



CHAPTER 3

GENERAL MARITIME STRATEGIC CONCEPTS

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CHAPTER 3

GENERAL MARITIME STRATEGIC CONCEPTS

- *Sea Control, Sea Denial and Power Projection are the basic tasks of maritime forces.*
- *Sea Control, the ability to use the sea and deny its use to an opponent, is fundamental to the RSA in achieving its strategic goals in conflict.*
- *Sea Control will be an essential element of practically every major operation in which the RSA will be involved.*
- *Sea Control operations may be required across the spectrum of conflict.*
- *Sea Control minimises Risk – but does not eliminate it.*

INTRODUCTION

To determine what a Navy does to carry out its functions effectively, knowledge of certain maritime concepts and principles is necessary. The unique attributes of maritime forces are also to be taken note of. The aim of this chapter is to describe these generic concepts and to elaborate on the generally accepted roles of navies. This information will be used in the following chapter to focus more on the SA Navy and what it does in fulfilling its responsibilities towards the RSA.

CONCEPT OF SEA POWER

The construct of Sea Power within the modern era has been significantly influenced by the work of Admiral Alfred Thayer Mahan who was instrumental in the shaping of the USN.

His model of sea power clearly directed that naval power and maritime power were two essential elements comprising real sea power. These power elements are supported by three essential support bases: firstly, industrial potential which will allow a country to trade, secondly, maritime trade and shipping to carry that trade and thirdly, naval bases and naval assets (ships) to protect that country's interests. These pillars or supports are linked by merchandise on the one hand and naval support on the other hand. In his view, to be a successful maritime nation and world player in maritime affairs, it was vital that a nation could comply with all the elements of his model. The model is depicted below.

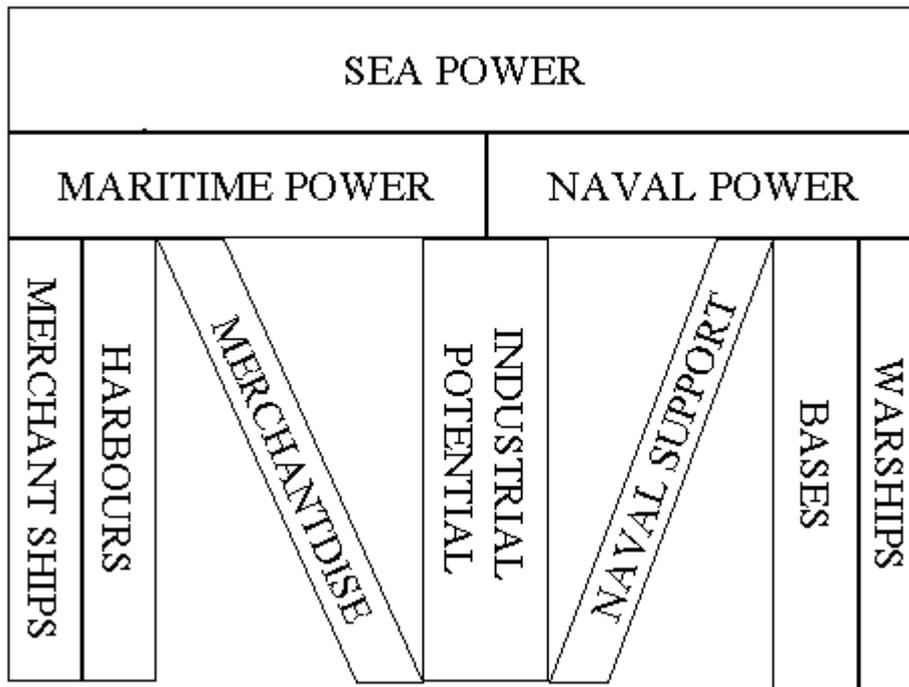


Figure 2: Sea Power

NAVAL POWER CONCEPTS

In order to conduct maritime operations certain concepts pertaining to the control of the sea have to be applied successfully.

