more advanced targeting methods, such as skimming the sea to decrease the chance of being detected prematurely, homing on jamming and using dual search modes (i.e. using both the infra-red and the radar search modes at the same time and comparing the two results) their chances of intercepting the targets have risen greatly.

The threat of using anti-ship missiles has been considered by the major navies so that all of them reserve great amounts of research to find effective counter measures. The reason lies in the great worry caused by the deployment of these missiles by most of the world's small navies. When Libyan naval forces engaged the American navy with the intention of driving it out of the Sidra Gulf in 1986, the presence of such missile craft gave United States navy a great amount of worry. For that reason it kept a constant umbrella of aircraft armed with anti-ship weapons to destroy such combatants before they come in range to fire their missiles.<sup>46</sup>

The development of air-launched anti-ship missiles that can be used by many available air platforms and the availability of such missiles in the international arms market is another important factor that may increase the capability of regional and coastal navies. The presence of such weapons means that a nation does not need a navy to project naval power hundreds of miles from its shores.

The importance of the countermeasure against anti-ship missiles was shown in the lessons of the October 1973 war, when Israeli missile boats used manoeuvre, electronic countermeasures, and close-in rapid fire guns to defeat the SS - 2C missile with success.<sup>47</sup> On the other hand, during the tanker war in the Persian Gulf, merchant shipping that had no countermeasures received 52 hits out of 53 firings.<sup>48</sup>

The threat that arises from the deployment of highly capable new generation anti-ship missiles is actively responded to by the use of countermeasures to nullify their effects. The emphasis is given on the countermeasures that is either aimed at the destruction of the warhead by the close-in weapons systems such as the *Phalanx* system used by the United States navy or the more conventional weapon/sensor countermeasures employment. Today, the countermeasures against anti-ship missiles are very important since the capability of such missiles is very advanced so that no captain can hope to manoeuvre out of their way as in the 1973 war.

Various means of confusing the guidance head of a missile have been tried; electronic jamming, chaff, infrared heat signature suppression and even lasers.<sup>49</sup> However, missile designers usually adapt to these by simple and on the spot changes, such as frequency shifting during flight and installing multiple sensor options and home-on-jamming tactics. Tactical solutions such as using 'cocktails' -single salvos containing a variety of missile types also proved to be very effective.

At the same time advances in long range propagation and navigation systems have enabled introduction of long range

anti-ship missiles and also giving even the smaller missiles an over-the-horizon capability.<sup>50</sup> However such missiles need the presence of a targeting capability such as a Remotely Piloted Vehicle (RPV), forward observation helicopter, aircraft or a satellite other than the launch platform.

New missile boats that are being launched by the navies are significantly heavier armed than their predecessors. These ships pack enough firepower to cripple the most powerful warships of the major navies if they get within range. In future battles at sea where the detection range is hindered either through the use of jammers or due to environmental reasons, they can be very effective.<sup>51</sup>

#### Developments In Submarine Warfare

Diesel electric submarines have been operated only by Britain and ex-USSR in the cold war. However, they are now making a comeback with the end of the cold war. The introduction of new classes such as the *Kilo* has caused stir in the western naval circles since these ships are very hard to find and equally hard to sink.<sup>52</sup> The SSKs are also cheaper and easier to maintain than their nuclear counterparts. This is one of the reasons that the market for SSKs is growing.

Similarly, the performance of diesel-electric submarines has improved greatly over the last few decades with the result that they are now used by over 40 navies. The advances in torpedo weaponry of submarines (torpedoes or anti-ship missiles) as well as the latest high capability sonar designs

have narrowed the quality difference between major navies and the smaller ones.

Most diesel-electric submarines are armed with systems that enable them to launch anti-ship missiles - such as the *Harpoons* fitted to *Hayashio* class submarines of the Japanese Navy.<sup>53</sup> Such weaponry in addition to the traditional torpedo armament, gives the SSKs an additional stand-off attack capability that can enable them to inflict serious damages on surface units.

Advances in the machinery of diesel electric submarines give them more endurance. The diesel-electric submarines will therefore be able to operate for longer periods in the sea without refuelling. The increase in the range and endurance of such submarines also means that they will now be better adapted to stalking the SLOCs in times of war. They can lie low in the 'choke' points of shipping, as demonstrated during World War II when American and German submarines had inflicted catastrophic losses despite technologic inferiority.

These improvements in the capabilities of submarines will be important. Acting independently in World War II style, with enough missile-armed submarines led by an adequate targeting information network, even a small navy could destroy or seriously damage the naval forces of a neighbouring small power at their base.

Advanced submarines are potent threats even as individual units. Only two to six are likely to be operated by current and future small-but-capable navies. While it is clear that such a small submarine force probably cannot deny the use of

regional seas, they may be a constant source of harassment and minor attrition and draw larger forces to neutralize them.

The relative cheapness of SSKs compared to the other submarine platforms will greatly facilitate obtaining such ships for regional and coastal navies such ships for. The improvements in the performance and the capability of these ships will definitely make an influential addition to the capability of coastal and regional navies.

# Protection Against Air Threats

The contest between the aircraft and the ship has gone on since the early days of the century. However, the advent of the air launched anti-ship missile has led navies to install systems that can eliminate attacking aircraft before it can launch missiles. At the same time similar systems that can destroy missile barrages ( in the case of a probable clash with aircraft such as the *Backfire* that has very long range anti-ship missiles) have also been developed by navies.

The development of such systems such as the American Aegis missile and aircraft combat system increased the survivability of surface groups operating against an enemy supplied with naval strike aircraft to some extent. However the price of these systems is so high that only crude versions of such management systems remain in the purchasing power of the medium navies.<sup>54</sup>

Today, air forces are generally devoted to support operations on land but are available to fly naval missions if

the need arises. The capabilities of modern aircraft allow such multi-functional air forces. The air forces have grown in effectiveness even when they are handled by the Third World powers with limited servicing facilities and operational experience. This was demonstrated in the naval engagements of the Falkland and Gulf War where it was found that Third World states can effectively penetrate the anti-aircraft screens of the major navies.

Therefore air power will remain as one of the chief disadvantages of conducting naval operations under enemy controlled skies. Naval ability to cope effectively with the air threats still needs development. Despite the claims of the defence manufacturers about the effectiveness of their anti-aircraft weapons, the extra caution shown by the navies is an important indicator of this.

3.2 The Increasing Availability Of Technological Sophistication

The technological sophistication of weapons in the naval strategic environment will favour the regional and the coastal navies. This is because the developments in the military technology increase their powers relative to the major navies. As FACs and their related munitions become more sophisticated, their unit effectiveness increase considerably.<sup>55</sup>

Especially as the further development of compact systems and subsystems progress, even increasing amounts of microelectronics and vertical-launch weapon modules will be

placed in small ships. Automation can also help reducing the crew size and therefore the living space requirements by taking over the jobs done by the personnel and eliminating the need for their presence. The space gained by this decrease is also used to give the ships more sensory systems and ammunition load. These developments can be best visualized in the following example; a 550 tonne *Reshef III* class Israeli Fast Attack Craft is handled by the same number of personnel as a *Komar I* class missile boat of 1960s design which is in the 200 tonne class. However, *Reshef IIIs* can carry up to 14 medium to long range SSMs, an on-board helicopter for ASW/ASuW operations and have an extensive sensory kit while *Komar* was designed to carry only two of the inferior *Styx* medium range missiles and a very crude radar set.<sup>56</sup>

The overall effect of these trends will be the enhanced capability of individual units, increased size and sophistication of weapons and platforms and therefore much more capable forces even for small sized forces.

The technological developments in the naval military will greatly improve the regional and the coastal navies which have been deprived of such capable equipment in the course of the cold war. Especially the proliferation described above is an important factor in the procurement of such systems by the navies of lesser states.

The proliferation of high technology military products has been a major concern for the international community for the last few decades. The naval dimension of the subject is equally important and the consequences also pose a threat to the security of the maritime activities.

The proliferation of conventional technologies increased with the dissolution of the political blocs. This led to an increase on the constraints exercised for the diffusion of weapons technologies that may affect the balance of power. The reflections of this development were made apparent in the Gulf War, when Iraqi *Mirage* F-1 fighters began attacking merchantmen in the Gulf with *Exocet* missiles. These weapons, which were examples of high western technology began to find their way into the armouries of the Third World naval powers.

In 1983, less than 40 countries operated missile armed ships or submarines. By the early 1990s, the number had reached to over 70.<sup>57</sup> This almost twofold increase in the number is due to the extensive military purchases made by countries. The tendency to arm with modern weapons was fuelled by two other factors: first, the entry of lower priced models of these weapons, especially from countries with expanding military industries such as Israel, China and Sweden. These countries with some of the western ones which have extensive arms-trading potential such as France, have sold many anti-shipping missiles in the period. Perhaps the most noteworthy example is the selling of Chinese and French anti-ship missiles to Iran and Iraq in the Gulf war.

The cutdown prices for the crude versions of high technology weapons is a lucrative market. Today many potential buyers for such weapons exist. After all, even a small navy would like to buy an inaccurate but nevertheless threatening anti-ship missile rather than relying on more traditional methods which it has far less chance to inflict damage.

The factor of chain reaction effect for armament must also be taken into account. When one country makes a military equipment purchase, its neighbours, especially if they have some suspicions about the intentions of that state will desire to counter this development by acquiring a similar weapon system. If the heavily arming Gulf states and some other regional navies are considered, it is clear that the arms race in the naval dimension is slowly gathering speed.<sup>58</sup>

Another factor is the increased number of countries that have the capability to manufacture such SSMs. Especially China, Argentina and South Africa advanced their anti-shipping missile capabilities in the last 20 years. It deserves mention that of this group, especially China became a major SSM supplier to Third World navies.

At the same period, these countries also managed to introduce other types of naval weapon systems for anti-aircraft defences, IC<sup>2</sup> systems, sensory systems and home designed and built naval platforms. These technical capabilities, gained by those countries act as the basis of their regional naval powers.

China and India are good examples for illustrating the development of such capabilities.<sup>59</sup> China has developed its SSBN capability and launched its first SSBN in the early 1980s. She already deploys some 5 SSNs and builds her own *Luta* class DDGs that have blue water performance.<sup>60</sup> China plans to deploy an aircraft carrier before the end of the century.<sup>61</sup> India also shows similar advances in naval technology. Today the Indian navy has managed to deploy onboard systems for AA warfare. She is currently believed to be in the process of

completing the final plans to deploy AA missiles on her warships.

The chief benefactors of the increased proliferation in the naval dimension are the navies of small and medium level states. Those have been excluded from the luxury of high capability weapons in the cold war. However, they are now in a position to get such equipment. The proliferation will change the balance of technology in favour of those navies.

# 3.3 Developments In Military Technology And Naval Missions

Advances in the military technology favour small and medium navies, because of the increasing conventional framework of the naval strategic environment and at the same time its increasing availability to all navies at the same time. The disappearance of the nuclear mission from the agendas of the major navies and their former classification to fight a battle at high sea, put them at a disadvantage when fighting within enclosed and bounded areas of the sea. The improvement in conventional technologies also makes possible for regional navies to deploy more capable ships in covering positions. This can offer a significant advantage in attacks against bigger sized opponents and in rapid deployment of limited numbers of units on successive missions within a large combat zone.

The major navies have long enjoyed a qualitative as well as a quantitative advantage. Besides they already employ most of these technologies. The effects of the increasing

availability and increased conventional capabilities will be more visible in the coastal and regional navies. The increasing capabilities of such navies will enable them to be used to support land operations in a limited way, to help in supply and logistics, and interdict similar operations or commercial use of local seas by the enemy. The task of small navies is generally based on establishing the local sea control. This may be limited in the coverage of the area but will not be restricted by a time period. They will also be tasked with the elimination of the enemy naval threat, and neutralising the air threats and submarines.

The small and medium navies will continue to improve their strategic and tactical situation against major ones. The first and foremost concern of such navies; the threat of a bigger naval power is now no longer considered as a serious danger as it used to be in the past. The problem of eliminating the surface threat, a major element of sea control is now in a better position to be solved. As described above the increasing firepower of small navies now gives them a better chance to deal with such adversaries. While larger navies rely upon their fleet of major warships ( and quite often upon their sea-based air force ), small navies enjoy the advantage of land based strike aviation that is far better equipped than in the past. It can provide semi- or at least partial coverage of maritime areas they want to control.

The decisive battle will be the primary objective of such small navies against similar sized opponents. After the initiation of hostilities, in order to eliminate the potential threat of the enemy's surface combatants or weaken his resolve

a direct and primary clash will most probably be sought by these naval forces.

On the other hand, when facing a major naval power regional and coastal navies may opt to 'lie low' and use the time-honoured 'fleet-in-being' strategy to threaten a flanking attack on the naval forces of the adversary. The targets may be coastal cities, or precious SLOCs. Without offering an opportunity to be defeated at sea by the other side they can harass the major enemy resources. One way that can be used by the major navies to counter such a strategy is to perform pre-emptive strikes from land or sea based aircraft and cruise missiles.

In the light of the developments presented so far, the following developments in the nature of future naval missions can be predicted :

- a) Combined air-surface tactics will be exercised to maximise lethality.
- b) The strategy of choice will either be built around pre-emptive air strikes or forcing decisive naval engagements rather than facing a prolonged war at sea;
- c) Denial of the control of a particular area will be a much favoured option especially since most nations now have a submarine ability. These can be used in naval combat against SLOCs, enemy bases or 'choke areas' of shipping.
- d) Also the time honoured principle of success in combat will remain as the tactical innovation and technical adjustment given the wide range of operational capability of the naval forces.

Naval power operations reflect the developments in military technology. This fact will also remain unchanged in the new period. Technological constraints will define the limits of naval missions. IV GEOPOLITICAL DIMENSIONS OF THE NEW NAVAL ENVIRONMENT

## 4 .1 The New Strategic Environment

Karl von Clausewitz defined war as the continuation of policy by other means. A noted writer of International Politics has extended this definition to define cold war as the continuation of war by non-lethal means.<sup>62</sup> During the cold war opposing fleets quietly watched each other's moves and tried to match them. Each navy pursued a grand strategy dictated by the conditions of the cold war. Strategies of these sea powers were directly effective on the type of the missions carried out.

