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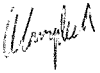
ARMED FORCES AS INSTRUMENTS OF FOREIGN POLICY: SOME CASE STUDIES

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A Dissertation in compliance with the requirements for the degree of Master of Arts at the University of the Witwatersrand, Johannesburg, 1986

DECLARATION

I declare that this dissertation is my own, unaided work. It is being submitted for the degree of Master of Arts in the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in any other University.



20th day of January, 1987.

To Mum and Dad; thanks for everything.

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INTRODUCTION

Traditionally, a State's Armed Forces have been regarded as its ultimate instruments of power, and war as the extreme form of the application of military force. In more recent times this view has been challenged (see Chapter 1). The purpose of this Dissertation is to examine the effectiveness of Armed Forces, and military power as instruments of foreign policy, in the post-war era. To this end, the Thesis is divided into two sections - Part I and Part II - the former of seven, the latter of four, Chapters.

Part I provides the theoretical framework for the Dissertation, which is the essential prerequisite for understanding and evaluating the actual practice of military power. To this end, in Chapter 1, the concept of power itself is examined, for this is the basic concept without which Armed Forces and military power have no meaning or purpose. Following on from this, Chapter 2 focuses on the phenomenon of war, by an examination of the works of some of the great theorists of war. Specific forms of military power and war are [illegible]ered - Sea Power (Chapter 3), Air Power (Ch[illegible], U.S. and Soviet Nuclear strategies (Chapter 5 and 6) and Insurgency and Counter-Insurgency (Chapter 7).

Having established the nature of power and war, and how Armed Forces should best be employed to obtain the ends desired by the State, it is necessary to examine the application of Armed Forces, and thus military power, in practise. This is the purpose of Part II, which contains three Case Studies, each of which is directly linked to one of the theoretical Chapters of Part I, and each of which is concerned with the examination of a different type of Armed Service and a different form of military power. Thus Chapter 8 (linked directly with Chapter 2 for the purposes of analysis) examines Conventional land war through a study of the Israeli campaign in the Sinai in 1956. Chapter 9 (linked to Chapter 3) focuses on Sea Power through an analysis of the 1982 Falklands War, and Chapter 10 (linked with Chapter 7) covers the Dhofar campaign (1965-1975) in order to examine the practice of b[illegible]. Insurgency and Counter-Insurgency.

As there have (fortunately) been no nuclear wars to date, there are no Case Studies to examine with regard to Chapters 5 and 6. These analyses of nuclear strategy are included, however, for nuclear weapons form the unavoidable background to contemporary international relations in general and conflicts in particular. Indeed, as will be apparent from Chapter 7, the existence of nuclear weapons has had a direct influence upon the

occurrence of the localized wars that have so marked the post-1945 era. Similarly, there is no Case Study specifically for Air Power; this is because of its nearly all pervasive presence in modern warfare.

Finally, the results of all three Case Studies are brought together, along with the theoretical insights of Part 1, to produce a final conclusion to the Dissertation, in Chapter 11.

PART I

THEORETICAL FRAMEWORK

POWER, WAR AND STRATEGIES

CHAPTER 1: CONCEPTS OF POWER

Power is, and has always been, one of the central themes and concerns of interstate relations. One of the earliest recorded expositions of this theme was in the 5th Century BC by Thucydides, in his The Peloponnesian War, which relates how:

> "In those years the Athenians made their empire more and more strong, and greatly added to their own power at home ... So finally the point was reached when Athenian strength attained a peak plain for all to see and the Athenians began to encroach upon Sparta's allies. It was at this point that Sparta felt the position to be no longer tolerable and decided by starting this present war to employ all her energies in attacking and, if possible, destroying the power of Athens" (1).

Thucydides also offers us probably one of the bluntest statements on the relationship between power and international affairs in the famous Melian dialogue, wherein he has the Athenian delegation expound upon power politics in the most unconstrained manner:

> "... we recommend that you should try to get what it is possible for you to get ... when these matters are discussed by practical people, the standard of justice depends on the equality of power to compel and that in fact the strong do what they have the power to do and the weak accept what they have to accept .... Our opinion of the gods and our knowledge of men lead us to conclude that it is a general and necessary law of nature to rule wherever one can ... we know that you or anybody else with the same power would be acting in precisely the same way .... What is looked for is a positive preponderance of

> power in action .... this is the safe rule - to stand up to one's equals, to behave with deference towards one's superiors, and to treat one's inferiors with moderation" (2).

Approximately twenty one centuries later, the peace settlement of Utrecht (AD 1713) announced its intention

> "to establish the peace and tranquility of Christendom by a just balance of power, which is the best and most solid basis of mutual friendship ..." (3).

Indeed, the question of power and the need to balance it became the central issue of the modern states system following Utrecht. Frederick the Great, of Prussia, in 1738 went as far as to argue that an equilibrium of power between states was essential to the health of the European body politic (4).

Treaties continually reflected this concern. Thus the anti-Bonaparte Treaty of Chaumont (1814) stipulated that it had:

> "for its object the maintenance of the balance of Europe, to secure the repose and independence of the powers, and to prevent the invasions which for so many years have devastated the world" (5).

In 1854 Palmerston proclaimed that:

> "call it what you like - 'balance of power' or any other expression, it is one which has been familiar to the minds of all mankind from the earliest ages" (6).

Unsurprisingly, given the wide usage of the concept, there is no concise, universally acceptable definition, of 'balance of power'. American theorist Inis L. Claude, for example, assembled seven different versions of the concept, grouping them into three categories, which he designated: balance of power as situation; balance of power as policy; the balance of power as a system (7).

Under the first category, Claude assembled those concepts of balance of power which saw it as an objective reality, as something which exists in the states system. In this context, he advanced three meanings. Firstly, balance of power as equilibrium - a simple description indicating when states are in a rough state of equality with each other. Secondly, balance of power as disequlibrium - a balance, seen in Claude's descriptive analogy, as a bank balance, in which one seeks to deposit more than one withdraws (in terms of states, a desire to have a margin of strength over rivals). Finally, balance of power - as distribution of power - as a means to measure whether the power relationships between states are in equilibrium or disequilibrium (8).

The second category, balance as policy, was concerned with the treatment of power as ite policy or as

a principle that could, or should, govern state policy. Again three concepts stand forth, equivalent to those in the first category. Thus, first, balance as a policy of creating or preserving an equilibrium between states; or, second, as a policy of creating or preserving a disequilibrium in favour of the policymaker´s state, a policy often referred to as establishing a ´favourable balance´; finally, the balance of power can be identified with the struggle for power: states are said to ´join the balance of power´ by being engaged in a power struggle amongst themselves (9).