COMMAND OF THE SEA

Early writers on the subject of maritime warfare were historically aware of the advantages that lay within the utilisation of the sea to further national power. The examples from the fifteenth century onwards of the Spanish, together with the Portuguese, and later the Dutch and English, illustrated the advantages of a nation supporting maritime expansion with maritime warfare. Early exponents of the strategic theory of maritime warfare that developed in the nineteenth century were concerned with the use of such warfare to advance 'dominance' for a state.

Emergent from this paradigm arose the concept of *Command of the Sea*, which was considered to be the principle objective of naval forces operating in a maritime arena. *Command of the Sea* was defined as the possession of such a degree of superiority that one's own operations are unchallenged by an opponent and conversely an opponent is incapable of utilising the sea to any degree for his own interests.

Command of the Sea was viewed as being achievable through the complete destruction or neutralisation of an adversary's forces. Historically the concept may have been valid but gradually as warfare advanced, it became unrealistic for any navy to dominate to such an extent that it could *Command the Sea*. This was because with advances in warfare, naval forces were faced with a range of asymmetric threats, brought about by technological innovations such as the mine, the torpedo, the submarine and aircraft.

An additional problem with the concept of *command of the sea* was risk of not understanding that the sea, which, unlike the land, is dynamic and not static, and war resources could be squandered on holding sea areas for no objective reasons. Holding sea areas does not have the same meaning as holding land areas. The value of maritime operations lies in the use of the sea for movement and not for possession of the sea itself. The recognition that naval conflict is essentially about controlling movement at sea led to the development of the more limited concept of *Sea Control*.

SEA CONTROL

Control of the Sea can be limited in place and in time and the required extent is determined by the task to be done. *Sea Control* is defined as that condition which exists when one has freedom of action to use an area of sea for one's own purposes for a period of time and, if required, deny its use to an



Sea control and sea denial ensure own forces have the freedom to manoeuvre in own territorial waters and beyond

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opponent. The concept includes the air space above, the water itself, the seabed and the electro-magnetic spectrum. It may also include the control of assets in space such as navigational satellites or reconnaissance devices.

SEA DENIAL

A related term to *Control of the Sea* is that of *denial of the sea*, or *Sea Denial*. This is defined as that condition that exists when an adversary is denied the ability to use an area of sea for its own purposes for a period of time. A nation may simultaneously be involved in *Sea Control* in one area and *Sea Denial* in another area. *Sea Denial* can take many forms, from the maintenance of a blockade of enemy forces, through the operation of exclusion zones to campaigns against an adversary's trade or logistics.

FORCE IN BEING

Another related concept to *Sea Control* and *Sea Denial* is that of the *Force in Being*, previously known as *Fleet in Being*. This concept involves the advantage a weaker power has of avoiding a head on confrontation with a stronger power by forcing the stronger power to divert valuable resources to contain it, ie the *Force in Being*. Thus a *Force in Being* can compel the enemy to concentrate its forces, against its will, in a valuable area; or around valuable units; or cause him to route its passage to its disadvantage; or to amend its operational plans.



A weaker power could force an opponent to divert its submarine to shadow its forces, instead of using it on a more valuable tasking. This is an illustration of a Force in Being

SEA LINES OF COMMUNICATION

Sea Control in the South African context will involve the protection of the ports, harbours, bays and small focal points. In addition it will involve the protection of our *Sea Lines of Communication* (SLOCs). Protecting SLOCs means protecting the routes used by merchant vessels contributing to our economy. The methods of defending these sea routes is inherently dynamic as these routes are not fixed, in contrast to roads, railways, airfields or air bases on land.

Protecting and allowing the free movement of shipping around the South African coast, and in particularly the free movement of vessels in and out of the six main harbours, will be a focal point for our *Sea Control*.

BATTLE SPACE DOMINANCE

The gradual blurring of the boundaries between sea, land and air combat has led to the gradual integration of all combat elements to achieve a concept know as *Battle Space Dominance*. It embraces the control over the environs of the entire battlespace, the surface,

sub-surface, air, land, information environment and the electromagnetic spectrum. The achievement of *battlespace dominance* in an area will necessarily entail sea control of the sea portions of that area. This concept is of relevance in joint operations, especially in the littoral.

Helicopters are very valuable assets for over-the-horizon information gathering to improve situational awareness which is required for battlespace dominance.