Strategies are not devised without any motives, policies drive them. Policies in turn, are based on the prevailing strategic environment. The conditions of the maritime environment have apparently changed quite radically in the last decade. The cold war, which began in the late 1940s, has ended with the fall of the Warsaw Pact and the disintegration of the USSR.

The conditions defining the missions of the sea power in that era have also come to an end. There are no longer two fleets that closely try to monitor and match the opposite side's move. They do not prepare any more for the day they will confront each other. The disappearance of one of the main

elements of the cold war sea environment will inevitably change the nature of the naval strategy in this new era.

The developments that have taken place in the last decade produced an entirely new strategic setting. After almost half a century of political combat and some minor proxy military skirmishes, the cold war has come to an end. Changes that could only have been imagined by the most liberal thinkers have led to the break-up of one of the superpowers.

The most acclaimed growth of regional navies has been in the East. Spurred by the perception that the United States is leaving the Far East, Asian navies seem to be in a period of speedy expansion. True to the Mahanian approach, the rise of the trade in especially the south east of the region also fuelled such attempts by the states to increase the capabilities of their navies. Japan's Naval Self-Defence Force has been transformed into the sixth powerful fleet in the world with more surface ships than the British Royal Navy. It has ordered a V/STOL carrier for delivery in 2000 as well as additional Aegis destroyers.<sup>63</sup> The Chinese navy is building progressively a blue water fleet. Its fleet of destroyers is making increasingly longer journeys. There is also the possibility of purchasing a carrier, probably the Varyag from the Russian Federation. In the Indian Ocean, the Indian naval force built around two light carriers, six submarines, and bases in the Maldives and Tanzania shows the same trends of expansion.

The rise of the naval powers of authoritarian states and politically unstable states such as Iran, Algeria and Libya in the Mediterranean rim and the Gulf also deserve attention.

These states border the most vital SLOCs in the world. Their authoritarian regimes have initiated extensive armament efforts. Even now they have a more than enough capability to threaten these SLOCs. Only a few of the major navies can operate in those areas and keep the SLOCs open against the possible attacks of these countries.

Another newcomer into the great naval power club is the European Navy. If realized, Europe's "Maritime Concept 2010" will allow the European Union to assemble a naval force of 30 nuclear attack and ballistic missile submarines and 70 modern diesel-electric submarines, 8 small carriers, over 100 destroyers and frigate sized ships, by the end of this century.<sup>64</sup> While there is no reason to think that the European naval forces will pursue an aggressive motive, nevertheless it will support a growing self-confidence and assertiveness in naval matters by Europe.<sup>65</sup> This may result in the widening of the differences between United States' and European views on some naval issues.

# 4.2 Withdrawal Of The Soviet Navy

The outcome of the cold war was a victory for the West. This transition, from a bipolar international system to a unipolar one also affected the naval strategic thinking which was based on the mutual competition of the two sides on the oceans of the world for the last several years.

As the Soviet power left Europe, the Soviet navy also gradually ceased to perform many of its cold war functions and

duties. The Ex-USSR is now being transformed into a new group of states as a result of political, ethnic and national conflicts, and economic distress. It is quite doubtful that any of the new republics, even including the Russian Federation will appear as a new global military superpower.

The naval environment is also affected by this sudden decline in Soviet military power. There are 'cavities of power' similar to those created in the central and eastern Europe after Soviet troops have left.

However the two withdrawals are not entirely the same. Though they both signal the exit of the USSR from a superpower position, the naval withdrawal of the USSR or its remains will be completed in a longer period of time, its consequences will also take longer to take effect. The naval assets of the Soviet navy will continue to decrease, including the massive nuclear armoury. A large navy is actually an expensive hardware investment, something which the CIS states will probably not desire and can not afford to keep, given the present condition of their economies.

Naval forces will probably be the first thing that will be on the disposal list since maintenance of naval units is expensive as compared to the other military units. The withdrawal of these assets will come in stages as the economic decline forces the CIS to dispose of these now unwanted hardware. The voluntary phasing out of these units, generally seen as an offensive tool of war will also positively affect the western opinion on which so much depends in the form of economic aids for the reforms.

Another point that will seal the fate of the remains of the former Soviet Navy is its minimal strategic value to Russia, a traditional land power. As a branch of the military forces that is redundant and has a less cost-benefit ratio when compared to other services, the Russian navy will be the first branch that will be compromised when the need arises to cut the budget deficit. Indeed the time must have come for such a deletion of unwanted assets in the former USSR navy, especially if one considers the enormous economical problems of Russia.

The withdrawal of ex-USSR naval units from the oceans of the world will be gradual. The units of its navy still outnumber all other naval fleets except that of America. If one also considers that ships built in the 1950s and 1960s are nearing their operational life and are due for block deletions, it will be evident that the Russian fleet will retain a much diminished proportion of the ex-USSR navy. It will, however, probably take a long time before full decline of this massive naval power becomes complete.

A decline in the power projection capability and the number of 'flags shown' which is central to a superpower military potential, will come as the first signal of the USSR's naval withdrawal. Those capabilities that are dependent on the presence of military staging bases ( which may be fixed or floating) in the appropriate locations of the world. The Soviet Navy depended on her naval bases to a greater extent than other naval powers since it lacked a capable aircraft carrier force and extensive mobile logistic support system to back up her operations.<sup>66</sup> The evacuation of the former Soviet

owned bases in the various locations of the world will result in growing difficulties for its inheritors to maintain their naval presence and carry out similar operations.

The former Soviet union maintained a number of bases in parts of the world. Dispersed in the territories of the USSR clients, the presence of these bases gave the Soviets the opportunity to pursue their strategy of backing Third World struggles. The consequence of the evacuation of these bases will be the ensuing vacuum of power in those areas where previously the Soviet navy has projected its presence.

American and allied counter-Soviet naval concentration will also decrease in number and strength since they are now redundant. Their meaning of existence; the offsetting of Soviet influence has now faded away. This is another outcome of the withdrawal that further enlarges the ensuing military vacuum.

The present leadership of the Commonwealth of Independent States has claimed that it poses no threat to the United States. Yet the CIS still possesses some 27, 000 warheads, an armoury that cannot be ignored, especially in light of the continuing instability in the former Soviet Union. The Russian-led Commonwealth's military forces remain potentially formidable. It can still field the second most powerful naval power on the globe and the navy still deploys thousands of these nuclear warheads aboard its SSBNS.

Moreover, the Commonwealth will decide to disengage slowly. They still have interests which diverge from the western interests in Black Sea, Southeast Asia and other parts of the world. The ideological aspect of the cold war may in

fact have been terminated, but the geopolitical aspect will only gradually exit the scene.

Indeed the problem that flared between the Ukraine and Russia about the Black Sea fleet is an example for this. While admitting that the fleet is burden for the stagnated economy, Russia has spent much political effort and economic arm-twisting to retain a larger share of the Black Sea Fleet and also to retain the important naval base of the Novorosisk.

The vanishing of Soviet power from those areas may have variable after effects. While in those regions where no capable sea power to fill the vacuum exists, the extra-regional factors will come to take place, but regional powers will compete with each other to gain the supreme position in other areas. One such region is the Indian Ocean where the Indian navy is rising very fast to fill the vacuum left by the decline of the superpower rivalry.

4.3 The Changing Naval Balance Of Power In The Indian Ocean

#### India's Quest For Supremacy

The withdrawal of superpower presence from the Indian Ocean is likely to cause intense struggle between the powers of the region. The intra-regional conflicts between the powers of the region that have largely remained unresolved because of the cold war can now be pursued by all sides, now that there

are no superpower fleets watching over their shoulders, ready to intervene if one side goes too far.<sup>67</sup>

The capability of the Indian navy was highlighted in the conflicts with Pakistan. During the operations against the Karachi and Chittagong the Indian navy managed to suppress Pakistani naval resistance.<sup>68</sup>

Currently India operates about forty-five combatants in her navy which makes her the largest navy in the Indian Ocean.<sup>69</sup> The steady increase in her naval capabilities since 1960s has made her the leading sea power in the region. It deserves mentioning that India plans further expansion in her naval force such as the home built versions of ships that it now operates.<sup>70</sup>

The importance of its naval power becomes more meaningful when India's unique geopolitical position in the Indian Ocean is taken into account. A quick glance at a map reveals that the Indian subcontinent cuts the Indian Ocean into two parts: the Arabian Sea and the Bengal Bay. India enjoys an interior lines advantage. Located in a central position, India can exert its influence on the events emanating from both of the regions that involve not only local powers but also major extra-regional powers.<sup>71</sup>

## Reactions From Extra And Intra-Regional Sources

The Indian Ocean comprises a large part of the developing world. Excluding India, there are no major powers in the region but 36 littoral and 11 hinterland states, most of which

are non-aligned. It is a large pool of cultural, political and religious diversity. Therefore the formation of a solid aligned bloc consisting of the regional countries against India will not be easy. So far only a number of border skirmishes with China and two wars with Pakistan in which she emerged victorious, were the only armed resistance shown to India.

India's quest for a superior position in the Indian Ocean may be received warmly by some extra-regional powers such as the United Kingdom and the United States. The United Kingdom is a traditional ally of India and supplied her with sophisticated weaponry throughout the cold war period. Britain sold the Indian Navy its second aircraft carrier and agreed to help its reconditioning operations on older ships. Britain will probably continue to support India as a factor of stability in the region.

The same notions are perhaps also maintained by the United States. After the end of the Afghan War, the value of Pakistan gradually diminished. Pakistani efforts to build nuclear weapons are viewed as a direct threat to regional stability. As the American-Pakistani relationship slowly turned sour,<sup>72</sup> American officials sought a rapprochement with India. In a meeting with the Indian officials in New Delhi, 1991, American officials discussed the future possibilities of co-operation in the region for keeping the stability. One year later two Indian destroyers took part in a joint exercise with United States forces in the first of a number of similar exercises.<sup>73</sup>

India is viewed as the integral factor for stability by outside forces. Therefore its expansion in the naval environment may be tolerated and even be backed by those powers as described above.

On the other hand, regional competitors may rise to rival India. The most probable candidate is Pakistan; which fought two wars with India. Barred from the three sides by inefficient and dependent on a non-sophisticated road transport system, Pakistan depends on her sea lines to get necessary imports to support and sustain her economy. Pakistan underwent a very efficient blockade during the wars with India. In order not to let anything like this happen again Pakistan has embarked on a strategy of sea denial of the critical areas in her territorial waters to Indian naval threat.<sup>74</sup>

Increasing power projection capability of the Indian navy is another reason for states in the region to worry about Indian naval power. Despite its limitedness such a power may back up allied movements to the Indian cause in the Indian Ocean region (which is so much in abundance) tilting the balance of power to its advantage. No state is free from internal disturbances in the region. The presence of a force that intervenes on the behalf of anti-government groups only makes life more difficult for the region's nations. Therefore the states of the region may step up to offset this potential of the Indian navy.

## The Future Of Naval Balance In The Indian Ocean

The Indian Ocean is one of the most likely places that a new naval balance of power will emerge in the coming decade. Under the light of the above observations, a dominance of littoral aspects in these new power formulations in which the regional powers, rather than then the extra-regional ones will be the elements, can be predicted.

India will use her naval strength to impose its influence in the region to enjoy a larger slice of the natural resources of the Indian Ocean. But the real objective of the Indian navy will remain the security of the SLOCs coming to India as it is dependent on these very important lines for her economy.

India, with her expanding naval power lies at the heart of any setting for the new naval environment. Other states in the region will not actually welcome the idea of the Indian Navy showing its presence in their troubled backyards or patrolling in their sea lines of communications. On the other hand India is viewed as the main element of stability in the post-cold war period in the region by the outsiders. With all these factors ranged against each other in the equilibrium Indian Ocean will certainly witness an arms race and high tension politics that will make it one of the most volatile sea areas after the cold war.

#### 4.4 Southeast Pacific

The Pacific was undoubtedly one of the most important 'backyards' in the cold war<sup>75</sup>. It was where a silent tug-of-war of countering the other side's moves was conducted throughout the cold war. Today, the Soviet Far Eastern fleet lies in a state of neglect in its ports. News of ships and machinery from the fleet being dismantled by the crews to be sold are commonplace.<sup>76</sup> As the decline of the ex-Soviet naval power becomes more complete in the Pacific, new players will emerge to balance the western side of the equilibrium. China with its combination of geographical location, industrial base and an ambitious naval expansion program will inevitably be the first candidate for study.

# Chinese Naval Power Expansion.

China managed to sustain an impressive growth rate in the last decade.<sup>77</sup> China's intentions to parallel this economic growth with a similar expansion in its military capabilities are testified by its accelerated efforts to modernise its armed forces. This new logic is different than the previously<sup>-</sup> formulated ones being based on a qualitative rather than a quantitative basis.

Chinese naval strength has increased significantly with the addition of several new classes and numbers of ships, each one much more capable than the older ones. The rate of introduction of these new classes increased especially after

the lessons of the Gulf War where the technological superiority prevailed over the numeric one.<sup>78</sup>

This naval force accumulation of China signals the Chinese aims to be the leading regional naval power; a position that is now vacant after the Soviet departure from the Cam Ranh Bay in Vietnam. China's security considerations are increasingly regional. The littoral inclination in the Chinese naval planning is also emphasized by its improving economy making China more sensitive than ever about its sea links. The improving Sino-Russian relationship on the other hand, affects the Chinese naval planners to shift their plans from full major conflicts in the Northern parts to smaller skirmishes in the Southern areas.

With its mountainous borders in the Southeast region making it quite hard for China to exert its numerical superiority, 79 China will seek future engagements in media that are more favourable to itself. The Chinese air force can not constitute a serious threat to the regional states. Many of the aircraft in the Chinese Airforce inventory are crude copies of USSR aircraft such as MiG-21, Su-27 and Il-28.80 These outdated aircraft have limited payload and range, and also suffer from a lack of suitable avionics that is required for operations in hostile environments. They can not be expected to survive in the face of even moderately effective air defence systems. On the other hand, most of China's neighbours such as Thailand, Taiwan and even Vietnam have extensive national anti-aircraft defences. The naval force therefore remains as the only alternative where China can exert its superiority in numbers and technology against its neighbours.81

The Chinese naval strategy formulated after the revolution was based on a version of Maoist Peoples' War At Sea.<sup>82</sup> It envisaged the support of land forces by naval extension charged with the mission of denying the coastal areas to the enemy invasion forces. The Chinese strategy is now changing; beginning in the 1980s the value of modern fighting vessels in present time naval environment became apparent to the Chinese naval leaders. More ships of modern designs are now replacing those acquired in the late 1950s and 1960s or built domestically with Soviet know-how. The primary motive of this doctrine seems to be the neutralisation of possible Russian amphibious operations against the northern parts of the country.<sup>83</sup>

It seems that China will increase its naval strength and capability to engage in naval operations in increasing distances from her shores.<sup>84</sup> The operation extensions were viewed by the western authors as more than training exercises.<sup>85</sup> They have demonstrated that the Chinese navy can manage the complex problems of long cruises, at-sea fuelling and communications over long distances.