Under the third category, balance of power as a system, the balance was seen as an operational arrangement governing the actual practice of international relations - an arrangement with understood rules, instruments and mechanics; hence references such as "regulated ... by the balance of power" (10).

British theorist Martin Wight´s examination of the concept brought to light, by contrast, no less than nine different meanings of the term. These he summarised as follows:

"1. An even distribution of power.
2. The principle that power ought to be evenly distributed.
3. The existing distribution of power. Hence, any possible distribution of power.

4. The principle of equal aggrandizement of the Great Powers at the expense of the weak.
5. The principle that our side ought to have a margin of strength in order to avert the danger of power becoming unevenly distributed.
6. (When governed by the verb 'to hold':) A special role in maintaining an even distribution of power.
7. (Ditto:) A special advantage in the existing distribution of power.
8. Predominance.
9. An inherent tendency of international politics to produce an even distribution of power" (11).

There remain, however, the questions concerning the nature and forms of power. In English, all variants of the phenomenon are covered by the one word 'power'; a similar situation exists in German. But French is different; the French language distinguishes between pouvoir (power within a political unit) and puissance (power of a political unit - i.e. power at an international level) (12). This study is concerned, throughout, with puissance. But what is power? Max Weber defined it as:

> "... the probability that one actor in a social relationship will be in a position to carry out his own will despite resistance, regardless of the basis on which this probability rests" (13).

It must be understood that since Weber regarded states as political associations interacting within social relationships with one another, his definition thus also applied to power at an international level (puissance) (14). Hans Morgenthau's

definition is not as concise:

> "When we speak of power, we mean man's control over the minds and actions of other men. By political power we refer to the mutual relations of control among the holders of public authority and between the latter and the people at large.
>
> "Political power is a psychological relation between those who exercise it and those over whom it is exercised ... the statement that A has or wants political power over B signifies always that A is able, or wants to be able, to control certain actions of B through influencing B's mind" (15).

In Robert Dahl's opinion, power, in general terms, refers to:

> "... subsets of relations among social units such that the behaviour or one or more units [the responsive units, R] depend in circumstances on the behaviour of other units [the controlling units, C]" (16).

Klaus Knorr simply defines power as coercive influence, where influence is defined as occurring when one actor, B, adapts his behaviour to comply with, or in anticipation of, another actor's (A's) suggestions, requests, or demands. Coercive influence occurs when B's policy adaptations are the result of fear of actual or potential sanctions that A will inflict if B does not adapt itself to A's demands (17). Raymond Aron argues that:

> "In a general sense, power is the capacity to do, make or destroy .... On the international scene I should define power

> as the capacity of a political unit to impose its will upon other units. In short, political power is not an absolute; it is a human relationship" (18).

English- and German-speaking theorists are trapped by their languages when attempting to construct definitions which simultaneously cover pouvoir and puissance.

Given the diversity of definitions of the concept, it is unsurprising that virtually every theorist has his own concept of the form(s) of power. E.H. Carr divided power into three subsets: military power, economic power, and power over opinion. Combined, these comprise political power at the international leve (i.e. puissance). Carr held them to be closely interdependant, and, in practice (as distinct from theory) inseparable (19).

According to Carr, military power is of "supreme importance" because war is "the ultima ratio of power in international relations" (20). War is the last resorc of every state, and, because of this, it is a dominant phenomenon in international politics. As a result, states must orientate their power with regard to the possibility of war. And that means military power. Indeed, the grading of powers was (and is) usually the result of their success in war and/or perceived military strength. This was

especially true of Great Powers: entry into this exclusive club of states was dependent on success in reasonably large-scale wars - for example, Germany after her victory in the Franco-Prussian War, America after the Spanish-American War, Japan after the Russo-Japanese War. Indeed, because of its importance to the state, military power often becomes an end in itself (21).

With regard to economic power, Carr primarily saw this in the light of the national economy's role in strengthening the states power base by increasing its military potential, arguing that:

> "... economic strength has always been an instrument of political power, if only through its association with the military instrument" (22).

Carr approvingly quoted a German Staff Officer's comment to Engels in the 1880s that "the basis of warfare is primarily the general economic life of peoples" (23). Also important was the use of the economy as an instrument of foreign policy, by means of the export of capital and the control of foreign markets. Examples of the former included the purchase of shares in the Suez Canal company by the British government; Russian government financing of the Chinese Eastern Railway; and the classic example, the private loan in 1894 of £400 million to Russia by French investors, made at the instigation

of the French government, which was intended to (and successfully did) cement the new alliance between these powers (24). With regard to the control of foreign markets, in the modern era this has taken the form of reciprocal trade agreements between economically unequal states wherein the stronger provides a secure market for the weaker's products, and sometimes provides goods and/or services at very competitive or even below market prices. For example, in the interwar period, Germany provided Central European and Balkan countries with a secure primary market for their main exports, usually purchased at prices above market level; in return, Germany gained political influence and a market for her own goods (25). A contemporary example is provided by the Soviet Union and her client, Cuba, whereby the USSR buys Cuban sugar at roughly three times world market prices (26).

Carr's third category of power is power over opinion. Carr argued that, though this aspect of power had always been with man, it had become especially important in the modern era, with the development of modern means to employ it on an unprecedented scale. Modern mass propaganda was, itself, made possible by the development of modern mass education combined with the modern communications media. Only in the second half of the 19th

Century did these developments commence. The process came to fruition with the First World War, in which major mass propaganda offensives were initiated by both sides in the struggle to gain control of the opinion of friends, foes and neutrals alike. It was not that propaganda was new; it was not; what was new was the mass nature it had developed. Following the termination of the war, the Bolsheviks in Russia took this development to its logical next step - propaganda as an instrument of policy in peacetime. This was the result in Carr's opinion of the USSR's initial extreme weakness coupled with its proclamation of, and proselytization for, a new, universalist, belief system (27).

Hans J. Morgenthau, one of the leading theorists of power, developed quite a comprehensive framework for the analysis of the phenomenon. He distinguished between power and influence, power and force, usable and unusable power, and legitimate and illegitimate power. In Morgenthau's view, influence was something the weak could have over the strong, but only the strong could have power. With regard to force and power, Morgenthau saw the former as physical violence, as involving the abdication of political power in favour of military power, political power being seen as a psychological relationship and

military power as a physical one. The concept of unusable power stemmed from the development of a situation of mutual nuclear deterrence - i.e. nuclear weapons are a form of power which cannot be used without bringing total destruction upon the user; usable power is, of course, non-nuclear. Legitimate power was, in Morgenthau's view, power that could be exercised legally and morally, as distinct from "naked power", power without justification (28).