MARITIME POWER PROJECTION

As stated at the start of this chapter, maritime warfare is about utilisation of the sea to further national interests. Some of the activities that take place in a maritime conflict may be only indirectly linked to activities ashore, but they are always linked to the accomplishment of a terrestrial result. *Sea Control*, once achieved, establishes the environment for more direct efforts in relation to the land. Maritime forces can shape, influence and control this environment, as well as deliver combat force ashore if necessary. The delivery of force from the sea is defined as *Maritime Power Projection* and can take the form of the landing of amphibious or special forces or the delivery of sea borne land forces, or bombardment by guided or unguided weapons from vessels at sea. The covert nature of submarines means they can play an important part in the projection of maritime power.



Maritime power projection can be achieved by landing a small force ashore

Maritime Power Projection has utility in the degree to which force can be implied or threatened, as well as asserted. It is thus a tool applicable across a range of contingencies and conflicts. *Maritime Power Projection* forces can be despatched at an early stage of a crisis to give a clear signal of resolve and they can remain poised for long periods with the ability to react at short notice. The sophistication with which maritime power projection can be exercised gives great strategic advantage to those skilled in its application.

MARITIME STRATEGY AND MODERN DEVELOPMENTS

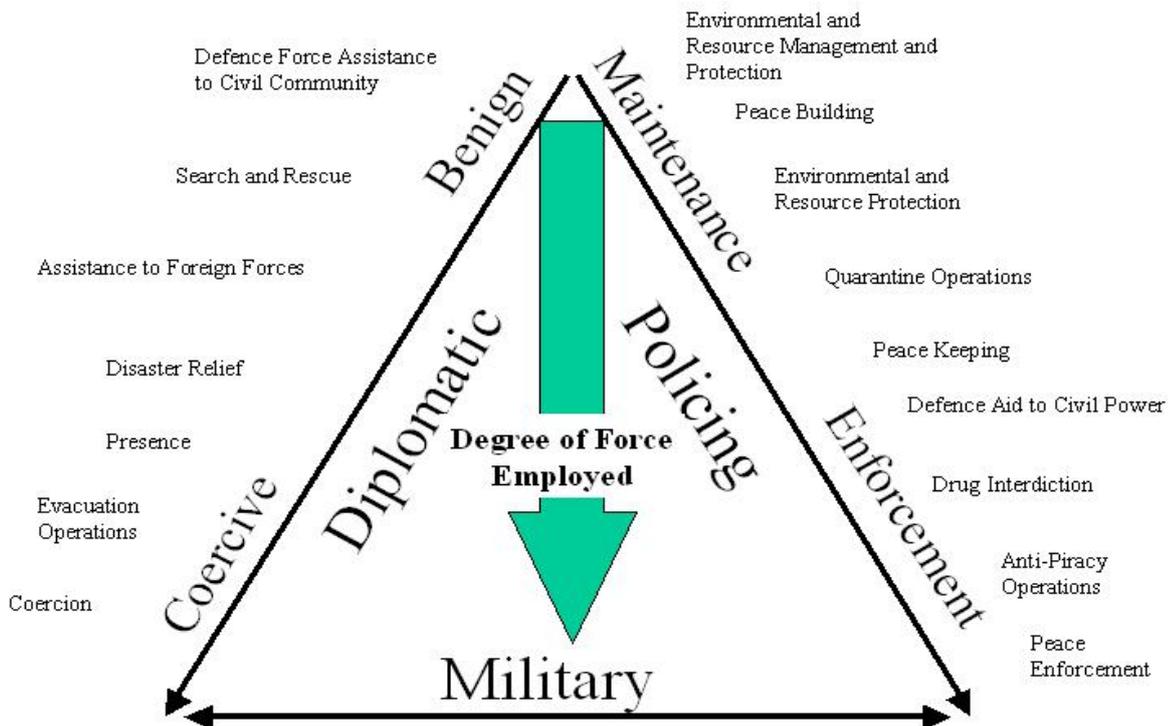
Technology seeks to increase the ability of naval forces to influence events on land and in the air. Thus, the development of extended range missiles, such as cruise missiles and guided munitions, increasingly integrate the air, sea and land battle. In addition, traversing the slow and difficult shore terrain in amphibious operations can now be coupled to the use of hovercraft or helicopters to deliver ground forces well inland in a battle ready state. Thus naval and amphibious forces can be utilised in a wide range of new situations. Both these developments are closely linked to improved battle space management systems and also the development of the ability of naval units to view over the horizon and intervening terrain to intervene in the land and land-air battles.