With the improving Sino-Soviet and later Sino-Russian relations a shift of focus from northern waters to the south occurred. Additionally the Peoples' Liberation Navy (PLN) now enjoys a steady flow of sophisticated Russian naval technology. As stated by a writer, China has entered a new phase in her development plans to gain more hi-tech goods and not being constrained by the political factors.<sup>86</sup> It deserves mentioning that China also sent some naval cadets to the

Russian Pacific fleet to get more information on the handling of the carriers.

Chinese naval circles have begun to formulate more assertive naval strategies. The extension of the " coastal area " to either 200 km or the continental shelf, whichever is longer, clearly shows the drastic change in the logic of Chinese naval planners. Recently this expansionist motives were highlighted by a Chinese general as

> " in order to prevent China from being attacked from sea, it's necessary to extend the depth of defence in to the oceans and to have a naval capability of intercepting and destroying enemy far out ""

Paralleling the expansion theme, there is a growing interest in operations in the southern waters. The expanding capabilities of the navy make it more possible to stage longer-duration operations at sea which is prerequisite for power projection.<sup>89</sup>

It should be noted that China's naval power is already the most powerful in the region. This will make the Chinese more eager to deploy their naval power in the Southeast for "showing the flag". A three-stage naval expansion program outlines the ideas of Chinese naval planners; the first stage till the year 2000 sees the introduction of major surface combatants with advanced electronics; in phase 2, between 2000 and 2020 several small carriers will be built, as the embryo of the future task forces, which would appear in the last stage of the program. By 2040, China would be able to conduct naval operations anywhere in the world.<sup>89</sup>

It deserves mention that this plan may even have already been activated. Visits have been made to the ex-Soviet Fleet

by the Chinese officers in order to gain more experience in the handling of long range operations and also operating aircraft at sea. PLN also has revealed a plan calling for the training of about 100 naval pilots to operate ship borne planes before 1997.<sup>90</sup>

Beijing's efforts to build up its naval forces directly stem from the strategic environment that now prevails. The decline of the Soviet naval power motivates Chinese naval planners to be more assertive in the projection of naval power. Another important factor is the withdrawal of United States presence from this region of the Pacific. In 1992, the United States navy and Marine Corps left their largest base, the Cubic Bay in Philippines. After its liberation in 1944, the Cubic Bay harboured a large part of the United States navy. It had a number of dockyards, big enough to take in large ships, storage areas for fuel and weapons. There is no other base that gives the same level of support to the United States navy nearer than Oahu. The United States Marine Corps is also leaving the region; some part is going to Diego Garcia in Indian Ocean, and the rest to San Diego on the East Coast.<sup>91</sup> The withdrawal of the Marine Corps means that a swift deployment to the region as in Korea and Vietnam Wars are now out of question.

The withdrawal of the United States and Soviet naval might from South Pacific leaves China as the most dominant land and sea power in the region today. China will make use of its navy to expand its influence in the region. It must be expected that Chinese ships will perform active resource management and safeguarding missions. Especially after the

skirmishes with the Vietnam over the Spratsly Islands in the last decade, the Chinese navy shows a keen interest in such missions.<sup>92</sup> Considering the volume of natural resources of the region such conflicts in which China will be the chief naval actor must be expected.

However, in the not-so-distant future China may run into another rival; Japan. Japan currently has one of the most modern navies in the world. Her economic superpower status has enabled Japan to have a strong industrial base in the world. So far Japan has refrained from flexing this economic muscle. However, it may not and probably will not pursue this policy forever. Especially in the last few years Japanese leaders showed a marked tendency to play a more assertive role in Asian politics.<sup>93</sup> Similarly, Japan may feel that time has come for her to step back into her place in Asian politics. Traditionally a sea-going state, and with a well demonstrated ability for naval capability, Japan will surely modify its naval strategy. This may call for a western and southern expansion in its naval area of operations. In that case Japan is bound to step into the sphere of Chinese influence.

Littorality plays the main theme in the South Pacific. The exit of the ex-Soviet Union in the Pacific, as well as that of the United States navy and marines, left China with her growing naval capabilities as the most possible candidate for the mystery of the Region. Aided by her relatively modernised navy and airforce China may take the supreme place. However, it will not be long before Japan emerges as a military, as well as an economic power. In that situation, however, friction may appear as a result of the rivalry for

the influence over the sea areas in the region that is rich with natural resources.

4.5 The Middle East And Instability

### Mediterranean Sea

The Mediterranean meets at the connection of three continents on which the first advanced civilizations appeared. For many centuries, the water ways in the region were the most important routes for goods, culture and invading armies. Its importance has not declined today, on the contrary it may even be said that it has increased.

NATO and Warsaw Pact maintained large numbers of naval units in the Mediterranean. With the end of the cold war, the Soviet presence or the remnants of it gradually left the Mediterranean. The stability formed by the balance of naval power between the evenly matched presence of two superpowers has slowly left in its place a one sided presence by the United States and its allies. However the exit of the Soviet presence from the Mediterranean also signals the elimination of constraints that held back third parties from actively pursuing their own objectives.

Before going on to explore the possible outcome that may emerge in a relatively less constrained environment, it may be useful to remember the unique geographical position of the Mediterranean. It may be viewed as a long sea way that extends

from the east to the west. Along the east-west direction some islands such as Malta, and Cyprus which have a significant role and presence in the surrounding sea routes, are present.

These properties force the Mediterranean SLOCs to concentrate along specific routes rather than being dispersed. This increases the vulnerability of SLOCs in the region. Another point that must be stated is that the maximum distance between the North and South shores is less than the operational range of most striking aircraft. It would not be incorrect to assume that a naval group operating in the Mediterranean would not be out of distance for a belligerent naval strike. This point becomes more obvious if the presence of long and medium range strike and bomber planes in the inventories of some ex-Soviet clients is remembered. The shallowness and warmth of the water also affect the chances of detection of a possible underwater target. The shallow waters of the Mediterranean greatly deteriorates the detection ranges of underwater objects. Therefore the Mediterranean is quite favourable to the offensive use of submarines even if they are of older designs.

While similar conditions exist in other seas, the particular importance of the conditions described above appears when Europe's extent of dependency on the Mediterranean SLOCs is considered. Mediterranean SLOCs, by the nature of geographical conditions, are saturated along a few routes and the majority of the merchant marine that enters Mediterranean follow these few lines. The grouping of maximum numbers of ships increases their vulnerability to harassing

attacks and aids aggressors in engaging the maximum number of targets at one time.

The importance of the Mediterranean to Europe is vital as almost all of the imported oil comes through the Mediterranean. The opening of the new oil and gas pipelines from Baku further multiplies the importance of the Mediterranean route. During a possible crisis the cutting of this route can prove to be very costly as exemplified by Nasser's closure of the Suez.

The rise of radical Islam in North Africa disturbs Western states, especially in those that have a shore line in the Mediterranean. The emergence of anti-Western regimes may seriously undermine the stability of the region. The rise of such regimes will greatly impair the prospects of a Middle East peace process since the anti-Israeli position of fundamentalist Islam makes no compromises for the building of a peace with Israel. Sides who oppose the peace process in the region such as radical terrorist groups will likely benefit from the emergence of such states since they can make use of such states as safe havens. Various forms of hostile reactions by terrorists operating against Western and secular states of the region may be launched. The presence of a direct line of support available to terrorist groups in the Mediterranean will greatly solve logistical support problems and provide them shelters from jurisdiction and persecution.

### Persian Gulf

The Persian Gulf is one of the most important sea areas of the world. The reason for this lies in the fact that SLOCs that carry the world's most precious energy source pass through this area. Over 70 % of the world's oil passes through the Gulf SLOCs. The area is a center of strategic interest since it has also been the center of political and military instability especially in the last decade.

During the cold war, superpower rivalry in the Gulf was present. However, the United States presence in both political and military terms was much more dominating than the USSR. Therefore it wouldn't be wrong to state that Soviet influence in the region was limited to the few clients it had, none of which carried much political weight until the recent times.

The US naval presence in the Gulf was limited during the cold war. This was perhaps due to the non-existence of the Soviet navy in the region. However, with radical developments in the region both superpowers showed a tendency to deploy more and more ships. During the hostage crisis of 1980, United States deployed a whole carrier battle group, and the Soviet navy had about 20 combatants of all sorts. The ensuing crisis and the subsequent Iran-Iraq war made the presence of these groups permanent.

The economic importance of the Gulf can be visualized if it's remembered that over 60 % of all the oil shipment originates from the region. Besides the Gulf also has the

largest oil reserves in the world. The lack of land pipelines limit the means of transportation to the maritime lines.

Similarly the geographical conditions of the Persian Gulf are also favourable to a potential aggressor which intends to cut the SLOCs. The short distance between the coastlines limit the passage of the ships to a very constrained area. In a matter of a few square miles many ships can be observed to be in transit to their destinations. This greatly eases the task of a navy trying to perform sea-denial missions. As vividly exemplified in the Iran-Iraq war even the use of sparsely sown or floating mines can seriously hinder the passage of shipping and require a far more amount of effort to clear than to place them.<sup>94</sup>

On the other hand the closeness of the coastline also deteriorate the sensory systems, limiting their performance even in the calmest of the weathers. Therefore it is equally difficult to form an effective early warning system in the area. The territorial closed waters favour the attackers.

# The Rise Of Iranian Navy

After the liberation of Kuwait, all the states in the region began to equip themselves with modern weapons of various types. However, Iran differs from the rest of the states as the foremost naval equipment buyer in the region.<sup>95</sup> Its military purchases are of great significance since this state used its limited air and naval capabilities to intercept international maritime SLOCs during the Iran-Iraq war.<sup>96</sup> Even with limited capability weapons and equally limited delivery

platforms, Iran was able to hit more than 139 ships during the war.<sup>97</sup>

Iran is trying to acquire sophisticated air and naval units, weapons and sensory systems. The deployment of those systems will give Iran an increased capability to exert pressure on the SLOCs passing through the region. Such attempts have been made by both sides in the Iran-Iraq war. Using strike aviation and land based anti-ship missiles, Iran and Iraq attacked a large number of merchant ships and tankers.

The current Iranian naval strength includes two destroyers and a number of missile armed small, fast corvette/frigate sized units.<sup>98</sup> Despite their poor sea-going performance such vessels can operate successfully in the shallow water, their small size making them particularly invisible to radar except at close ranges.<sup>99</sup> It is noteworthy that in the last few years Iran has managed to mount the Chinese made C-801 and C-802 anti-ship missiles in most of its naval units.<sup>100</sup> On the other hand Iran is credited with having considerable amphibious assets. They indicate the importance given by Iran to naval amphibious operations. In the Iraq-Iran war, Iran undertook such operations to outflank the Iraqi positions in the southern front. Especially in the taking of the Al-Faw, Iranian operation took the distinctive shape of amphibious landings with initial coverage fire.<sup>101</sup> Today, Iran deploys some 30 small to medium size large landing ships and about fifty small patrol craft.<sup>102</sup> This gave Iran the ability to deploy a brigade of troops in an amphibious assault which is an impressive number for a country like Iran. Iran retains

an ability to supply its fighting forces at sea since, it acquired a number of replenishment, fleet supply and one repair ship. The total number of support vessels amount to an impressive number of about 20 or more tankers, tenders and utility craft.<sup>103</sup>

Iran suffered from acute maintenance problems for its naval assets during the Iraqi war.<sup>104</sup> Therefore Iran is now taking important steps to ensure combat readiness in its naval forces such as holding regular training sessions for technical personnel. Additionally, North Korea, Russia and China provide courses for training and maintenance of the equipment they provide to Iranian naval personnel.<sup>105</sup>

Iran also seeks naval sensor systems such as airborne reconnaissance platforms and long range naval radars.<sup>106</sup> The acquisition of such systems will significantly increase Iran's long range targeting capability for its strike aircraft, submarines and surface units with stand-off missiles.

Iran is expanding its navy with impressive arms purchases. According to some sources, Iran has also sought more advanced anti-ship missiles from North Korea and China.<sup>107</sup> Perhaps the most striking development was the purchase of some 12 Tu-26m *Backfire* aircraft and AS-6 *Kingfish*, 300 mile range anti-ship missiles from the Russian Federation in late 1993.<sup>108</sup>

For its armament efforts after the war with Iraq, it has been the Iranian claim that it was trying to reach the pre-war condition of combat effectiveness and strength. The Imperial Iranian navy was to be based on the 4 Sahan class destroyers and 8 missile boats of the Saam class. Before the revolution, Iranian navy had received respectively 2 and 5 of those ships

from United States and United Kingdom. These units were fitted with average quality electronics and had been armed with the inferior MM38 version of the Exocet. The Imperial Iranian Navy also had no attached support units.<sup>109</sup>. During the Iran-Irag war, the Iranian navy suffered a number of losses, 110 however the Iranian regime ordered many new naval units to replace those and further strengthen its naval forces. As described above these include mine warfare ships, FACs, naval strike aircraft and submarines.<sup>111</sup> Since no reliable source of information exist , no exact figures can be given but the Iranian navy is currently estimated to be comprised of 2 to 3 destroyers with more on order from N. Korea and China, about 12 operational missile firing frigate sized units -of United States, PRC and French origin, and more than two dozen smaller missile firing combatants.<sup>112</sup> Several Boghammer and Whaler class light craft armed with RPGs, recoilless guns and light SAMs must also be added to this sum. Iran also formed dedicated coastal artillery brigades, naval marine infantry units and a small but growing naval aviation contingent.<sup>113</sup> The Iranian navy is adequately armed to play an important role in the Persian Gulf. If the past performance of Iran in the Gulf is remembered, this increase in the Iranian naval strength is an indicator of regional leadership aspirations.