In addition to this, Morgenthau broke the concept of power down into nine component elements - geography, natural resources, industrial capacity, military preparedness, population, national character, national morale, the quality of diplomacy and the quality of government. In this he was neither first or unique, an earlier example being provided by the American geopolitician N.J. Spykman who, in 1942, identified ten elements of power. Morgenthau is, however, the best known. For Morgenthau, geography is the "most stable factor upon which the power of a nation depends" (29). The area, or lack of it, of a country; whether it has natural frontiers and/or defences (e.g. high mountains); whether it is a continental state, peninsula, or an island; are all factors which directly relate to a country's power, by virtue of the degree of invulnerability (or lack

of it) that they impart to foreign invasion (30). Natural resources encompass both food and raw materials. With regard to food, lack of self-sufficiency is, in Morgenthau's view, a potential weakness to the state - the classic example being Britain - while permanent scarcity of food is a permanent source of weakness, as with many Third World countries. The same holds for raw materials, specifically those essential for waging war, though the importance of a specific raw material may vary over time depending upon advances in technology (e.g. today uranium is important; fifty years ago it was not). However, possession of raw materials does not automatically comprise a source of power; what is required before this can occur is the appropriate industrial capacity. A state rich in raw materials yet lacking in industrial capacity (e.g. contemporary Zaire) is not strong; rather, it becomes a tempting target for powerful states. Industrial capacity is essential because of the technological nature of modern war - without industry one cannot develop and produce the tanks, guns, missiles, aircraft, etc. essential to victory in the contemporary era. The stronger the industrial capacity, the more power a state can deploy - thus Britain's dominance of the world coincided with, and was the result of, her position as by far and away the world's leading industrial

nation in the 19th Century (31). These two elements of Morgenthau combined roughly equate Carr's concept of economic power.

For Morgenthau, military preparedness:

> "gives the factors of geography, natural resources, and industrial capacity their actual importance for the power of a nation" (32).

Military preparedness, equivalent to Carr's military power, requires the existence of an adequate military establishment and is composed of the sub-elements of military technology, military leadership, and the quality and quantity of the armed forces. Superior technology immediately grants one an advantage in the military balance; inferior technology automatically places one in a position of military inferiority. Thus Charles VIII's possession and use of artillery during his invasion of Italy in 1494 gave him a decisive advantage over the Italian City States, who could not counter it. Quality of military leadership is also of crucial importance - Prussia's rise to power in the 18th Century was almost entirely a reflection of Frederick the Great's military genius; the selfsame Prussian Army that had served Frederick so well failed disastrously when confronted by the great Napoleon. But for superior technology and leadership to be able to take effect, they must be based

upon an adequate (both in terms of quantity and quality) military establishment. Just what comprises an adequate military establishment is a question each state must answer for itself (33).

Population, by itself, does not necessarily constitute a source of power; indeed, as Morgenthau points out, in Third World states it can be a cause of weakness; nevertheless, only countries with substantial populations can hope to become Great Powers, because only large populations can establish and maintain the military establishment required for great power status. Such factors as population trends (increasing or decreasing; predominantly young or predominantly old) also affect a state's power. National Character, as Morgenthau freely admits, is one of the most elusive elements of power, yet is, he believes, of great importance. National morale is another elusive element and, in addition, the most unstable one on Morgenthau's list. He defines it as "the degree of determination with which a nation supports the foreign policies of its government in peace or war" (34). It is of indisputable importance, permeating all branches of a nation's activities, yet is very difficult to predict. However, the higher the quality of the society and government, the stronger national morale is likely to be. When Morgenthau talks about the

quality of diplomacy, he refers to the formulation and execution of foreign policy at all levels. Diplomacy is the essential instrument by which a state´s potential power is converted into real influence; good diplomacy can magnify a country´s power beyond its 'paper' capability; poor diplomacy can diminish a state´s power below its theoretical levels. All the aforementioned elements of power would come to naught, however, if a state suffered from poor quality of government. For Morgenthau, good government requires the fulfillment of three conditions: balance between the state´s human and material resources on the one hand, and the state´s foreign policy on the other; balance among the resources; and popular support for foreign policies being pursued. Failure to achieve these conditions would undermine a nation´s power (35).

It is to be noticed that Morgenthau has no equivalent to Carr´s power over opinion in his listing; he does, however, discuss psychological warfare and propaganda in his work. For Morgenthau, psychological warfare and propaganda are synonymous, and form one of the three instruments by which, in his view, foreign policy attempts to achieve its aims, the others being diplomacy and military force. He defines propaganda as:

> "the use and creation of intellectual convictions, moral valuations, and

emotional preferences in support of one's own interests" (36).

Morgenthau saw all foreign policy as a struggle for the minds of men; propaganda being the most direct means in this struggle. And although propaganda has existed since ancient times, today it has a different status because it is now, as not before, an autonomous instrument. To be successful, propaganda must adquately fulfil three relationships: the relationship between the content of the propaganda and how effective it is; the relationship between the content of the propaganda and the actual experiences of the target population; and the relationship between the propaganda and the foreign policy it is intended to serve. With regard to the first relationship, it is not the truthfulness of the propaganda that will guarantee success, but rather, whether it satisfies some need in the intellectual and political life of the target population - the outstanding example being Nazi propaganda in Germany. The second principle focusses on the necessity for the propaganda to fit into the life experiences of the target population; if it does not, then no matter how sophisticated it is, it will fail. Finally, if the propaganda does not aim at the objectives sought by the foreign policy it is meant to serve, it is merely wasted effort. One problem of Morgenthau's discussion of

propaganda is that it is very unclear where it fits into his schema of power (37).

Raymond Aron's approach is very different. Aron distinguishes between power and force (puissance et force, Macht und Kraft). The former is a human relationship, the latter the means, the instruments available to the state. Force, or strength, can be military, economic, or even moral; power is the actual functioning of these forces under given circumstances and with particular objectives in view. As these forces can be subject to approximate measurement, power can thus be estimated by reference to the available forces, though a margin for error should always be allowed.

The concept of force can be subdivided into potential force - the total resources, human, moral and material, available to a state in theory ('on paper') - and actual force - those of its resources that have actually been mobilised to support its foreign relations. In time of peace, actual force is not synonymous with military force. In wartime, however, actual force and military force come close to being identical. To proceed from potential to actual force, a state must mobilise its resources, and this mobilisation potential is of great importance, for the force available to a given state

is not proportional to its potential force but to its 'potential of mobilisation'. And this mobilisation potential is, in turn, dependent on the state's capacity and will to mobilise;

> "The conditions of economic or administrative capacity, and for collective will as affirmed by leaders and supported by the masses, are not constant throughout history, they vary from period to period" (38).