These new capabilities of sea borne forces are counter-balanced by improvements in surveillance and anti-ship weapons that pose challenges for the defence of sea borne forces. Thus the effective use of sea borne forces in a threat environment requires careful assessment of an adversaries capabilities and the balancing of offensive and defensive capabilities. This means the integration of land, air and naval forces together with supporting intelligence and surveillance elements.

ROLES OF A NAVY

According to Ken Booth, the traditional roles of a Navy are the Military, Policing and Diplomatic Roles. The Royal Australian Navy has expanded this construct, indicating how the tasks can develop from within the different roles. The Diplomatic and Policing Roles are secondary to the Military Role.

Figure 3: The Roles Of A Navy



Diplomatic Role. Naval Diplomacy is the use of maritime forces as a diplomatic instrument in support of political objectives and foreign policy. It is the availability of a force to back up and provide support to diplomatic efforts at various levels. The Diplomatic Role varies from being benign (disaster relief) to developing to the more forceful function of coercion. Maritime forces can, therefore, be used symbolically to send messages to a government by incrementally increasing the offensive capability. The following functions are carried out under the Diplomatic Role:

- **Disaster Relief.** *Disaster Relief* tasks are carried out to assist the own population or that of another nation, to alleviate suffering caused by both natural and other disasters.
- **Assistance to Foreign Forces.** The Assistance Provided to Foreign Forces, can be any assistance of any nature requested by the foreign force, or offered to the foreign force.
- **Presence.** *Presence* is the exercising of naval diplomacy in a general way involving deployments, port visits, exercising and routine operating in areas of interest, to declare interest, reassure friends and allies and to deter possible adversaries.

- **Evacuation Operations.** During *Evacuation Operations*, forces are evacuated from land during time of combat. Non-combatant Evacuation Operations are operations to relocate non-combatants threatened in a foreign country to a place of safety, ie the evacuation of own nationals from countries experiencing civil unrest.
- **Coercion.** *Coercion* is the use of force, or the threat of the force to persuade an opponent to adopt a certain pattern of behaviour, against their wishes.

Policing Role. In the *Policing Role*, forces are employed to enforce law (both domestic and international) or to implement some regime established by an international mandate. Force is only employed for self-defence or as a last resort in the execution of the task. The Policing Role also extends from the more peaceful role of maintaining (environmental and resource protection) to the more aggressive part of the role of the enforcement of sanctions and embargoes. The following are the associated functions that are carried out:

- **Peace Operations.** Peace operations encompass those operations that support the diplomatic peace process. The major categories in the maritime environment are explained below.
- **Peacekeeping.** Peacekeeping formally refers to observer and interposition forces, although its popular usage extends much more widely to international intervention of any kind. Implicit in peacekeeping operations is that they operate under a mandate and according to conditions which are agreed by all the belligerent parties. Open sea peacekeeping operations are rare; more commonly naval forces will be used to patrol coasts, estuaries and rivers to monitor a cease fire. Naval units may be used as neutral territory for talks, while naval personnel can be employed as military observers, liaison officers, HQ staff officers, disarmament inspectors or in medical or communications teams. Naval forces, particularly amphibious vessels and organic helicopters, can provide substantial logistic support.
- **Peace Enforcement.** Peace enforcement moves a step further than peace keeping. It may occur in circumstances where one or more of the belligerents have not consented to intervention by international forces and coercive action may be required to restore peace. The Gulf War in 1991 was an important example of such action, authorised under Chapter VII of the United Nations Charter. The roles played by maritime forces will depend upon the nature and scale of the conflict, but may extend to high level sea control and power projection operations, as well as the provision of logistic support.
- **Embargo, Sanctions and Quarantine Enforcement.** Embargo, sanctions and quarantine enforcement are a major maritime component of peace enforcement. While the level of force which may be employed, is carefully controlled, the possibility of reprisal by the affected party generally requires such operations to be conducted in concert with a range of self-protective measures. Depending upon the nature of the threat, this may require sea control operations on an appropriate scale.
- **Peace Building.** Where reconstruction of a state or region is being attempted in the wake of conflict, naval forces can provide many facilities to assist with such work, both in platforms and personnel. Key areas where naval forces undertake such efforts include mine clearance, the opening of ports and ordnance disposal and salvage. Depending upon the scale of the task, such activities may take many years to complete.