Iran is determined to provide its naval forces a numeric and qualitative advantage over other states. It is estimated to have paid over 2.3 billion dollars for arms during 1994. While most of this sum goes to air forces and army, the Iranian navy also gets an important share.<sup>114</sup> Through the purchase of *Kilo* class submarines, *Backfire* naval bombers,

heavy anti-ship missiles from Ukraine and China Iranian navy increased its striking strength greatly.<sup>115</sup> While its navy may not be expected to mount long range operations, Iranian leadership may desire to exert more pressure over the Gulf States. There is actually no other force but the presence of the American fleet to oppose the Iranian Navy in the Gulf.

During the Gulf War, Iran has made attempts to paralyse the oil traffic in the region. Using its small navy of lightly armed vessels and inferior quality weapons, it mounted numerous attacks against the ships passing through the Gulf. It is now gradually modernizing its naval capability. The chief mission of the Iranian navy will be denying the use of SLOCs in the Gulf to other states. For this type of missions, the Iranian navy is sufficiently armed.

The armament efforts of Iran may result in two developments in the region :

The reaction of the neighbouring states to oppose Iranian expansion and to begin forming naval forces strong enough to challenge the Iranian Navy. While reaction to Iranian efforts to exert influence in the region seems to be increasing, they are not organized. An effort to form a parallel naval force to match that of Iran's will be costly for the region's states that are already paying large amounts of money to arms purchases.<sup>116</sup>

Iran may continue its efforts unopposed in the Gulf and might gain a superior position in the Straits of Hormuz. The effects of such a development can be very serious for oil consuming countries since Iran may cut the SLOCs passing through the Gulf and disrupt the flow of oil shipments.

The Iranian navy's expansion is a clear reflection of that state's regional leadership aspirations. Due to the aggressive and radical disposition of the authoritarian Iranian regime, this may give way to the development of conflictual situations in the future.

# Regional States And Iranian Expansion

The political and the economic importance of the Persian Gulf due to the SLOCs passing through the region has led the regional countries to strengthen their naval forces. Especially after the Iran-Iraqi war, the importance of a sufficiently equipped navy to protect their trade routes from harassment attacks became clear.

The countries in the region may oppose the efforts of Iran to exert its influence in the Gulf since such a development will negatively affect their economic and political links with outside the region. However, most of these countries are either too small like Qatar or beset by their own internal affairs like Yemen.

Iraq and Saudi Arabia are the two most probable countries in the region that will react to the Iranian expansion of influence in the region.

During the war with Iran, Iraq had conducted many attacks against the ships passing through the Gulf. However it has been totally destroyed by the coalition air forces in the first days of the air war during the Gulf War of 1990-1991.<sup>117</sup> While the exploits of the Iraqi naval and naval air forces are

well-known in the Tanker war, it is clear that the Iraqi navy is in no position to reach the pre-Gulf War strength. Due United Nations sanctions the sale of military equipment to Iraq has been prohibited.

Iraq sent a part of its airforce to Iran in the later stages of the Gulf War. So far Iran has made no attempt to return those planes back. That is also another setback for Iraq since most of those planes were the ones that made up the modern part of its naval strike aviation.

After the Gulf War Iraq is severely hampered by United Nations sanctions. Under close monitoring, Iraq can not even try to make up its losses of the Gulf War. Therefore it is in no position to pose as an opponent to the Iranian expansion efforts in the Gulf. Besides, lack of suitable bases had always put Iraq at a disadvantage in naval activities. Therefore, even if an Iraqi military expansion comes into effect, Iraqi efforts - as was in the war with Iran, will mainly rely on naval-aviation and coastal missile artillery where it has a better chance of disrupting the Gulf maritime traffic as well as attacking Iranian shipping. That will also nullify the power of the Iranian navy. However, as long as the United Nations sanctions prevail, this looks quite out of probability. In the present situation Iraq is quite out of the picture with its military capability severely depleted after two wars and in no position to be used since such a breach of United Nations sanctions is sure to bring down immediate retaliation.

The other contender, Saudi Arabia has vast economic resources. Besides it is the most populated country in the

Southern Gulf and deploys the biggest military force. It is in a good position to exert its influence in the region and become the leader of the Southern Gulf countries. The Saudi Navy is the second largest navy in the Gulf after Iran.<sup>118</sup> It has capable ships with Western technology. The Saudi navy is growing in size and capability. This is chiefly due to the Western supplied equipment that began to flow into Saudi Arabia steadily after 1987.<sup>119</sup>

Saudi naval assets include well equipped bases in the Al Qatif and Jubayl. These are the most extensive naval bases in the region and may serve the logistics of the Saudi navy successfully. Naval aviation is based in those installations that amount to more than 20 ASW aircraft and at least 4 AEW&C planes.<sup>120</sup>

On the other hand the effectiveness of the navy is beset by some important factors. The level of readiness has not risen very much in parallel to the expansion of military capability. While adequately armed to meet a naval threat, the personnel needs training on the use of these newly acquired weapons.<sup>121</sup> Apart from the low level of training, the Saudi navy is also undermanned badly and needs another decade of manpower expansion to fully man its naval assets. Another point is that due to the origin of the equipment used, Saudis are tied to the Western maintenance and logistic support to a great extent. Therefore it can not be expected to endure lengthy operations at sea without the Western support.

The Saudi navy has grown significantly in the last decade, and it is the most capable naval force in the Persian Gulf after the Iranian navy. It may be used as an instrument

of Saudi Arabia to oppose the Iranian expansion of influence in the area and also to support a similar motive of the Saudi leadership. But it is still far from mounting extensive naval operations due to the operational constraints imposed on her naval force described above.

The naval expansion of the Iranian navy in the Gulf is a serious concern for the regional states that have witnessed its actions during the Iran-Iraq war. However, the probability of formation of an effective naval force to counter it in the region is low for the time being. The situation may change in the future when Saudi Arabia completes its naval expansion and raises a fully self-contained naval force with ships and personnel. Also Iraq is sure to step up to such efforts if the United Nations sanctions that bar its re-armament efforts are lifted. If these developments happen, such efforts are sure to clash with the Iranian naval expansion in the region.

### Middle East: Potential For Conflict

With the rise of radical elements in the Middle East, the SLOCs in the region will come under pressure from the possible hostile reactions of such regimes. As stated above these are very important transportation routes, vital to the stability of the world.

Deployment of the fast and heavily armed and hard to detect small missile boats, silent diesel-electric submarines and high performance attack aircraft in the inventories of the navies of such countries<sup>122</sup> may also seriously disrupt

operations in the Middle East region.<sup>123</sup> The threat is multiplied by the extensive arming efforts of states in the region and the increasing availability of high capability weapon systems. These additions to armouries of states in the region which have regional leadership aspirations and little respect for the territorial rights of their neighbours may further decrease their hesitations to interdict the SLOCs passing in the region. During a conflict, such an option may be chosen by these countries as an instrument of policy against the West which depends on these lines to a great extent. Another potential source of conflict may be the disputes over the sharing of marine natural resources which is an essentially littoral problem.

# 4.6 The Growth Of The Regional Navies

The growth of regional navies as described above signals the transition of the sea control from blue water to the littorals. Authors that write about the emergence of regional navies often point out the increase in the striking capability of these small navies.<sup>124</sup> Coastal and regional navies are developing into small but capable navies armed with surface, air and submarine forces.

The naval security environment increasingly resembles the pre-World War II one with the growth of regional naval capabilities. In contrast to the cold war era where security interests were ranked most important, economic interests will have a higher priority in future. Former allies of the cold

war, are becoming economic adversaries. Troubled trade relations between some countries may get worse if one of the sides, enjoying a certain advantage because of its navy, chooses to rely on naval power to ensure economic interests.

While these developments may not result in all-out wars, they may lead to clashes involving small numbers of combatants indulging in disruptive raids. It is questionable that the world will see the return of privateering, however there may indeed be a temptation on the side of the powers with capable regional navies to use them in the solutions of problems. Being a flexible diplomatic tool, naval forces are likely be utilized by decision makers frequently.

Preservation of the integrity of the world economy will be a primary security goal in the new post-cold war period. This will depend on the elimination of the possible sources of threat. This task can be challenged by the current developments as described in this chapter. The complexity of the task is also multiplied by the fact that, potential sources of threats must be analysed and recognized in advance.

Certainly, it would be quite erroneous to see the states with strong regional navies as potential aggressors to world peace and stability. But some of these states may have aspirations for greater regional roles. Therefore, it would not be an exaggeration to view the development of regional powers, especially those that have displayed a radical, and aggressive nature with extreme caution.

It is clear that the focus on the control and command of the sea is shifting from the open sea to the littorals. As a concept that contains a defensive side, the use of the sea

presently will certainly be affected from the increased deployment of the naval weapon systems in all navies and more importantly; from an increase in the number and strength of regional navies. If it is also considered that some of those navies belong to states with strong regional aspirations, development of conflictual situations can be expected in the future. V REDEFINITION OF NAVAL MISSIONS IN THE POST COLD WAR ENVIRONMENT

Based on the framework outlined in the second chapter of the study, the following two chapters have examined the changes brought by the developments in the political and technological dimensions of the naval strategic environment. The analysis of the former parts of the study is presented in the first part of this chapter. The tasks carried out by the naval forces in the post-cold war period will be shaped according to these developments. This chapter attempts to explain which missions of the naval forces will be stressed in operations in this new context.

5.1 Prospects For The Naval Strategic Environment

The general consensus regarding possible crises in the post-cold war era is that they will not be high level conflicts. In the past there was great concern that a cold war crisis could easily turn into a nuclear catastrophe. The revolutions of the early 1990s in Eastern Europe, successful arms control treaties and the subsequent disintegration of the Soviet Union with its successors deeply involved in their own domestic problems have all signalled the exit of the concept of nuclear escalation from the terminology of military thinkers.

The elimination of the superpower rivalry on a global basis will certainly reduce the possibility of high intensity crisis. On the other hand, as one writer had predicted, while the Gulf War of 1991 was a notice to those Third World states that may entertain a similar motive over the sovereignty of a state or disruption of international stability, it could have been missed.<sup>125</sup> Most authors agree that the decrease in the probability of a high intensity conflict is matched by an increase in the probability of emergence of low intensity, small scale skirmishes around the globe.<sup>126</sup>

The rise of a crisis in the naval environment also follows the same pattern. The exit of the Soviet navy left a power vacuum in the naval environment. The rise of a conflict may be also due to other reasons. When the Argentinean Navy decided to occupy the Falklands, the military leaders of Argentina thought that Britain would not react swiftly and decisively to save the islands. It seems that such crises are highly dependent on the decision makers' perception of the situation; conflicts usually appear when one side fails to assess the importance of the case to the other side. This may well be the case in the future.

As examined by the study, territorial disputes will actually be the most common element in the list of possible naval conflict in the post-cold war period. Even in the cold war various problems existed as potential reasons of territorial dispute, which were kept under control because of the constraints of the bi-polar cold war environment. Potential reasons concerning the distribution of oil or an equally precious element vital to the economies of the states

are more probable. Similarly the rights of passage through a disputed area may lead to conflicts between neighbours.

The sensitivity of extra-regional countries to such naval conflicts may be on the rise. The increasing importance of marine activities to the economy of the states make them more sensitive to such issues. This was vividly demonstrated by the Tanker War in the Gulf. The emergence of a situation in a distant region that indirectly affects the economic stability of the world economy will prompt even the extra-regional states to react against the cause of the problem.

It must be noted that most of the territorial problems that involve some of the most hostile political regimes among the oil producing states have not been solved. The Gulf wars of the last decade; the one between Iran and Iraq and the invasion of Kuwait by Iraq and its subsequent defeat in the hands of the allied coalition must always be a reminder that these conflicts may easily escalate into a full sized regional war. Today almost all Gulf countries still have claims over each other's land and sea areas. They are closely followed by the South East Asian states that have fought some 'quiet' naval wars over disputed areas in the last two decades.

There may be additional states in the other regions of the world that may also be entertaining similar intentions over disputed maritime areas. After the end of the cold war some countries began to enjoy regional leadership aspirations as described earlier in the study. These are potential threats to the security in the naval environment of the future.

In the problems that have escalated from such claims, intervention of the outside powers for the solution of crisis

to the case must be expected. In such cases the use of the SLOCs will remain the most optimum solution to transport the bulk of the heavy material.<sup>127</sup> Coalition forces have used the sea to send in their forces to Saudi Arabia in 1990. In a future intervention the use of the sea will still be the only cost-effective option for the outside powers to transport their heavy forces and equipment to the area.

The number of sovereign states has increased with the break up of some of the former eastern bloc states. With the absence of a strong international authority to regulate the relations between them, there is potential for the emergence of crises in such a chaotic environment.

Taking the new factors of the post-cold war era into consideration such as the rise of militancy, proliferation of military high technology and continuing high tension in various parts of the world, it becomes clear that conflicts will stay with us in the post-cold war era. Cohen's following observation points to the sources of conflict;

> "War, and potential war, will remain a feature of international politics. Its sources will be many and changing, from ethnic animosity to irredentism, from competition for power to religious fanaticism. Its stakes will include territory (including valuable offshore properties ), water rights, and control of populations.

In this anarchic environment where the potential threat of escalation into wars exist, the need for an effective instrument of policy is evident. In this respect the naval forces may be quite useful. They can operate in proximity of each other. Therefore navies have more chance to become involved in an international intercourse than the other

branches of military forces. They can communicate political messages in support of national policy. Their role as described earlier extents to supporting stability and building confidence. They may also act as a threat by their mere presence and potential military strength.

5.2 Redefinition Of The Tasks: Missions For The Naval Power In The New Era.

The use of each type of naval missions has been favoured in a certain period of history. The early 1900s was dominated by the extensive naval diplomacy performances of the industrialized nations, World War II saw the navies, backed by technological advances and governed by political as well as military conditions, fighting over large distances and projecting their power over land for the first time. In the cold war period the naval powers of NATO and USSR were given the task of providing a second strike capability and form a leg of the nuclear deterrence. At the same time concepts like forward presence and showing the flag appeared as the most frequently exercised missions of all the navies.

Navies are instruments of states in pursuing their aims at the international platform. The objectives of the states are shaped by the developments that take place in the international dimension. The ruling military and political conditions of the period also affect states in their pursuit of national objectives. Therefore a strong link exists between

the conditions of the period and the type of naval operations undertaken by the states.