Just as the concept of force can be subdivided into two categories, so too can power. For Aron, one can distinguish between defensive power and offensive power. The former comprising the capability of a state or political unit for resisting others attempts to impose their will upon it; the latter representing the state's capability to impose its will upon others. Furthermore, Aron argues that there are three fundamental elements, or determinants, of power - milieu, resources, and collective action.

Milieu refers to the space inhabited by the political unit - i.e. its geographical setting. Strong natural boundaries greatly increase a state's defensive power; they simultaneously severely restrict its offensive power. Open, exposed borders have the opposite effect: gravely reducing defensive power, but amplifying offensive power. The ideal situation for a state is to occupy a position which simultan-

eously combines maximum defensive and offensive potential. And there is a geographic formation which provides such an optimimum combination - an island. Britain, for much of its history, enjoyed the situation of possessing a secure base (maximum defensive power) which was ideally suited to support distant expeditions (maximum offensive power).

Under the rubric of resources is subsumed the materials available to the state, and the technology whereby they can be transformed into weapons, as well as the number of men available and the capability of transforming them into soldiers, the whole being summed up by Aron as "the quantity of implements and combatants" (39).

Collective action is actually shorthand for a state's collective capacity for action, that is, the organisation and discipline of the armed forces, the quality of the civil and military leadership, in time of both war and peace, and the solidarity of the country's people in the face of the vicissitudes of conflict. For Aron, these three, abstract, terms, are equivalent to the proposition:

> "the power of a collectivity depends on the theatre of its action and on its capacity to use available material and human resources" (40).

As these fundamental elements (and the equivalent

proposition) automatically encompass the effects of historical and technological change, Aron feels that they do not merely equivalate to, but are superior than, listings such as Morgenthau's (41).

Aron further distinguishes between power in wartime and *power in peacetime*. *In wartime, power - both* offensive and defensive - depends primarily on mobilised military force. Aron supports his argument with a passage from Clausewitz:

> "The conduct of War is not making powder and cannon out of a given quantity of charcoal, sulphur, saltpetre, of copper and tin: the given quantities for the conduct of War are arms in a finished state and their effects" (42).

Wartime power also depends on the use made of this military force.

Power in peacetime, however, is concerned with non-violent means coupled with those violent means permitted in peacetime. Non-violent means include economic means; again there is a distribution between defensive and offensive capability. The former comprises a state's ability to withstand sanctions, the latter the state's ability to support and strengthen its client-states' economies by offering secure markets, advantageous terms, investments, economic and technical aid, etc. Another non-violent means is propaganda. Originally used to

try and win support amongst members of the elite in the target country, in the modern era it is also - even predominantly - targetted on the mass of the population. Again there are offensive and defensive aspects to this - some states are better suited to wage propaganda campaigns by virtue of the palpable advantages of their system, or because of their institutionalised ruthlessness and unscrupulousness; other states are better able to withstand foreign propaganda onslaughts because of the cohesion of their societies. Fragmented societies are most vulnerable to foreign propaganda.

Permitted means of violence in peacetime are symbolic violence and clandestine violence. Symbolic violence was much more common in the 19th Century than it is today, the most common variety being known as Gunboat diplomacy - i.e. the sending of a warship by one state to another to support the former's demands against the latter. In other words, symbolic violence is the mobilisation of a degree of military force to bring pressure on a target nation for some specific purpose, without that military force actually being committed to any offensive action.

By contrast, clandestine violence is very much a phenomenon of the 20th Century, and involves one or

more states fighting against another state by means of terrorists and insurgents, the respective states being formally in a condition of peace (or, at least, ceasefire) with each other. Thus the Arab states have promoted terrorism against Israel; Tunisia, Morocco, and Egypt were involved in the training and supply of FLN terrorists fighting the French in Algeria (43).

Unlike most theorists of power, Aron also discusses the uncertainties of the measurement of power. These stem from key factors difficult to estimate and which often are only testable by conflict. They include: the administrative capacity of the state; the ability of a state to withstand an initial onslaught and gain time to mobilise its potential; the quality of the military forces: the balance of, and progress in, technology; and the quality of diplomacy. The quality of these factors (i.e. how good or bad they are) can have a dramatic effect on a state's actual power, either magnifying or diminishing it (44).

The approach adopted by Klaus Knorr harks back, in certain respects, to that of Carr, for Knorr subdivides power into military power, economic power, and political penetrative power. Each category is further subdivided into putative power

and actualised power. Finally, Knorr is also concerned with the concepts of weight, scope and domain of power. For Knorr, putative power is a means, a factor which a state can accumulate, a capability that permits a state to make strong threats. Actualised power is an effect, actually achieved influence, which can only be enjoyed in a specific situation; its measure of success is the level of influence actually achieved.

Knorr regards putative military power as having three elements: military forces, military potential and military reputation. The first refers to the actual military strength of the nation; the second to the state's capacity to improve and/or expand its military forces; and the last to the perception, by other countries, based on previous experience, of a particular state's greater or lesser inclination to employ military threats should its vital interests be interfered with. Actualised military power takes three forms: war, threats of military force, and the perception of other nations that the state concerned might resort to military force in the event of a serious conflict of interests between them. This last mechanism is often overlooked, because it is largely hidden in operation, but Knorr hypothesises that it is the most common form of actualised military power (45).

But how is putative military power converted into actualised military power? Knorr argues that a 'conversion model' can account for this. The 'conversion model' identifies the main conditions usually governing the conversion of putative power to actualised power, and is as follows (Knorr purposely keeping it simple):

1. B's estimate of the costs of complying with A's threat
2. B's estimate of the costs of defying A's threat
3. B's bargaining skill relative to A's
4. B's propensity to act rationally and to accept risks.

The four elements of the model are the factors upon which a military threat from A against B depends for its success. The first two elements are largely self-explanatory, though in the first case 'costs' include both the stake in the original conflict with A as well as the additional losses that would be sustained by the capitulating to A's threat; in the second case, 'costs' include calculations of all likely consequences - including possible new additional demands by A - should B be defeated. All other things being equal, the higher the cost of compliance, the more likely B is to resist; the

higher the cost of defiance the more likely B is to capitulate. The third element covers the fact that skillful diplomacy by B - effective bluffs, carefully staged indications of intransigence, effective maneouvres to involve third powers - can dissuade A from carrying out its threats, or give the impression that it is beyond B's ability to fulfill any or all of A's demands. The more skillful B is, the less likely A's success. However, all these elements can act as a guide to B's likely behaviour only if B is rational. Knorr argues that most government are usually rational, and that unless there is any evidence to the contrary, a reasonable level of rationality should be assumed. Given rationality, B is likely to base its decision on how to react to A's threats on B's net estimates of the costs of defiance and compliance.