- **Defence Force Aid to the Civil Power.** In policing terms, naval operations to provide military assistance to the civil power are usually aimed at supporting domestic law enforcement at sea within national jurisdictions. Defence Force Aid to the Civil Power involves the assistance to civil authorities, where they have inadequate or no resources to do so. Maritime operations to provide military assistance to the civil power could include counter-terrorist operations such as the recovery of offshore gas or oil installations, or ships held by terrorists.
- **Environmental and Resource Management and Protection.** Fisheries protection is one of the oldest policing roles of naval forces and remains an important activity in an era of extending jurisdiction and increasing exploitation of and stress on fish stocks in both coastal and oceanic waters.
- **Anti-Piracy Operations.** Naval forces have international obligations to suppress piracy, which by definition is an activity on the high seas. Within territorial waters, piratical activities are legally described as armed robbery at sea and must be dealt with by domestic mandate. In circumstances where piracy or armed robbery at sea are actively interfering with commerce and other peaceful activities, the same measures which apply in other situations for the protection of merchant shipping will require to be applied in sea control operations. The more sophisticated, technologically advanced and aggressive the criminal activity, the more demanding such operations will be.
- **Quarantine Operations, Drug Interdiction and Prevention of Illegal Immigration.** Maritime forces play a significant role in combination with other Government agencies in operations such as the enforcement of quarantine regulations, drug interdiction and the prevention of illegal immigration.

Military Role. Maritime forces can carry out the military role by conducting operations both from the sea and at sea. The situation and capabilities of a specific navy will determine which operations it can conduct. The division of the two is indicated below.

Types of Military Operations

Combat Operations at Sea	Combat Operations from the Sea
• Intelligence Collection and Surveillance	• Maritime Mobility
• Cover	• Land Strike
• Against Shipping	• Support to Operations on Land
• Maritime Strike and Interdiction	• Amphibious Operations
• Containment by Distraction	
• Barrier Operations	
• Layered Defence	
• Advance Force Operations	
• Naval Control and Guidance of Shipping	

- **Intelligence Collection and Surveillance.** This involves the routine collection of information at sea.

- **Cover.** *Cover* is the provision of support, if required, to less powerful units or detached elements of the force that are engaged in operations of their own, taking advantage of the wider sea control that the main force has achieved. An example is the air defence provided to mine counter measures vessels operating in a high air threat area.
 - **Maritime Strike and Interdiction.** These operations entail engaging the enemy from the sea. *Maritime Interdiction* operations are defined as “operations which encompass sea-borne enforcement measures to interdict the movement of certain types of designated items into or out of a nation or specific area. These measures may include enforcing economic sanctions via an embargo of a particular country’s international trade”. *Interdiction* is defined as “actions to divert, disrupt, or destroy the enemy before he can affect friendly forces”.
 - **Layered Defence.** *Layered Defence* is the disposition of protective assets possessing a mixture of anti-submarine, anti-surface and anti-air capabilities in layers of screens and patrol areas around units of high value or in crucial waters and choke points.
 - **Naval Co-ordination and Guidance of Shipping.** This is the guidance of friendly merchant shipping through safe lanes/areas in time of crises. It is used for the protection of maritime trade.
 - **Containment.** *Military Containment* is the geographic restriction of the freedom of action of enemy forces.
 - **Maritime Mobility.** *Mobility* is the capability to move military forces from place to place by sea while retaining the ability to fulfil their primary mission.
- Each protective asset also has its own layered defence. The last layer of defence of a ship is its close-in weapons system or the surface-to-air missile shown being fired from a Frigate


- **Land Strike.** *Land Strike* is in support to land forces by directing weapons at targets ashore. This includes Naval Gunfire Support.
 - **Support to Operations on Land.** These operations include such tasks as providing command and control facilities, medical facilities and logistic support to land forces.
 - **Conflict Prevention.** A peace support operation employing diplomatic, civil and, where necessary, military means to monitor and identify causes of conflict and take timely action to prevent the occurrence, escalation, or resumption of hostilities.