In the post-cold war period, some types of naval operation are emerging as more probable than others. They are more adaptable to the conditions of the new naval strategic environment. The following part of the study will discuss those missions that will be more frequently exercised by the navies and also those which will decline in importance.

5.3 Diplomatic Roles For Navies In The New Period

# Gunboat Diplomacy

During the last decade the gunboat diplomacy has been exercised by a number of states in the course of their political ventures. The East-West balance of terror in the world was the basis of stability in the cold war and prevented resort to force. Therefore the exercise of the gunboat diplomacy has largely been restricted to expressive actions to show attitudes to the other side by the superpowers and their client states.

The face of the gunboat diplomacy in the post-cold war environment will be different from the cold war period. The growing littoral aspect of the naval problems will be an important factor. It may tempt some states to deploy their naval forces to make demonstrative actions to signal their policy objectives. As shown earlier in the study, there are

indications that some states such as China and India may be including such possible uses of their naval forces in their plans already.

States that have radical or totalitarian leaderships may decide to perform even more aggressive acts. By tradition, such leaderships have often shown great inclination for using force wherever possible in their diplomatic relations. Those states may decide to use their naval forces - now growing in capability with the purchase of advanced weaponry in such acts against western states if they find themselves in a position to do so.

The resolve to protect freedom of navigation by means of ship and aircraft operations on and over the oceans of the world may also necessitate the use of gunboat diplomacy. Already several peacetime "freedom of navigation" programs have been designed to help ensure adherence to the provisions of the UNCLOS.<sup>129</sup> In support of these programs, Western naval policies, led by the United States as the only global naval power, will be designed to suppress maritime claims inconsistent with international law. It can be expected that the United States navy will probably take active part in this issue.<sup>130</sup>

Therefore, the nature of gunboat diplomacy must be expected to change in the coming years. The low level of the force used in the previous period will give way to missions of gunboat diplomacy in which higher levels of force will be employed to create *fait accomplis*. The use of gunboat diplomacy will probably be the mission of choice for the navies which aim to support the political objectives of their

states. With the growing possibilities for a conflictual situation in the naval environment, it may be exercised frequently.

5.4 Constabulary Roles For Navies

Naval Forces And Crisis Control

After the end of the cold war, diminishing of Soviet influence will tend to reduce the possibility of a high level conflict. However this relaxation in the constraints of the cold war period may allow states to act more vigorously in search of what they perceive to be their sovereignty and their sovereign rights in maritime zones. Therefore the maritime environment contains the seeds for crises in the future. Some conflicts that were present in the cold war were kept in check and began to emerge when the constraining factors of the cold war began to fade away from the international environment.

These seeds of political crisis will definitely bring forward the possibility of the naval crisis management; these can be described as follows:

a) Despite being still unratified by all the members, some UNCLOS principles are exercised by a number of countries in a way that is advantageous to them. How sovereignty is to be exercised in both demarcated and undemarcated maritime zones is a most typical example of this type of problem. As a further extension of the problem,

continuing problems between states over the even distribution and exploitation of the marine resources also pose a threat. The strong, continuing difference of opinion between the United States and the other nations on UNCLOS issues may take years to resolve. The supporters of the UNCLOS are, with only a few exceptions, Third World countries that are not major naval powers.

- b) The ongoing presence of smuggling, piracy, terrorism, hijacking, illegal fishing, and similar unlawful activities -sometimes backed up by a regional power, are also possible reasons.
- c) Perhaps the most probable reason for a political crisis may be a state's actions in those areas over which it claims the exercise of sovereignty.

There does not seem to be an accepted status quo in the maritime areas of the world today. This lack of a balance in the environment indicates the existence of an unstable situation that may present a number of crises which may emerge in the future. The seeds for a potential conflict of a naval dimension are plenty. Eventually, one or more of these problems will surface in the international arena. When that time comes, the navies will be in the most favourable position to affect the relatively peaceful containment of the situation. The crises management in the naval dimension will therefore be an important role of the navies.

#### Jurisdictional Tasks; Protecting Maritime Resources

Coastal states are gradually increasing their extent of jurisdiction over wider areas of sea. With this development, the need for enforcing regulatory processes will be required. The safeguarding of the maritime resources by the navies will be a step before the problem appears. In that respect the future of the jurisdictional missions will become something of a preventive measure. If necessary regulations are imposed on the maritime resources in the sea backed by the effectively-led naval forces, the need for crisis management will become redundant.

As noted by some writers, it has been a concern that the tendency of the states to enlarge the sea areas under their national jurisdiction may increase in the absence of an enforced international law.<sup>131</sup> This whittling away of the world's high seas into national maritime areas must be regulated with an effective estate management regime. Especially in the face of heavily armed, small or medium sized navies, such politico-legal missions, designed in a way to pre-empt possible conflicts will be important tasks for the navies.

There are also other reasons for such missions; the recent example of Amoco Cadiz accident where the oil leakage from that tanker destroyed large areas of sea life<sup>132</sup> illustrates how lethal can be the sea accidents. They have caused a significant amount of pollution. The number of such accidents can increase since ship owners pressured by the

financial difficulties indulge in practices as racing rides, cutting corners, and shelving maintenance schedules. The increase in the sheer volume of sea transport is also another factor. It has been stated that the size of the world's maritime fleet has gone up over four times in the last 35 years.<sup>133</sup> It is clear that the shipping routes must be regulated just like the air routes.

The mission of safeguarding and controlling the maritime zones of importance will be most important in the focal points, like the English Channel, Suez and Panama channels. The local states are most likely to be increasingly involved in shipping surveillance, traffic separation schemes, the identification, interception and arrest of offenders, in salvage and wreck clearance in the course of such missions.

It now remains to suggest the ways in which the growth of these activities will affect the world's navies and, indirectly perhaps, the maritime strategy of present and future. In the first place, the establishment of a global regime for the offshore estate is as yet nowhere near accomplishment.<sup>134</sup> For the time being, disputes over lines of jurisdiction would seem a likely feature of the international diplomatic scene.

Finally it must be stated that with the increasing value of the natural resources, states will increasingly use their navies for the safeguarding of such resources against all kinds of threats ranging from hostile ones to unintended sea accidents. Therefore, the estate management at sea will be an important task for the navies.

#### Naval Peacekeeping And Peacemaking

Although the use of naval forces to assist international peacekeeping and making operations is not new, this kind of operations were not practised frequently in the past. During the Spanish Civil war, the British Navy had blockaded the Spanish territorial waters against possible foreign assistance by Germany and Italy. The Royal Navy also helped the evacuation of Spanish refugees. In the early 1970s, United Nations naval forces undertook mine clearance operations in the Suez and Bangladeshi ports. The Gulf War of 1990 saw the greatest concentration of warships for the implementation of a United Nations resolution. 135 Finally under United Nations flag, a flotilla of frigates now patrol the Adriatic, intercepting ships that may be carrying an arms cargo to the former Yugoslavia while an aircraft carrier group operates its aircraft to carry on air raids under the direction of the Security Council resolutions. 136

Especially in this case where conditions necessitate the presence of an international force, such types of operations will be very important. Peacekeeping may not be the most commonly practiced method of naval activities, but the new period will see an increase in its practice due to the following reasons :

1) The increase in the strength of the regional navies and the risk of opposed maritime jurisdiction.

2) The low intensity threats to the maritime lines such as terrorism and piracy.

3) The commitment for maintaining freedom of navigation.

4) Giving tactical and strategic logistic support to the United Nations forces on the land.

The increase in the strength of regional navies has been discussed before. This fact coupled with a tendency by some countries to increase maritime economic zones under the yet unratified UNCLOS may lead to serious disputes. Several zones where conflicts may spark exist such as the recent Turco-Greek dispute over the 12 mile national boundary limits in the Aegean Sea.

The opposed delimitation of access to these zones by some states may result in a call upon United Nations authorized forces to take part in the solution of the dispute or in the preservation of a status quo.

In such situations the obvious choice of military forces will be the naval units which can be placed under a centralized United Nations command to seek solution of the problem. Timely deployment of the warships in an area of possible conflict can greatly decrease the time of reaction in a probable crisis situation. The possibility of prompt handling of those crises and a swift response by United Nations warships may also deter possible violators.

Another area that can be the target of United Nations naval operations may be the prevention of piracy and terrorism in international waters. Especially the piracy in the Southeast Pacific, Indian Ocean and South Atlantic have always been a severe threat against the SLOCs passing near these potential areas of trouble.<sup>137</sup> The reason for this is chiefly due to the following reasons :

1) Pirates often take refuge in the territorial waters of a neighbouring state when pursued by a naval police force.

2) More often than not, pirates have far more fire power than the individual naval police ships that are employed by these states for patrolling purposes. Small Iranian motor launches demonstrated how effective the small arms fire could be against ships during the Gulf War. The wide availability of small weapons like RPG-7, LAW and even hand held antiaircraft missiles like SA-7 in the world black market compound the lethality of these pirate attacks, both against the merchant ships and also the police forces.<sup>138</sup>

3) The small size of the pirate and terrorist ships and the vast areas that have to be covered by the patrols multiply the scale of problem.<sup>139</sup>

As can be concluded from the above discussion the presence of a unified control is important. All the problems stated above also dictate the mandatory presence of international patrolling forces in these areas. Such a force composed of modern and powerful light surface ships of the big naval powers and backed by United Nations support will be most suitable to handle the problem. The creation of such a force under a United Nations flag will also prevent the legal and political problems that may arise, from any unilateral action by any national naval force.

The policing duty of the navies is beginning to be exercised by more and more states. The deployment of the United States warships in the Colombian territorial waters for anti-drugtrafficking operations was an important step taken in this direction.

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The above points illustrate the potential for naval contribution to United Nations efforts. The major navies of the cold war, that are now under constant threat from cost cutting and downsizing schemes may look warmly to such ideas for their eventual salvation.

Navies, after the end of the cold war, are in a position to give utmost support to the United Nations efforts. Their help, direct or indirect to the problems of the world ranging from the humanitarian aid operations to peacekeeping will be an important addition to the United Nations efforts. Also in the cases of acts of aggression against the shipping routes in international waters, we may expect to see the formation of multi-national naval task forces as the one in the Iran-Iraq war to escort the merchant shipping and if necessary to eliminate the sources of instability.

We can expect to see an increase in the number of such naval operations in support of United Nations efforts. The end of the cold war constraints gave the navies a free hand to follow such types of naval tasks more easily. Another point is that, the presence of such a task may actually save most navies from the cost-cutting schemes by giving them a new viable objective.

5.5 Military Roles Of The Navies

# The Future Of The Command And Control Of The Sea

The naval superiority enjoyed by the West for the control of the sea gave it the ability to reach any part of the world using the sea lines of communications. Therefore, control of the seas came to be taken for granted by the West for a very long time that used the sea for their commerce. The support of this security and economic system is very important for the future of world peace

The future of the West's ability to retain control of the sea is not without problems. After the end of the cold war and the disintegration of the USSR, there is no longer a need for NATO to win sea control in the important areas that cover the SLOCs. However, the ability for an ensured continued access to the seas is still required for the free world. Despite the development of air and extensive land transportation routes, the use of SLOCs remain the cheapest means of transporting goods in bulk. This will continue in the present period in an increasing scale. Currently the seaborne trade that crosses borders accounts for more than 80% of the world trade by volume.<sup>140</sup> If the amount carried by weight is taken the figure rises to a dominating 95% including the inland borders.<sup>141</sup> With the seaborne trade rising again,<sup>142</sup> it is clear that the West will pay greater attention to SLOCs and will try to keep them under control. Indeed access to the SLOCs is important

especially for the West in the present security environment. This is because since continued stability of the global economy depends more than ever on seaborne commerce. The control of the sea areas that cover these lines is therefore vital.

The control and command of the sea areas will be even more important to international security because of another very important aspect of the SLOCs. The real importance of the free access to the world SLOCs comes from the fact that these lines carry some of the most critical elements to the industries of the West such as crude oil and petroleum products. Over 949 million tonnes of the former and 310 million tonnes of the latter are carried by ships.<sup>143</sup>

The concept of control will also be important in preventing the territorial problems that may emerge as the result of the regional ambitions of the states. The experience of the Gulf Tanker War makes this clear, the diplomatic initiatives of the western governments failed to deter Iran and Irag from engaging the unarmed merchantmen and tankers. Iran even went so far as to attack Kuwaiti ports with the Silkworm missiles it had purchased from the PRC.<sup>144</sup> Only when the Western naval deployment into the region began to arrive, did the Iranian navy's attacks began to decline in effect. This was due to the defences provided by those forces. It also tried to exert pressure on these sources to force them to withdraw from the Gulf. However when the United States naval forces began to counter the Iranian navy's small boat and air attacks against the Gulf transit routes and inflict losses on them, Iran withdrew from such operations. Even then, Iranian

navy tried to show further acts of aggression aimed at disrupting the shipping whenever it found an opportunity.<sup>145</sup>

This example shows clearly the link between the control of the sea and the right of free passage for traditional causes. This right can only be taken for granted if the sea area under question is effectively controlled by the forces friendly to the idea of free passage. On the other hand, it's impractical to wait, even from the only global naval power the US to have the command and control over all of the sea areas under dispute.

However, in the light of the increases in the naval military holdings of some nations that border the concentration areas of maritime shipping and their radical attitudes in the recent times, the right of free passage in those areas has become highly questionable.

The naval power of the West, especially that of United States has been successful in deterring probable hostile intentions to interfere with free access to the sea. However in the new era, the control of the sea is a source of anxiety for the West. It was during the Gulf War that most of the allied naval officers had serious concerns over the vulnerability of sea lines of the coalition in proximity to Libya and Yemen. While none of these countries had more than small coastal navies, it wouldn't be too difficult for them to exert pressure on the SLOCs using even the few resources they had.

The difficulty of keeping the control of the sea is multiplied by the fact that threats do not have to be posed by naval combatants. A variety of means have been tested

operationally and used in wars after 1945. Among them, mining the probable routes of passage along SLOCs are open to almost any navy who possesses more than a tug-boat fleet. Mining can be very effective, a fact demonstrated during the 1984-1987 Tanker War and the 1984 mining of the Red Sea.

In fact it is relatively easy even for a small navy to harass the SLOCs using a number of indirect and passive means as illustrated by the experiences of the Iran-Iraq war. Currently about 71 nations possess anti-ship missiles, and a further 46 have naval mine capabilities.<sup>146</sup> Besides any littoral nation with land-based military aircraft can pose a threat to SLOCs since the non-availability of a sea-borne AEW&C will increase their chances of penetration into the area and inflict damage.