Knorr also proposes a model for the inverse situation, that is, one designed to try and ascertain the likelihood that A will, or will not, resort to threats. This model is even simpler than the first one, having only three elements:

1. A's estimate of the value of B's compliance
2. A's estimate of the diverse costs of making a threat
3. A's propensity to act rationally and to

take risks.

Element one is calculated on the basis of the original stake involved as well as possible benefits vis-a-vis other states from the successful application of a threat; the second element involves a calculation of the costs of being defied, the costs of implementing the threat, and any costs that may stem from effects on domestic and foreign opinion. The third element is, of course, directly equivalent to the fourth element of the previous model. Knorr emphasises that attempts to achieve coercive influence (i.e. power) must involve costs; the benefits of success may greatly outweigh costs, but costs there will be (46).

For Knorr, like Carr, economic power acts directly as a basis for military power - pointing out that, at the height of the Second World War, both Britain and Germany devoted approximately 50% of their *economic strength solely to the waging of war*. With regard to military power, economic power forms an inextricable element of putative military power, being encompassed within military potential and military forces. Moreover, economic power can be readily converted into, or used to support, virtually any type, or instrument, of power - such as political penetrative power, or intelligence

services, and so on.

However, economic power may be employed as a coercive instrument in its own right. Thus, A may seek to deny some sort of economic advantage to B. As with military power, Knorr distinguishes between putative economic power and actualised economic power. Again, putative economic power is also composed of three elements: economic strength, economic potential, and economic reputation. The first, equivalent to military strength, comprises the ability to halt investments, reduce economic aid, pre-empt sources of supply and shut off valuable markets. The second element, equivalent to military potential, involves the ability to increase such international economic control. Finally, economic reputation, equivalent to military reputation, refers here to the state's inclination to resort to economic pressures if it felt they were in its national interest. Actualised economic power involves the implementation of any or all of the threats and capabilities available to a state as a result of its economic strength. Knorr argues that the two 'conversion models' developed with regard to military power cover the conversion process from putative to actualised economic power equally well. He further argues that the ability of a state to proffer economic rewards to another, instead of

threats, amounts to a source of non-coercive influence (i.e. not power) unless it is obvious that these rewards are being offered as substitutes for coercion (i.e. carrots, with the hint of sticks in the background), whereupon the normal power conversion models will apply. Knorr recognises that there is a 'passive aspect' to a state's economic capability, that is its ability to limit the damage other states can inflict on it; but Knorr does not really regard this as an element of power, as such (47).

Knorr devotes remarkably little attention to political penetrative power, arguing that it is not as well understood as the other elements of power. He focusses on various clandestine activities such as propaganda, the fomenting of unrest, support of opposition parties and/or revolutionary groups, and bribery and corruption. He gives, asexamples, Nazi Germany's successful use of these methods to undermine Austria and Czechoslovakia, as well as the multiplicity of Soviet front organisations, such as the World Federation of Trade Unions, the World Peace Movement, etc.. He further defines propaganda as:

> "... the planned dissemination of information, arguments and appeals designed to influence the beliefs, thoughts and actions of specific foreign target groups".

Successful propaganda can provide a state with a basis to attempt coercion of another state (48).

Finally, Knorr also, though somewhat cursorily, distinguishes between the concepts of weight, scope and domain of power. Weight refers to the extent to which the policy of the target state is influenced; scope reflects the range of values or policy-areas within which the state's policy is influenced; and domain refers to the number of states that are influenced - influence can be multilateral as well as bilateral (49).

The relatively straight-forward approaches of Carr, Morgenthau, Aron and Knorr were challenged during the nineteen sixties and seventies by a totally different approach to the concept of power - indeed, to the whole field of international relations. This approach, centred in the United States, and variously referred to as 'behaviouralist' or 'scientific', explicitly claimed to be seeking the creation of a 'science' of international relations, and received a considerable stimulus from the traumas of the late sixties and early seventies - specifically, America's failure in Vietnam, and the Arab oil embargo of 1973.

This 'scientific' school sought, so its members

claimed, "clarity and precision" (50) with regard to concepts of power. Basically, they were concerned with what they saw as "the paradox of unrealised power", i.e. the inability of apparently stronger states to force apparently weaker ones to submit to their demands (typified by America's failure in Vietnam and by the Arabs ability to massively increase their oil prices). D.A. Baldwin argues that there are two forms of explanation for this "paradox". Firstly, there is the traditional argument focussing on "malfunctioning conversion processes", in other words, lack of skill or will on the part of the would-be wielder of power (52). Then there is the answer provided by what can be called 'policy contingency framework analysis'. This approach argues that scope, weight and domain must always be taken into consideration in power analysis; that power resources have limited liquidity (or fungibility); that sources of power in one policy contingency may be counter-productive in other; that it is possible to determine whether something is a power resource or not only by placing it in the context of a real or hypothetical policy contingency framework; that power is relational - i.e. it does not reside in the qualities of a state, but in the would-be wielder's qualities and the intended target's value-system; that the effectiveness of military power is exaggerated; and that, as

a result, power is a multi-dimensional phenomenon, not a continuum - there is no such thing as an 'ultimate', or 'basic' or 'dominant' form of power (53). In the words of two of the founders of this approach:

> "Failure to recognise that power may rest on various bases, each with a varying scope, has confused and distorted the conception of power itself, and retarded inquiry into the conditions and consequences of its exercise in various ways ....
>
> "In particular, it is of crucial importance to recognise that power may rest on various bases, differing not only from culture to culture, but also within a culture from one power structure to another ....
>
> "What is common to all power and influence relations is only effect on policy. What is affected and on what basis are variables whose specific content in a given situation can be determined only by inquiry into the actual practices of the actors in that situation ....
>
> "Political analysis must be contextual, and take account of the power practices actually manifested in the concrete political situation" (54).

The argument that the focus on policy contingency frameworks would involve so many combinations and permutations as to impose an impossible burden on any analyst is rejected by H and M Sprout:

> "Estimates of capabilities covering all members of the society of nations in all imaginable contingencies would run to millions of combinations and permutations. No government, even more emphatically no university or private individual, could conceivably carry out so massive a research and analysis. Nor is any such

> undertaking contemplated or needed by anyone. A great many contingencies - for example, Canadian-US military confrontation - are too remote to justify any consideration. By a process of elimination, one comes eventually to a hard core of contingencies that seem more or less likely to set the major patterns of international politics in the years to come, and with regard to which the relative capabilities of interacting nations are not self-evident' (55).