ATTRIBUTES OF MARITIME FORCES

Maritime forces have unique attributes that their planners and users are to be aware of in order for the forces to be used effectively and to their full potential. They have the ability to

be self-sustaining by replenishing liquids and stores at sea. To be used most effectively, the forces are to be employed jointly, that is with other service forces and elements to carry out operations. Attributes that are relevant to a navy like the SA Navy are mentioned below:



- **Access**. The majority of states have a coastline and are therefore connected by sea. Maritime forces can, therefore, be deployed unhindered to most significant areas and threats.
- **Mobility**. Maritime forces can move hundreds of miles per day. This mobility enables the maritime forces to respond from over the horizon, becoming selectively visible and threatening to potential adversaries.
- **Versatility**. Warships can easily change their military posture, undertake several tasks concurrently and be readily available for re-tasking.
- **Sustained Reach**. As maritime forces have their own integral logistic and matériel support systems, the range and endurance that these provide give individual units sustained reach, ie to operate for extended periods at considerable distance from shore and, specifically, base support. Reach is further advanced with the use of logistic supply ships. Only a navy so equipped can exploit the full potential of maritime power.
- **Resilience**. Warships are designed to absorb a fair amount of damage before they become non-operational. While the loss of capability through damage will degrade operational performance, a ship's company is trained to restore systems to use as quickly as possible. They are also designed for use in areas of biological and chemical contamination with minimum degradation to their fighting ability.
- **Poise**. Once in theatre, maritime forces can remain on station for an extended period of time both covertly and overtly, depending on the requirements. In that time on station they have the option to do what is best in the particular scenario, they can seize the initiative, act as a force for coercion or deterrence. The ability for forces to poise in international

waters gives them an added advantage over land and air forces in that the political complications and military risks are avoided. It thus gives the political leadership many choices as well as time to deliberate.

PLANNING AND EXECUTING OPERATIONS

Military operations are planned to achieve a desired result that is more commonly known as the desired end state. Once that desired end state is achieved, the operation can be deemed successful and further action should cease. If the action continues, it means that another desired end state has been defined. In order to achieve an end state a few concepts need to be applied.

- **Centre of Gravity (COG).** The centre of gravity, which has considerable relevance at all strategic levels, is the combination of characteristics, capabilities or localities from which enemy and friendly forces derive their authority, cohesion, freedom of action, physical strength or will to fight. Success is achieved by identifying and neutralising or destroying, the enemy's COG and identifying and protecting one's own. Examples would be the mass of an enemy's army, the concentration of ships in a port, an opponent's task force at sea, the command structure, the will of the people, etc.
- **Focus of Main Effort.** The focus of main effort is defined as "a concentration of forces or means, in a particular area, where a commander seeks to bring about a decision." It is a tool to provide a focus of activity that a commander at any level considers crucial to the success of a mission. The focus of main effort is usually directed at the opponent's COG.
- **Decisive Points.** Military use of force in combat, or the threat or possibility of combat, to bring about decisions that will define the subsequent progress of the battle. The term, decisive points, is used in joint warfare for the intermediate objectives, the prosecution of which will lead to the opponent's COG.
- **Desired End State.** The *Desired End State* clearly indicates what constitutes success and conceptualises this with one's own forces, the adversary's forces and the operational scenario.

By applying the above concepts in planning and executing operations, the forces will be employed efficiently to achieve the aim of the operation. This is done by focussing the main effort of own forces against the opponent's COG, which could bring the opponent to its knees. Identifying one's own COG will also assist in determining and executing force protection of own forces.

CONCLUSION

This chapter has explained the generic maritime concepts of how and the reasons why maritime forces are employed to support a government's initiatives. The following chapters will focus on the employment of SA Navy forces, considering the South African maritime environment explained in Chapter 2 and these concepts.