The command and the control of the sea areas covering the commerce SLOCs will be one of the most important tasks of the navies in the post-cold war period. Under the light of this fact we can expect to see that special attention will be paid to freedom of navigation in the open seas.

# Naval Power Projection: The Ability To Influence

As the changing in naval security environment continues to evolve the former naval missions, one of such will be naval power projection. In the cold war, naval power was the primary means by which superpowers tried to exert influence over international developments of the world relations.

The post-Cold war conditions will affect the naval power projection mission. However the probable changes in the applicability of naval power projection must be examined in two levels of operational coverage: global and regional.

During the cold war complete global power projection was available only to the United States navy.<sup>147</sup> Despite having a large and capable navy, the USSR never had the capability to deploy necessary sea control, sea lift and power projection assets for totally dominating the naval environment. Its naval forces provided only a very limited global power protection capability that did not extend much longer than the local naval environment of the USSR and its allies.<sup>148</sup> The American Navy, built on this idea, was the most capable naval force in such missions. Power projection at the global level still remains within the capability of the United States navy. It is also seen as an available American policy option in the post-cold war period as in the words of a writer :

> "For the United States isolationist naval power projection will be the means by which conflicts are resolved on someone else's soil. For the internationalist, it will be a United States instrument necessary for world leadership."<sup>149</sup>

However the forward presence of the United States navy is slowly passing away from the cold war footing to a post-cold war environment. When it was first envisaged by the naval authorities in the 1970s, the global power projection was meant to take on the Soviet naval bases in the northern flank of the NATO. Therefore, the United States navy had grown to a size that could fight and win against the whole might of the

Soviet Fleet and supporting air assets of the Soviet naval aviation.

It is clear that there's no need for the United States navy to pay for naval assets that it no longer needs. The last changes in the naval deployment plans are expected to include cuts in the number of surface warships deployed in the carrier battle groups. It is clear that with the passage of cold war rivalry from the international arena, the United States leadership will find little reason to deploy the same number of naval assets.

It may be expected that the global power projection will remain as an option only to the United States navy in the future, however even the United States navy is showing reluctance to keep the number of ships that was needed for the cold war.<sup>150</sup> With the rising costs of maintenance and the effects of her stalled economy, the US will show a tendency to cut down or at least 'mothball' some of this excess capacity. With the passing of its most successful and only user, power projection will not be a mission that will be frequented by the navies in the global level.

On the other hand the major navies of the West as well as some of the emerging naval powers have the capability to mount similar operations, albeit at a regional level. The major navies such as that of Britain and of France retain a regional power projection capability. The Royal Navy extended her presence over the South Atlantic and after a costly but successful clash with the Argentinean air and naval forces will repeat the feat once more if the need comes to it.

Russia, remaining as the chief benefactor of the ex-USSR retains a fleet that can easily undertake power projection missions on the regional level. In addition, the fact that new Russia will be committed to the naval operation to preserve the Russian interests has been voiced by the Russian naval authorities.<sup>151</sup>

It has been previously stated that the growth of the regional navies had been based on the ambitions of the regional powers to exert more political influence in their respective regions. Therefore it must be expected that these navies will look warmly to the regional power projection. Indeed as examined earlier they are already trying to improve their capabilities to undertake power projection missions. The emerging navies in the East that signal growing capabilities for projecting power in their regions are good examples. China is trying to improve its forces capability to land forces on beaches by airborne delivery from naval units. Iran and India also show the same line of trend by deploying a number of amphibious vessels and increasing the quantity and the quality of their naval air arms.

As a result of recent technological developments, naval forces may be in a better position to make contributions to land operations by air strikes, traditional shore bombardment, and amphibious landings. There is also the cruise missile which represents a new family of weapons. It can be used in land attacks at far greater ranges which had been previously covered by the nuclear weapons. The effectiveness and potential of cruise missile technology suggest that it could eventually become the primary weapon of navies. While the

cruise missiles are also slowly becoming available to the medium size navies, most of the current designs of anti-ship missiles can be easily turned into crude but nonetheless useful cruise missiles to be used against land targets. Especially as the targeting techniques and missile capabilities of these nations improve, a larger number of users will emerge.

Naval power projection is far more than the total sum of the destructive power of ordnance carried by missiles and aircraft. It includes an amphibious capability which can intervene in a crisis or provide humanitarian assistance. Force operating in the international water of a region affected by a crisis can be projected ashore by degrees. It must be stated that the threat of naval power projection also has an impact as vividly seen in the World War II. Naval power projection in all of its forms will remain in the agendas of the naval decision makers. However this operation type of the navies will reflect the changes in the decreasing conflict levels. Therefore, the lesser scale missions (performed by the regional and coastal navies in support of their objectives ) will be exercised more often than the grand scale version of the power projection.

# Nuclear Deterrence And Defence: The Fading Role

The mission of nuclear deterrence was developed to meet the conditions of the cold war. Today, Russian leadership has made it clear that the new Russian Federation poses no nuclear

threat to the United States.<sup>152</sup> It is clear that deterrence will undergo a transformation in its concept.

# Global Nuclear Deterrence

This transformation will vary according to the different levels of the nuclear deterrence. At the global level, which was its most widely theorized form, there is no visible future for this type of mission since there is now no Soviet Union to deter. The future also shows no contenders for this position. The extinction of a global scale nuclear attack threat on the remaining superpower and the West may be said to have left the nuclear forces of the West somehow disoriented.

During the cold war, United States deterrence was based on a predictable, "rational" Soviet leadership. Both sides were familiar with each others' nuclear doctrine, posture and alert signals.<sup>153</sup> However, the same is not true for today; a former American official has observed that offensive United States forces may not be able to deter an accidental or miscalculated launch of a CIS nuclear weapon.<sup>154</sup> The exit of the 'rational' actors in Moscow also left gaps in the formulations of new templates for the naval nuclear deterrence.

It is clear that the naval nuclear deterrence is now an "out of the area" problem for the navies. The global nuclear deterrence which was so dependent on the naval forces has now lost much of its raison d'être. A clear indication of this may be decisions taken by the United States and Russia to discontinue their SSBN programs. Therefore global nuclear

deterrence will not be a highly likely mission for future naval forces.

On the other hand another dimension of deterrence is raised by the nuclear proliferation into the Third World countries. It is a frequently asked question how to deter emerging nuclear powers. Nuclear deterrence will, as previously, depend upon an opponent receiving, and understanding intended signals as credible.

The active use of nuclear weapons by those states is also a grave possibility. While the deployment of naval nuclear weapons in the navies of these countries may seem to be of little probability, the land based nuclear weapons in the arsenals of these countries also affect the nuclear forces of the major navies at sea. During the tanker war, Iran had made repeated attacks on the US surface warships using whatever means available to it. At one time it was even reported that it went to such extremes such as forming a suicide-attack air squadron to attack the American carrier assets in the region.<sup>155</sup> As various sources indicate, Iran may have probably gained access to a number of nuclear gravity bombs and warheads and significantly improved its nuclear capability. It would be terrifying to think that these can be used against a naval concentration.<sup>156</sup> The probability of their usage against neighbouring countries is equally terrifying.

Nuclear deterrence can be of use in such cases. The targeting of the land based ICBMs may not be possible against these targets in those regions of the globe that fall outside the maximum range of these missiles in their current deployment sites.<sup>157</sup> The most obvious option will be then the

use of naval assets or neighbouring air bases. However there may be occasions when the use of nearby bases can not be possible. This can be due to the reluctance of the neighbouring countries to allow their bases to be used for a nuclear bombing attack, or there may not be such a base after all. Therefore, nuclear deterrence against the Third World state, if it becomes necessary, will be undertaken by the naval forces.

In such situations the first obvious option is the use of the naval air delivered gravity bombs. However the increasing effectiveness of the air defense systems of the Third World countries may jeopardize the delivery of the payload as well as its accuracy. In such cases cruise missiles may be employed to minimize the casualties. As witnessed in the Gulf conflict the sea launched cruise missiles have gained an excellent degree of accuracy. They can be launched from a number of platforms including submarines, carrier aircraft such as *F18 Hornet* and *A6 Intruder*, submarines, surface ships including even small sized destroyers.<sup>158</sup> In addition to these, are the usual SSBN platforms which using their ICBMs can provide a heavy punch if needed.

The use of the navies in the deterrence missions can be in a highly different manner. The surface ships of the major navies bristle with long range, anti-SSM surface-to-air Missiles. These can be employed as part of an interim theatre missile defence system against the growing threat ballistic missile proliferation.<sup>159</sup> Their mobility allows them to operate in troubled parts of the world. The availability of such mobile ATBM defences in hot spots may deter use and deployment

of ballistic missiles by regional states, discouraging its use.

Nuclear deterrence will remain as a mission that is exercised only by major powers since only they will have the necessary hardware to mount nuclear weapons at sea. On the other hand one side of the equation in the deterrence function is likely to be changed. The target may be Third World countries armed with nuclear weapons. Nuclear deterrence at the global level will be a less pronounced naval mission. The deterrence against smaller powers however remain on the agenda of the naval powers since on such occasions, they will be out of the reach of most land based nuclear weapons and only the naval nuclear weapons will be in a situation to be used against them. There is also the possibility of the deployment of naval units as ATBM launch stations that will enhance the deterrence capability. Therefore it can be stated that the deterrence missions will be of lesser scales than the cold war era in the new period.

5.6 Conclusion

The naval roles in the new strategic environment will be shaped according to the conditions of the post-cold war era. In this new environment which has been examined in the course of the study, some roles of the navies will decline in importance, while some will appear as more dominant in scope and importance.

In dealing with the highly fluctuating political problems of the world, there's need for a flexibility both in the policy and instruments. It was because of similar realities that the West has adopted navies to act as instruments to deal with instabilities in the world and also with the crises to which those instabilities might lead. In this respect, possible other uses for the naval power can be deterring aggression or for guaranteeing the security of all.

In the highly unpredictable environment of international politics, it will not be too erroneous to predict new and unexpected developments directly affecting stability and peace. This highlights the importance of a flexible response to prevent crises getting out of hand. Naval forces are particularly useful in such cases since they can keep the adversary guessing, act in a gradual way, and if things go wrong, can be withdrawn.

In the constabulary role, the jurisdictional tasks such as controlling and safeguarding the vital maritime zones will be the first line of preventive tool for the elimination of possibilities of conflicts. Navies have a unique capability of demonstrating non-threatening interest in sea and coastal areas of concern. Besides they have the capability to patrol and monitor the developments and act immediately, making them quite useful for constabulary missions.

The freedom of navigation must continue, the economic and political stability of the world rests on it. It is easy to predict that attempts to block the passage of shipping may lead to dramatically acute shortages of energy, resources and cause unhealthy fluctuations in the world trade balance. The

lack of decisive standing may give way to repeated offences so if one must rely on international regulatory systems, they must be reinforced by show of resolve. The possibility of conflict as a result of such operations will remain high. Therefore it must be expected that navies will be increasingly used in constabulary roles such as crisis management, off-shore resource control and safeguarding, the peacekeeping/making missions or securing the safety of SLOCs especially when the presence of an international force is most helpful.

The use of international diplomatic methods in solving the issues that may arise may seem as the optimum way for solving disputes. However, it must be remembered that where the diplomacy is not supported by military power to provide credence, all efforts are likely to end in failure. The degree of diplomatic persuasiveness, especially in subjects that involve territorial questions, depends on its credibility. Therefore it would not be wrong to assert that the diplomatic ways to solve a problem will also require the presence of a strong force in support of diplomatic efforts.

The possibilities for naval diplomacy in the form of gunboat diplomacy are numerous in the post-cold war era. It may be in the shape of an enforcement action taken by the major naval powers against smaller states that threaten the international SLOCs around. On the other hand the states that have regional aspirations may also take part in acts of gunboat diplomacy either against their neighbours or extra-regional powers by interdicting international SLOCs.

The increase in the potential for conflictual situation will support the increased employment of the diplomatic role of the navy by the states. The Yellow Sea has been the chief area of gunboat diplomacy in the previous century. Today, the number of areas that offer potential for such missions has increased. The employment of naval diplomacy in the form of gunboat diplomacy must be expected in the emerging period.

During the cold war, Western navies led by the American navy in particular have enjoyed a largely successful capability to deter the other side from challenging the control of the sea under their control. The main opponent, the Soviet Navy was not capable of aggressive power projection and blue water operations, something even which its commanders admitted.<sup>160</sup> Nuclear deterrence was the most central of all these tasks. The cold war's end will affect the military missions of the navies most. The different settings of the cold war are no longer adaptable to this new period which is emerging.

The chief role of the navies will remain as the military one. This is to be expected since the raison d'être of the navies is, by nature, military. The extent of a probable conflict has decreased. Therefore the naval missions will also reflect this change. In a different way from the rest of the naval roles, these changes will be reflected in the levels of operation of specific operations: while global power projection will be a less exercised option, the coastal and regional levels will increase in importance.

With the growing littorality in the naval environment, it must be expected that low level conflicts between the

regional and coastal naval powers can occur. The military role of the navies will be exploited by these states in the pursuit of their national interests.

On the other hand the naval missions such as the global nuclear deterrence, huge amphibious operations, major surface actions for the command of the sea will not be as important as they were in the cold war period. They will diminish in importance as the naval operations such as the control of the sea areas around SLOCs, small scale power projection by regional navies will move into forward positions on the agendas of the naval leaders. The military role of the navy in the new period will reflect the trend for increasing littorality and the level and scope of the operations undertaken will also be regional and coastal.

This study has tried to analyze and identify the new conditions in the naval strategic environment. The conditions of naval environment that had spanned the last half century are now passing away. The post-cold war conditions are opening up new dimensions to the naval environment. Navies as one of the most important military branches of the states will modify their tasks to reflect the conditions of new strategic factors of the period.

END NOTES

## Chapter I

Siegel, Adam. "Who will do What With What: Defining the United States navy Missions " <u>Center For Naval Analyses Paper</u>. (May 1993)

<sup>2</sup> Siegel, Adam. "Who Will Do What With What: Defining The United States Navy Missions ".

<sup>3</sup> Linn, Thomas. "Naval Forces In The Post Coldwar Era". <u>Strategic Review</u>. 20:4 (Fall 1992 ), 9.