Baldwin argues that policy contingency framework analysis (also called the 'relative infungibility explanation') is superior to traditional power analysis for two reasons. Firstly, he argues that focussing on 'skill and will' with regard to an actor's attempt to wield power encourages sloppy analysis - because it can always be employed as a cover behind which an incompetent or inept analyst can hide his failure to correctly analyse the power relationship, should matters not proceed as he predicted. In fact, Baldwin further argues, the elements of skill (that is, the likelihood that the state can convert its power resources into a *successful outcome*) and will (the likelihood that the state will have sufficient determination to reach a successful outcome) should be included in any estimate of a state's power resources. Secondly, the policy contingency framework approach focusses attention on power's contextual nature. For this approach, skill is merely another power resource.

Because of the nature of this 'relative infungibility' approach, listing of elements of power becomes a meaningless exercise, because:

> "such data acquire political relevance only when viewed in some frame of assumptions as to what is to be attempted, by whom, when and where, vis-a-vis what adversaries, allies and unaligned onlookers" (56).

The contest is everything, power has no independent existence beyond or outside it.

But the 'scientific' approach also threw up another, radically different, approach to power analysis - the mathematical model. This is exemplified by the work of Ray Cline. Quite simply, Cline constructed a mathematical formula encompassing all the elements he believed essential to a state's power; this formula is intended to provide a means of measuring the power of the various state actors in the international system. The formula, as a formula, is quite straightforward:

$$Pp = (C+E+M) \times (S+W)$$

where:

Pp = Perceived power

C = Critical mass = population + territory

E = Economic capability

M = Military capability

S = Strategic purpose

W = Will to pursue national strategy (57).

Cline applied this formula to forty nations, giving numerical value to each element in the formula in each case; thus, for the variable 'strategic purpose' he gave the numerical value 0.3 to the US, and 0.8 to the USSR, because the latter possessed "clear-cut strategic plans for international aggrandizement" while the former did not. Quantification of the formula for each country produced a number which represented the "total weighted units of perceived power" for that state; in the case of the US the result was 35; for the USSR, 67.5 (58).

Cline's approach, in sharp contrast to that of the policy contingency framework analysts, is thus highly abstract, sees power as a phenomenon independent of contests, and regards it as both monolithic and homogeneous. Both, however, are very different from the traditional approaches of Carr, Morgenthau, Aron, and Knorr (though the last has adopted some of the style of the 'scientific' approach, though none of the content).

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46. Ibid., pp.15-20.

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CHAPTER 2: THEORIES OF WAR

When a State employs its Military Power as an instrument of its foreign policy, and encounters opposing Military Power, War often results. But what, in fact, is War? What are its purposes? These questions have concerned strategists from ancient times - the earliest known surviving Strategic Treatise being Sun Tzu's The Art of War, written in the period 320-400 BC. In this Chapter, an attempt to answer these questions will be made by means of an examination of the analyses of some of the great Strategists - Sun Tzu, Niccolo Machiavelli, Karl von Clausewitz and Ardant du Picq.

The very first thing that Sun Tzu writes on war is the following:

> "War is a matter of vital importance to the State; the province of life or death; the road to survival or ruin. It is mandatory that it be thoroughly studied" (1).

Expanding on this verse, the classical Chinese commentator, Li Ch'uan, wrote:

> "'Weapons are tools of ill omen'. War is a grave matter; one is apprehensive lest men embark upon it without due reflection" (2).

In his concise and elegant manner Sun Tzu outlines the political significance of war: it is the most important matter in which a state can be involved, a

matter that can have awesome consequences to the state involved. This point Sun Tzu reinforces in Ch. XII, vs. 17 and 18:

> "17. If not in the interests of the state, do not act. If you cannot succeed, do not use troops. If you are not in danger, do not fight.
> "18. A sovereign cannot raise an army because he is enraged, nor can a general fight because he is resentful. For while an angered man may again be happy, and a resentful man again be pleased, a state that has perished cannot be restored, nor can the dead be brought back to life" (3).

Yet the use of military force is essential with regard to some foreign policies:

> "He who intimidates his neighbours does so by inflicting injury upon them" (4).

Centuries later, Niccolo Machiavelli (1469-1527) took up the study of war, not only in his The Art of War, but also in The Prince and The Discourses. He regarded war as being of such overwhelming importance, that he wrote:

> "A Prince, therefore, should have no other object or thought, nor acquire skill in anything, except war, its organisation, and its discipline .... The first way to lose your state is to neglect the art of war" (5).

This stemmed from his belief that political life was a constant struggle for survival between organisms, that is States, that were continually growing and expanding (6). One does not have to accept Machiavelli's entire philosophy in order to

recognise the validity of his views on the political significance of war.

But of course the most famous of the great strategists, and one who, more than any other, firmly linked war to politics, was General Karl von Clausewitz (1780-1831). In the first chapter of On War, he writes:

> "It is clear, consequently, that war is not a mere act of policy but a true political instrument, a continuation of political activity by other means. What remains peculiar to war is simply the peculiar nature of its means .... The political objective is the goal, war is the means of reaching it, and means can never be considered in isolation from their purpose" (7).

Unlike the other, aforementioned strategists, Clausewitz explicitly derives this definition.

Influenced by the leading German philosophers of the day, Hegel and especially Kant, Clausewitz commenced with an ideal definition of war:

> "War is thus an act of force to compel our enemy to do our will" (8).

As war is an act of force, logically nothing must be allowed to interfere with the application of the force:

> "Kind-hearted people might of course think there was some ingenious way to disarm or defeat an enemy without too much bloodshed, and might imagine this is the true goal of the art of war. Pleasant as it sounds, it is a fallacy that must be

> exposed: war is such a dangerous business that the mistakes which come from kindness are the very worst" (9).

and again:

> "To introduce the principle of moderation into the theory of war itself would always lead to logical absurdity" (10).

and

> "If we were to think purely in absolute terms, we could ... proclaim with inflexible logic that, since the extreme must alway be the goal, the greatest effort must always be exerted" (11).

These ruthless statements, to reiterate, concern Ideal or Perfect War, that is the type of war that would exist if the world was perfect. Of course, the world is not perfect. But Clausewitz, as previously mentioned, was influenced by German philosophy, and from this source he gained a determination to locate the essence of each phenomenon - in this case, war. Thus, this Ideal or Perfect War is an intellectual model designed to illuminate the essential, timeless elements of war. Failure to realise that this is Clausewitz's method has led to many totally failing to understand or comprehend his arguments (12).

But such Perfect War could only, by definition, take place in a world where perfect isolation of the war from all intervening factors was possible. No such world exists:

> "Man and his affairs, however, are always something short of perfect and will never quite achieve the absolute best. Such shortcomings affect both sides alike and therefore constitute a moderating force" (13).

Real War, therefore, excludes the perfect requirement that utmost force be used. This is of key importance: if the absolute is not to be feared, and cannot be aimed at, it thus becomes a matter of judgement as to what level of violence to employ in war. And this judgement depends, among other things, on the object of war; and this object, in turn, is politically defined:

> "When whole communities go to war ... the reason always lies in some political situation, and the occasion is always due to some political object. War, therefore, is an act of policy .... That, however, does not imply that the political aim is a tyrant. It must adapt itself to its *chosen means, a process* which can radically change it; yet the polical aim remains the first consideration. Policy, then, will permeate all military operations, and, in so far as their violent nature will admit, it will have a continuous influence on them" (14).

The rider is very important. Clausewitz, contrary to myth, recognised that there could be different types of Real War, distinguished by different levels of violence, and the differing effects these levels of violence have on the political objective. These different types of war can be designated, to use modern jargon, Limited War and Total War.

For Clausewitz, the less extreme the tensions preceeding the war, the more obviously political the war is:

> "The less intense the motives, the less will the military element's natural tendency to violence coincide with political directives. As a result, war will be driven further from its natural course, the political object will be more and more at variance with the aim of ideal war, and the conflict will seem increasingly political in character" (15).

When political objectives are limited, the level of violence will be limited to serve that political end. The five-day Peruvian-Ecuadorian Border War in early 1981 is an outstanding example of a Limited War. The boundary between the two countries has, in many places, been a source of dispute for years. Ecuador suddenly seized three unmanned Peruvian border posts, claiming they were on Ecuadorian territory. The Peruvian Army counter-attacked and re-took the posts. Fighting occurred only around the three disputed posts, and nowhere else. The issues at stake were limited, and thus the fighting was limited. The success of the Peruvian counter-attacks ended the war.

By contrast, there is Total War. This must not be confused with Ideal or Perfect War, which is, to re-emphasise, an abstraction. But Total War is the form of Real War which comes closest to this abstraction. Total War occurs when the reasons for

war are of the greatest, most powerful, most dangerous to the State:

> "The more powerful and inspiring the motives for war, the more they affect the belligerent nations and the fiercer the tensions that preclude the outbreak, the closer will war approach its abstract concept, the more important wil be the destruction of the enemy, the more closely will the military aims and the political objects of war coincide, and the more military and less political will war appear to be" (16).

The Second Wor[illegible] the classical example of this: the milita[illegible] political objectives became identical: the total destruction of the enemy. But note, though the political object becomes hidden by the military aim, it does not cease to exist; Total War is still political; it is simply no longer obviously political.

It must be stressed that Clausewitz did not regard the distinction between Limited War and Total War as a historical distinction, as a contrast between the relatively restrained wars of the 18th Century and the unrestrained nationalistic conflict of the Napoleonic era. Though he believed that Total War would become more common - a forecast confirmed by history - he also believed that Limited conflicts would continue to occur - another forecast amply confirmed by history.

The objective of war is thus political; the means of war is violence:

> "That cannot be called war where men do not kill each other, cities are not sacked, nor territories laid waste"

wrote Machiavelli (17). Even Sun Tzu, who urged his readers to try and defeat their enemies with the minimum expenditure of time, economic resources and men, by means of the maximum use of subversion (18), recognised the need for - and gave great attention to - battle. Though if the subversion were well carried out, battle might only be required to formalise a victory already won:

> "Thus a victorious army wins its victories before seeking battle; an army destined to defeat fights in the hope of winning" (19).

This might appear to be a statement of the obvious, but much of human knowledge stems from examining what is apparently obvious. It is no surprise that Clausewitz devotes close attention to the issue of violence. We have already discovered that Clausewitz regarded violence as the essence of war. We shall now examine Clausewitz' treatment of violence in more detail.

All the other elements of war are not unique to war: it is a competitive activity - so is business (and much else); it requires discipline, both externally and self-imposed - so does education; it is a social

activity - so is choir-singing; it takes place at a national and international level - so does sport; it involves national passions - again, so does sport. And so on.

What is unique to war is its focus on violence - violence as a central theme, not as a side effect. In Clausewitz' words:

"Essentially war is fighting" (20).

and

> "it is inherent in the very concept of war that everything that occurs must originally derive from combat ... whenever armed forces, that is, armed individuals, are used, the idea of combat must be present .... The end for which a soldier is recruited, clothed, armed and trained, the whole object of his sleeping, eating, drinking and marching is simply that he should fight at the right place and the right time" (21).

Let us return to Clausewitz' abstract model of Ideal War. In such an Ideal War, the violence should take the form of one, massive, decisive battle - Armageddon, in other words. This of course, does not happen. In the real world, a series of battles are required - thus, in the Second World War, the decisive battles (El Alamein, Stalingrad, Midway) took place during 1942 and early 1943, yet the war did not end until late 1945! Moreover, in some, Limited Wars, the actual violence might be restricted to minor battles or even skirmishes. But, for Clausewitz, the ideal, the idea that informs and

inspires military action, even if it does not actually take place, is the battle. His own comparison - which had a great impact on Marx and Engels (22) - was with the cash settlement in trade. It may occur only rarely, but it was the ideal towards which everything was aimed. And if it did occur, it would decide everything (23).

But the combat is not merely a physical activity with physical results; it is also a psychological activity with psychological results. It should be noted here that, as the strategists we are considering all pre-date the formal invention of psychology, the term they frequently employed, instead of the not-yet-existing 'psychological', was 'moral'. These terms will be henceforth used synonymously. The moral, or psychological, elements operate simultaneously at many different levels, in many different ways, with many different effects, in a war situation. Basically, the issue can be approached at three levels: tactical - fear and the overcoming of fear, troop morale, etc.; strategical - the will and determination of the leadership, both political and military; and finally, psychological warfare. The great theorists of the moral aspects of war are Sun Tzu, Clausewitz, and Ardant du Picq.

Sun Tzu sets out his statements as straightforward

facts: the reader or commentator must flesh them out with his own experience and knowledge; it is like a book of mathematics which gives the equations and answers, but not the calculations needed to achieve these answers. Any experienced mathematician can derive the necessary calculations himself. Likewise for the student of strategy and Sun Tzu. By contrast, Clausewitz and du Picq derive and analyse their opinions, showing the reader clearly where the concepts come from.

Though Sun Tzu was concerned that morale be in a good condition in the army - he argued that there were five fundamental factors in war, and placed "moral influence" as the first of these (24), further stating:

> "By moral influence I mean that which causes the people to be in harmony with their leaders, so that they will accompany them in life and into death without fear of mortal peril" (25).

and:

> "He whose ranks are united in purpose will be victorious" (26).

- he is primarily important for his stress on psychological warfare and subversion to which we will later return.

Clausewitz' consideration of the psychological/moral aspects of war was one of his greatest achievements.

They are encompassed in his conceptions of friction and genius. As these concepts are linked, they will be dealt with together.