<sup>4</sup> Cheney, Dick. "Post-Cold War Period And The United States Armed Forces", lecture delivered at Georgetown University, (Washington DC :March 1991).( E-Mailed Document) File Name : KW11-11-93, 6.

#### Chapter II

<sup>5</sup> Booth, Ken. <u>Navies And Foreign Policy</u>. London: Croom & Helm., (1977), 15.

<sup>6</sup>A.T, Mahan .<u>The Influence Of Sea Power On History:1660 -</u> <u>1783</u>, Boston :Little, Brown & Co., (1890), 25.

<sup>7</sup> Booth, Ken. <u>Navies And Foreign Policy</u>. ,16.

<sup>3</sup> Corbet, Julian. <u>Some Principles of Maritime Strategy.</u> London: Longmans.(1918).

<sup>9</sup> J.R.Hill. <u>Maritime Strategy for Medium Powers</u>, London :Croom Helm, (1989), 81.

<sup>10</sup> Even the AEW&C aircraft which have increased ranges, can not be kept up in the air permanently.

<sup>11</sup> J.R.Hill. <u>Maritime Strategy for Medium Powers</u>, 83.

<sup>12</sup> Booth, Ken. <u>Navies And Foreign Policy</u>. ,24 ,117-119.

<sup>13</sup> Rosskill. S. W. <u>The War At Sea :1939-1945</u>. Volume 1. London: HMSO, (1954), 100-289

<sup>14</sup> Biggest share of the U-boats were made by allied convoy escorts that were sailing with the other merchant ships. Despite their popularity the hunter-killer groups scored less. Similarly the Q-ships of the British navy did not achieve much in the WW I.See Rosskill. S. W. <u>The War At Sea :1939-1945</u>, 100-289. <sup>15</sup> Till, Geoffrey. <u>Maritime Strategy and the Nuclear Age</u>. 2nd ed. London:Macmillan, (1984),215.

<sup>16</sup> A.T, Mahan .<u>The Influence Of Sea Power On History:1660 –</u> <u>1783</u>, 90.

<sup>17</sup> Till, Geoffrey. <u>Maritime Strategy and the Nuclear</u> <u>Age</u>.,216

<sup>18</sup> Fieldhouse, Richard. <u>Superpowers At Sea.</u> Oxford: Oxford University Press, (1989), 83-100.

<sup>19</sup> Following a nuclear detonation, the electromagnetic pulse and the ionisation of the airspace will adversely affect seriously the functioning of the radar in a large area for some time. Similarly in case of an underwater explosion, sonar performance will be reduced to a minimum because of the severe reverberations, See Fieldhouse, Richard. <u>Superpowers At Sea</u>, 108.

The environmental damage that will occur after the use of such weapons is also of concern .The amounted of radiation that leaked after the explosion of the reactor at Chernobyl was assumed to be equal to that of a small yield (5-10 Kt) nuclear weapon which is also the yield rate used in most of these tactical weapons. Comparing with the effects of Chernobyl ( which was indirect and reduced by the countermeasures implemented after the accident ), it would not be too difficult to predict what will happen if *about a hundred* of such weapons are used in the oceans where they can directly affect the sea environment.

<sup>20</sup> Corbet, Julian. <u>Some Principles of Maritime Strategy.</u> London: Longmans, 15

<sup>21</sup> Booth, Ken. <u>Navies And Foreign Policy</u>., 76.

<sup>22</sup> J.R.Hill. <u>Maritime Strategy for Medium Powers</u>, 80.

<sup>23</sup> Till, Geoffrey. <u>Maritime Strategy and the Nuclear</u> <u>Age</u>., 198.

<sup>24</sup> See Gorskov, Sergei. <u>The Sea Power Of A State</u> .Oxford: Pergamon Press, (1978), 60-125; Till, Geoffrey. <u>Maritime</u> <u>Strategy and the Nuclear Age.2<sup>nd</sup> ed.London:Macmillan,</u> (1984),198-210;Grove, Eric .<u>The Future Of Sea Power</u>. London :Routledge (1990), 232-242;Fieldhouse, Richard. <u>Superpowers At</u> <u>Sea.</u> Oxford: Oxford University Press, (1989);Stansfield Turner "Designing A Modern Navy".<u>Adelphi Paper</u>. 123 (1977) in Till, Geoffrey. <u>Maritime Strategy and the Nuclear Age</u>,198.

<sup>25</sup> Hart, Little.<u>The History Of The World War II</u>. London: Pan Books, (1967), 330-331, 455, 600.

 $^{\rm 24}$  See Gorskov, Sergei. <u>The Sea Power Of A State</u> ,122 for the discussion of this idea. <sup>27</sup> In order to show the commitment of the Britain to the safety of the British and other Western citizens in China, Royal Navy kept a strog presence in the Yellow Sea and also landed some troop contingents to places where Western citizens lived.

<sup>28</sup> Kearnsly, John Harold. "Rethinking Maritime Power Theory" .S<u>trategic Review.</u> 20:4 (1993), 10.

<sup>29</sup> Booth, Ken. <u>Navies And Foreign Policy</u>. ,26.

<sup>30</sup> Grove, Eric .<u>The Future Of Sea Power</u>., 190-196.

<sup>31</sup> Cable, James.<u>Gunboat Diplomacy</u>. London:MacMillan Press, (1981),57.

<sup>32</sup> Kearnsly, John Harold. "Rethinking Maritime Power Theory".

<sup>33</sup> In 1956, USS Pueblo, a United States electronic intelligence ship was attacked by North Korean warships and then forced in to a North Korean Harbour. The ship and its crew was released only after United States had agreed to issued a rather heavy worded message condemning its own naval actions.

<sup>34</sup> Booth, Ken. Navies And Foreign Policy. ,56-105.

<sup>35</sup> Cable, James .<u>Navies In Violent Peace</u>. London : MacMillan Press, (1989) ,90.;Pugh, Michael."Peacekeeping : A Role For The Navies: ". <u>Naval Review</u> .14:4, (1993), 8-12;Grove, Eric .The Future Of Sea Power, 167-198.

<sup>36</sup> Cable, James .<u>Navies In Violent Peace</u>. London : MacMillan Press, (1989) ,90.

<sup>37</sup> Pugh, Michael. "Peacekeeping : A Role For The Navies." ,11.

<sup>38</sup> Pugh, Michael. "Peacekeeping : A Role For The Navies." ,11.

<sup>39</sup> Grove, Eric .<u>The Future Of Sea Power</u>. London :Routledge (1990), 90-101.

<sup>40</sup> Till, Geoffrey. <u>Maritime Strategy and the Nuclear</u> <u>Age</u>, 202-205.

### Chapter III

<sup>41</sup> Grove, Eric .<u>The Future Of Sea Power</u>., 135.

<sup>42</sup> Foxwell, David. "Spotting The Skimmer", International Defense Review. 26 (August 1993), 624-629. <sup>43</sup> Cordeman, Anthony H. & Wagner, A.B. <u>The Lessons Of Modern</u> <u>War</u>, Volume 2. Westview Press: Boulder (1991), 431

<sup>44</sup> Eilat - an Israeli destroyer was sunk by a missile attack by Egyptian missile boats in the Arab-Israeli war of 1967.Hill, J.R. <u>Maritime Strategy for Medium Powers</u>, London :Croom Helm, (1989), 179.

 $^{45}$  The SSN - 2c Styx which was responsible for the sinking of the Eilat had a radar and ECM homing device in its tip.

<sup>45</sup> Grove, Eric .<u>The Future Of Sea Power</u>, 100.

<sup>47</sup> See Cordeman, Anthony H. & Wagner, A.B. <u>The Lessons Of</u> <u>Modern War</u>, Volume 1. Boulder: Westview Press, (1991), 106.

<sup>48</sup> Cordesmann, H. Anthony. <u>After The Storm</u>. Boulder: Westview Press, (1993), 541.

<sup>49</sup> Thompson, J., "Laser Weapons At Sea ?", <u>International</u> <u>Defense Review</u>, 23:3 (June 1990), 853.

<sup>50</sup> Newer versions of the *Harpoon* and *SSN-19* missiles are believed to be capable of reaching 150 and 450 kilometres respectively. See, Moor, John E. Jane's Fighting Ships 1992 -93. London: Samson. Low, Marston & Co. (1993), 244, 333.

<sup>51</sup> Adm. Eberle, Sir James. Commentary, <u>Military Technology</u>. 13:2 (February 1992), 4.. See also Preston Anthony, "FACs: Quo Vadis ? ", <u>Military Technology</u>. 13:9 (September 1992), 33.

<sup>52</sup> "Iran Gets Its Second Kilo", <u>Jane's Defense Weekly</u>. 20:7 (14 August 1993), 8.

<sup>53</sup> Jane's Fighting Ships 1993 - 94. London :Netherwood Dalton & Co. (1993), 344

<sup>54</sup> C., Dawson, " Changing Requirements for the Third World Navies", <u>International Defence Review</u>, 19 (1993), 10.

<sup>55</sup> Preston Anthony, "FACs: Quo Vadis ? ", <u>Military</u> <u>Technology</u>. 13:9 (September 1992), 33.

<sup>56</sup> Similarly, 8 of the new Exocet MM 40 can be carried in lieu of four of the older MM 38 versions on fast attack craft of several small navies that this missile was deployed.

<sup>57</sup> Cordesmann, H. Anthony. <u>After The Storm</u>. Boulder: Westview Press, (1993), 42.

<sup>53</sup> Cordesmann, H. Anthony. <u>After The Storm</u>. 42-45.

<sup>59</sup> See Till, Geoffrey. "Navies And Security In The Pacific Rim". <u>Naval Review</u>. 10:1, (1990), 22-23.

<sup>60</sup> Jacobs, Gordon., "Chinese Naval Developments After Gulf", Jane's Intelligence Review, 5 :2, (December 1993), 81-86. <sup>61</sup> See Jiurdino, F. "China Ahead In Asian States In Post cold war Battle", <u>Jane's Defense Weekly</u>. 20:13, (24 September 1993), 19.

## Chapter IV

<sup>62</sup> Brzezinski, Zbigniew, "The cold war And Its Aftermath.". <u>Foreign Affair</u>s, \_ (Winter 1993), 31-51.

<sup>63</sup> Grove, Eric .<u>The Future Of Sea Power</u>, 107,190-198.

<sup>64</sup> See Robert J. Art, ''A Defensible Defense: America's Grand Strategy After the cold war, ''<u>International Security'</u>, Spring 1991.

<sup>65</sup> See Robert J. Art, "A Defensible Defense: America's Grand Strategy After the cold war".

<sup>66</sup> See for example Grove, Eric .<u>The Future Of Sea Power</u>, 89.

<sup>67</sup> For example an American carrier battle group was sent to the region, when Turkish Army landed on the Cyprus in 1974. Similarly, US units were also present during the critical stages of the Civil War in El Salvador. In the same way, Soviet Units deployed a great number of naval units around the Spratsly Island chain during the skirmishes between China and Vietnam in 1979 and 1981.

<sup>68</sup> Gordon, Sandy & Babbage, Ross. <u>India's Strategic Future</u> <u>:Regional State Or Global Power</u>. New York: St. Martin's Press, (1992), 49.

<sup>69</sup> Gordon, Sandy & Babbage, Ross. <u>India's Strategic Future</u> :Regional State Or Global Power, 51.

<sup>70</sup> "The Silent Menace:Diesel-Electric submarines", <u>International Defense Review</u>, 16 (August 1993), 613-617.

<sup>71</sup> Gordon, Sandy & Babbage, Ross. <u>India's Strategic Future</u> :Regional State Or Global Power., 117.

<sup>72</sup> This became apparent especially after the United States blocking of nuclear technology equipment bound for Pakistan.

<sup>73</sup> Research Institute For Peace And Security, Tokyo. <u>Asian</u> <u>Security 1992-93</u>. London: Brassey's (1993), 193.

<sup>74</sup> "The Silent Menace:Diesel-Electric submarines", <u>International Defense Review</u>, 615.

<sup>75</sup> See Cheung, Tai Ming. <u>Growth Of Chinese Naval Power</u>. Pacific Strategic Papers, Singapore : Institute Of Southeast Studies Press, (1990), 34.

<sup>76</sup> A Nanutcka class missile boat, was for example deliberately sunk by its own crew to sell the valued pieces of machinery from the ship including the full complement of SSN-9 SSMs and SA-N 7s SAMs on board (NATODATA File No: 01069301 - 010894350).

<sup>77</sup> "China Awakening". <u>The Economist</u>. 326:7789 (December 27 1992), 61.

<sup>78</sup> Jacobs, Gordon., "Chinese Naval Developments After Gulf", Jane's Intelligence Review, 2 :5, (December 1993), 81-86.

<sup>79</sup> This was clearly observed in the border war with Vietnam where numerically inferior Vietnamese troops, benefiting from the excellent terrain that favours the defender, inflicted disproportionately heavy casualties to the Chinese invading army.

<sup>80</sup> Military balance 92/93 .London : Brassey`s (1992), 180-192.

<sup>81</sup> During the Sino-Vietnamese conflict it became apparent that Chinese airforce could not apply a significant effect in neither tactical nor strategical perspective.

<sup>82</sup> See Cheung, Tai Ming. <u>Growth Of Chinese Naval Power</u>. Pacific Strategic Papers, Singapore : Institute Of Southeast Studies Press, (1990), 37

<sup>83</sup> However such a move was never regarded feasible by the Soviet authorities who thought that such an operation will arouse great reaction since it will be very close to the United States naval deployments and may easily escalate the situation.

Obviously the Soviets were worried about the possibility of triggering an American response which they thought would undoubtedly give China a helping hand in such a situation. See Hayes, Peter & Zarsky, Lubarsky. <u>American Lake: Nuclear Peril</u> <u>In The Pacific</u>. Penguin :Middlesex, (1987) for an interesting account of the Soviet ideas on naval operations against the China.

<sup>84</sup> As early as Chinese naval units sailed round the Philippines .In 1985, Naval auxiliaries visited Chile and Argentina. Next year a destroyer cruised into the Indian ocean and while returning from a round trip that included port visits to a dozen countries, exercised with United States navy.

<sup>85</sup> Jiurdino, F. "The Chinese Navy" .<u>Naval Forces</u>, 2:8, (1987), 198.

<sup>86</sup> See Jiurdino, F. "China Ahead In Asian States In Post Cold War Battle", 19.

<sup>87</sup> Cheung, Tai Ming. <u>Growth Of Chinese Naval Power</u>, 38.

<sup>88</sup> Recently China has formed a regiment sized marine force operating from helicopters that can be based on amphibious ships. The objective of these troops, according to the PLN officials, will be the seizure of beachheads in the enemy occupied territory. See Jiurdino, F. "China Ahead In Asian States In Post Cold War Battle", Jane's Defense Weekly, 19.

<sup>89</sup> Cheung, Tai Ming. <u>Growth Of Chinese Naval Power</u>., 42.

<sup>90</sup> Jiurdino, F. "China Ahead In Asian States In Post cold war Battle", 19.

<sup>91</sup> See Hayes, Peter & Zarsky, Lubarsky. <u>American Lake:</u> <u>Nuclear Peril In The Pacific</u>., (1987) for the deployment plans of the Marine Corps.

<sup>92</sup> During the 1979-82 period the Chinese navy fought an undisclosed number of skirmishes with the Vietnamese naval units for the possesion of the Spratlsy islands. The islands offer rich resources of oil and food and their possesion has been claimed by each side. Currently China holds the islands. It must be noted that the region is full of such rich resources of food and energy.

<sup>93</sup> See."Japan's Foreign Policy ". <u>The Economist</u>.328:7830 (September 27 1993), 66.

<sup>94</sup> It must also be remembered that the mines found in the Gulf were either sown at random or floated with the current; their probability of being anywhere on the maritime routes created an atmosphere of insecurity and added to the cumulative effect.

<sup>95</sup> Cordesmann, H. Anthony. <u>After The Storm</u>, 413-415.

<sup>96</sup> Cordesmann, H. Anthony. <u>After The Storm</u>, 413.

<sup>97</sup> Cordeman, Anthony H. & Wagner, A.B., 546.

<sup>98</sup> These are of 3200 tonnes, armed with four SM-1MR SSM/SAM missile launchers and Agusta AB 204AS helicopter for ASW duties

<sup>99</sup> The small size of the boats which are generally of a mere 50 to 70 tonnes ( or just fibreglass dinghy sized ones armed with light rocket launchers and machine guns in the case of Iran ) eliminate their chances of detection from long ranges. Only the presence of effective and equally expensive naval AEW&C aircraft such as British *Nimrod* or American E2C *Hawkeye* may increase the detection ranges and provide warning against such small sized threats. Even then keeping such aircraft in the air for all the time is quite difficult; the endurance of EW (Early Warning) aircraft are limited. Even a US carrier can not operate its such aircraft continuously. Besides the recognition of a target as a friend or foe will be quite difficult in a region where the SLOCs are heavily utilized.

<sup>100</sup> See Wylie, James. "Iran's Quest For Security And Influence ". <u>Jane's Intelligence Review</u>, 5:3, (July 1993), 312. <sup>101</sup> see Cordeman, Anthony H. & Wagner, A.B., 487.

<sup>102</sup> Cordesmann, H. Anthony. <u>After The Storm</u>, 412.

<sup>103</sup> see Cordeman, Anthony H. & Wagner, A.B. <u>The Lessons Of</u> <u>Modern War</u>, 490.

<sup>104</sup> see Cordeman, Anthony H. & Wagner, A.B. <u>The Lessons Of</u> <u>Modern War</u>, 343.

<sup>105</sup> Cordesmann, H. Anthony. <u>After The Storm</u>, 412-415.

<sup>106</sup> It has bought some three *Kilo* class submarines from Russian Federation and will operate them at the straits of Hormuz. Such a submarine capability was new to the Gulf since no other states than Iran operate submarines. They give Iran a way of operating in the Gulf and in the Gulf of Oman that reduces its vulnerability to air and surface attack. See "Iran Gets Its Second Kilo", <u>Jane's Defense Weekly</u>. 20:7 (14 August 1993), 8.

<sup>107</sup> These short range anti-ship missiles can be launched from the land, ships, and aircraft. They have a range of approximately 70 kilometres in the surface-to-surface and use J-Band active radar guidance. They are relatively more accurate than the older generation missiles.

<sup>108</sup> In the late 1993 Iran purchased 3 Kilo class submarines, and some 12 Backfires from Russian Federation. In the same period Iran also received deliveries of a number of AS-6 Kingfish anti-ship, sea-skimming missiles from Ukraine. It deserves that The Russian Tu-22m( Tu-26 to the NATO designation list) *Backfire* is a long range bomber, that has an impressive sensor suite, can fly very low and carry 3 heavy anti-ship missiles. It is also a dual capable aircraft and can carry nuclear weapons Iran is believed to have acquired.

The Kilo class SSK is one of most modern of the world, considered as a hard to find and equally hard to kill enemy. The Kilo classes may seriously threaten Western ASW forces in the region. See Wylie, James. "Iran's Quest For Security And Influence ", 312.

<sup>109</sup> Imperial Iranian Navy was so short of support units that even the naval reccoinnase was undertaken by the airforce planes and the reports were sent to navy. There was also no supporting artillery and sensor units.

<sup>110</sup> Although the quality of these installed weapons may be somewhat lower than the Imperial Navy's American made weapons their great number of deployment offsets this disadvantage which is also run parallel with the general Iranian strategic principle of superiority through numbers. See Cordesmann, H. Anthony. <u>After The Storm</u>, 30-55 for the total number of deployed weapon systems.

<sup>111</sup> See Cordesmann, H. Anthony. <u>After The Storm</u>, 414.

<sup>112</sup> Military balance 92/93 .London: Brassey`s 1994, 151;Cordesmann, H. Anthony. <u>After The Storm</u>, 30-41,410-415.

<sup>113</sup> Military balance 92/93 .London: Brassey`s 1992, 1<sup>a</sup>¬.

<sup>114</sup> Cordesmann, H. Anthony. <u>After The Storm</u>, 38.

<sup>115</sup> Since Iran does not disclose its arms purchase agreements to the International Institutions, the exact figures for its armament efforts are not known. However, Iran seeks to strengthen its naval position in the Gulf and has made purchases for that purpose that include naval EC/CM ystems, missile weapons. See Cordesmann, H. Anthony. <u>After The Storm</u>, 25-47.

<sup>116</sup> Cordesmann, H. Anthony. <u>After The Storm</u>, 45

<sup>117</sup> Friedman, Norman. <u>Desert Victory: The War For Kuwait 1990</u> .New York: Ballantine Books, (1992), 222.

<sup>110</sup> Cordesmann, H. Anthony. <u>After The Storm</u>, 583-586

<sup>119</sup> Cordesmann, H. Anthony. <u>After The Storm</u>, 586

<sup>120</sup> Cordesmann, H. Anthony. <u>After The Storm</u>, 585.

<sup>121</sup> This is to be expected if the technological leap in the expansion programme is considered.

<sup>122</sup> Countries like Syria, Libya, Algeria, Tunis and Egypt have scores of such missile craft in their navies purchased or transferred from USSR during the cold war. Syria and Egypt have also acquired operational experience of these type of boats from the Arab-Israeli wars.

<sup>123</sup> During the Libyan crisis in 1986, the United States 6<sup>14</sup> Fleet showed great caution even against Libyan fast missile attack boats armed with very short range *Sea-Killer* and SS2-c *Styx* missiles. Despite the prosecution of every individual small radar contact by American carrier, Libyans managed to get close within some 110 kilometres of the task force (well within range of the newer ex-USSR SSMs). Correspondingly the expenditure of the ammunition was also very high as exemplified by *USS Yorktown*'s firing of a *Harpoon* type heavy SSM against a small patrol boat of 100 tons.

<sup>124</sup> See Cordeman, Anthony H. & Wagner, (1991), Linn, (1992) and Hewish (1993).

### Chapter V

<sup>125</sup> See Linn, Thomas. "Naval Forces In The Post Coldwar Era", 21.

<sup>126</sup> See Till, Geoffrey. "A Post Cold War Strategy For Nato." <u>Naval Review</u> .13:3, (1993), 8. <sup>127</sup> Friedman, Norman., 21

<sup>128</sup> Elliott A. Cohen, "The Future of Force and American Strategy, " <u>The National Interest</u>, 19:1 (Fall 1990), 8.

<sup>129</sup> Linn, Thomas. "Naval Forces In The Post Coldwar Era".

<sup>130</sup> This United States resolve to protect navigational freedoms by means of ship and aircraft operations on and over the seas and oceans of the world has been voiced by some writers of the genre. See Owens(1992) and Linn for example.

<sup>131</sup> See Linn, Thomas. "Naval Forces In The Post Coldwar Era" (1992); Till, Geoffrey. "A Post cold war Strategy For Nato." (1993) ;Grove, Eric .<u>The Future Of Sea Power</u>. (1990) ;Booth, Ken, Law Force and Diplomacy at Sea. (1985).

<sup>132</sup> In 1984, Amaco Cadiz - a super tanker that belongs to Exxon Firm, foundered off Alaska. In the ensuing oil spill resulting from the leaking tanks of the tanker, some 30,000 tonnes of oil covered the surface of a 60 mile long coastal strip and adversely affected the natural life in the region. In 1993, efforts to clear the area were still going on. See Hill, J.R. <u>Maritime Strategy for Medium Powers</u> (1989), 107.

<sup>133</sup> British Maritime League Official Report, "Inquiry Into the Decline In The UK Registered Merchant Fleet", November 1986 no page numbers were present in the E-Mailed document.

<sup>134</sup> Stuart Blode. " Offshore patrol and maritime policing", International Defense Review. pp.17-20, may 90, vol 23.

<sup>125</sup> Friedman, Norman. <u>Desert Victory: The War For Kuwait</u> <u>1991</u>, 123.

<sup>136</sup> Pugh, Michael."Peacekeeping: A Role For The Navies: ". <u>Naval Review</u> .14:4, (1993) 8-12.

<sup>137</sup> Stuart Blode. " Offshore patrol and maritime policing". <u>International Defense Review</u> 23 (May 1990), 17-20.

<sup>133</sup> See Stuart Blode. " Offshore Patrol And Maritime Policing", International Defense Review. p.17-20

<sup>139</sup> Stuart Blode. " Offshore Patrol And Maritime Policing", International Defense Review. p.17-20.

<sup>140</sup> British Maritime League Official Report, "Inquiry Into the Decline In The UK Registered Merchant Fleet".

<sup>141</sup> See British Maritime League Official Report, "Inquiry Into the Decline In The UK Registered Merchant Fleet" and Hill, J.R. <u>Maritime Strategy for Medium Powers</u> (1989), 30 -51.

<sup>143</sup> In 1986 some 3362 million tonnes of cargo was carried aboard ships which was more than the some 3062 million tonnes carried in the recessionary year of 1983. See British Maritime League Official Report, "Inquiry Into the Decline In The UK Registered Merchant Fleet".

<sup>143</sup> British Maritime League Official Report, "Inquiry Into the Decline In The UK Registered Merchant Fleet".

<sup>144</sup> Cordeman, Anthony H. & Wagner, A.B. <u>The Lessons Of Modern</u> <u>War</u>, Volume 3. Boulder: Westview Press, (1991), 44.

<sup>145</sup> Cordeman, Anthony H. & Wagner, A.B. <u>The Lessons Of Modern</u> <u>War</u>, vol 2, 569-570.

<sup>146</sup> Jane's Fighting Ships 1990 - 91. London: Netherwood Dalton & Co. (1990), 4.

<sup>147</sup> While Soviet Union had the *Moskva* and *Kiev* classes, these were all limited designs from which only helicopters or low-performance aircraft may operate. Besides Soviet Navy had a only a medium size pool of landing ships suitable for short range operations. Those assets are not really meant for global power projection tasks.

<sup>148</sup> See Grove, Eric .<u>The Future Of Sea Power</u>., 129, 237.

<sup>149</sup> Linn, Thomas. "Naval Forces In The Post Coldwar Era", 9.

<sup>150</sup> Rathburn, Robin. "Strategic Mobility In The 1990s". <u>Strategic Review.</u> 20:3 (July 1993), 49.

<sup>151</sup> Adm. Amelko, Nikolai. "The Russian Navy And The New Union.", <u>Jane's Intelligence Review</u>. 6:13 (1992), 6-11.

<sup>152</sup> See Adm. Amelko, Nikolai."The Russian Navy And The New Union.", 6-11 on the Russian side's opinions for this.

<sup>153</sup> Dr. Sukru Elekdag. "Nato and Warsaw Pact Nuclear Strategies in the Cold War ", lecture delivered at the Bilkent University (Ankara: December 1992).

<sup>154</sup> Aspin, Les. <u>A New Kind of Threat: Nuclear Weapons in an</u> <u>Uncertain Soviet Union</u>. Washington: United States Government Printing Office, 1991.

<sup>155</sup> A group of Pasdarans were reported to be in training by North Koreans to use MiG-21 and similar aircraft to attack carriers in one-way missions. The payload of these planes were reported to be 'very heavy' explosives. See Cordesmann, H. Anthony. <u>After The Storm</u>. Boulder: Westview Press, (1993) for detailed information about such Iranian schemes.

<sup>156</sup> Belvedere, James. "Deciphering Iran". <u>International</u> <u>Defence Review</u>, 27 (April 1994), 31-36.; Egeli, Sitki. <u>Taktik</u> <u>Balistik Fuzeler Ve Turkiye</u>. Ankara: MSB - SSM, (1993), 74.

<sup>157</sup> It deserves mention that these ICBMs are pre-programmed to reach possible targets only in Eastern Europe and Russian Mainland as well as China. Their regular route is over the north cape. Their range may not be sufficient to reach probable areas of trouble such as the Middle East, Indian sub-continent and Korean Peninsula.

<sup>158</sup> American navy has even adopted the Arleigh Burke class DDGs to carry Tomahawk missiles. The standardisation of the Mk141 VLS Standard missile launcher as the launch platform of the Tomahawk means that even the frigates of the 3000 tonne class such as the FFG Perry can carry these missiles.

<sup>159</sup> Boatmen J., Hewish, Mark."Adjusting The AAW For Littoral Warfare", <u>International Defence Review</u>. 26 (August 1993), 465-468.

<sup>160</sup> For an interesting account of the Soviet naval thought, see Gromov, Felix."Reforming The Russian Navy" .<u>Naval Forces</u>. 14:4, (1993), 11. ARTICLES

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