For Clausewitz, the chaos of the battlefield was dominated by the free play of human intelligence, will and emotions. It was to deal with these factors that l[illegible] Clausewitz to invent of the concept of genius. Clausewitz' concept of genius did not merely mean the highest possible level of originality and creativity; rather, it also referred to "gifts of mind and temperament in general", to quote Paret (27), and applied to ordinary men as much as to extraordinary ones, and to all levels of command, not just the highest. For, as Clausewitz points out:

> "War is the realm of chance. No other human activity gives it greater scope: no other has such incessant and varied dealings with this intruder. Chance makes everything more uncertain and interferes with the whole course of events" (28).

It requires the right temperament, the right gifts of mind, to remain unsettled by chance, for:

> "all information and assumptions are open to doubt, and with chance at work everywhere, the commander continually finds that things are not as he expected" (29).

And not only to remain unsettled by chance, but also to seize and exploit the opportunities provided by chance. For Clausewitz, the strong mind is the one

that remains calm no matter what is occurring around it, and so retains its perception and judgement, and so its freedom of action. Additionally intelligence is vital in war; as is courage, audacity, decisiveness and determination. True military genius consists of a harmonious combination of these and other elements.

All these elements are required for military genius because war is a very difficult thing to wage. Not because it is difficult to draw up plans of operations, but because it is very difficult to carry out such plans. The difficulty is the result of friction:

> "The conduct of war resembles the workings of an intricate machine with tremendous friction, so that combinations which are easily planned on paper can be executed only with great effort. Consequently the commander's free will and intelligence find themselves hampered at every turn, and remarkable strength of mind and spirit are needed to overcome this resistance. Even then many good ideas are destroyed by friction, and we must carry out more simply, and modestly what in more complicated form would have given greater results" (30).

It was just such friction - the refusal of the British Armoured Divisions to obey orders and advance to screen the Infantry, due to their inferiority complex vis-a-vis the German Panzer units and fear of the dreaded "88" guns - that forced General Montgomery to change the plan for the

Battle of El Alamein after it had begun (31). And, unlike in mechanics, from which Clausewitz borrowed the term, lubrication cannot be used to reduce friction, nor can improved planning reduce the number of points vulnerable to it:

> "A battalion is made up of individuals, the least important of whom may chance to delay things or somehow make them go wrong" (32).

Friction can be physical - rain, snow, mud, fog, blown bridges, mined roads, unexpectedly strong resistance by enemy defenders, etc.. But it is also psychological - uncertainty, ignorance, confusion, fear, mistrust, fatigue (both a physical and psychological phenomenon), wariness, all can inhibit the implementation of a General's plans.

Overcoming friction requires a strong will, and tact. But it has its cost:

> "Iron willpower can overcome this friction; it pulverizes every obstacle, but of course it wears down the machine as well" (23).

In the First World War, Generals Joffre and Nivelle (Joffre's successor) had "Iron willpower" but no tact, no feeling for the troops under their command. Time and again this willpower threw French troops against German defences with little or no effect; finally the "machine" was worn down - in May 1917 the Army mutinied. It was only restored after

months of effort by Petain (3:)

It is this friction, more than anything else, which distinguishes real war from war on paper.

While Clausewitz paid great attention to moral/psychological factors, Ardant du Picq (1831-1870) focussed almost exclusively on them. A French Army officer, who served in the Crimea, Syria and Algeria before being killed near Metz in the early days of the Franco-Prussian War, his starting point was the dynamics of battle: What really happened in a combat situation? He rapidly discovered that this was one aspect of war that was almost totally neglected.

To try and discover the truth, du Picq turned to the wars of antiquity - partially because ancient writers were more outspoken on the fundamentals of military activities than du Picq's contemporaries, and partially because ancient wars displayed intriguing paradoxes: the most brave combatants, as individuals, such as the Germanic and Gallic tribes, were the least successful in battle; and secondly, the casualties of the defeated were always vastly greater than those of the victorious. Why?

It is still a common opinion that, in ancient times, opposing armies clashed head-on, the leading

soldiers fighting each other until one side, through heavier losses, began to give way. But as du Picq point out, if this had been the case, victory would have gone to the bravest - or most fanatical - of the combatants. Yet the unfanatical Romans vanquished many fanatical enemies. And there remained the great discrepancy in casualties.

This led du Picq to conclude that not merely was there a physical force in battle, there was also, more importantly, a moral force:

> "In battle, two moral forces, even more than two material forces, are in conflict. The stronger conquers. The victor has often lost ... more men than the vanquished .... With equal or even inferior power of destruction, he will win who is determined to advance, who ... has the moral ascendancy. Moral effect inspires fear. Fear must be changed into terror in order to conquer .... The moral impulse lies in the perception by the enemy of the resolution which animates you ....Manoeuvres ... are threats. He who appears most threatening wins" (35).

Victory, in other words, went to the Army that retained its moral cohesion; defeat to the Army that lost its moral cohesion. The highly disciplined Roman Army, because of that discipline and its constant training, retained its moral cohesion. Most of its enemies, while individually displaying fanatical bravery, had no collective moral cohesion. Hence, they were defeated:

> "Never do two equal resolutions meet each other in battle .... The abordage is never reciprocal .... The enemy never holds his position, because, if he is holding, you flee" (36).

This also explained the great difference in losses - the majority of the vanquished army's casualties occurred not in the actual battle, but during the *flight from the battlefield*. The fighting in the Far East after 1942 was so unusually savage and bitter precisely because the opposing armies kept their moral cohesion, making the abordage reciprocal and requiring the physical extermination of the enemy for the achievement of victory - for example, the capture of Iwo Jima, an island only four miles long, by the US Marines in 1945, required five weeks of bitter fighting, over two months of mopping up, cost the Marines 26,000 casualties (30% of the entire landing force) and left only a thousand of the approximately 26,000 strong Japanese garrison alive, as prisoners (37). This is what happens on those rare occasions when combatants have an equal moral cohesion.

These psychological/moral factors do not merely operate at the level of strategic and political leadership. Clausewitz defines the object of war as "to compel our enemy to do our will" (38). That is, the enemy must accept our will for them. This can, at the military level, have a physical meaning - by

clever use of defences force an enemy to strike in a certain direction - but it more usually has psychological/moral meaning, especially at a political level. Like an Army, a country's leadership and people concede defeat when they <u>believe</u> they have been defeated, when they <u>believe</u> they *cannot resist further*. An outstanding military example is General Percival's surrender of Singapore to an Army half the size of his own, which had furthermore outrun its supply lines and so would have had to retreat had the British put in a counter-attack they were, theoretically, quite capable of (39). But they had no moral cohesion, so they surrendered. By contrast, Britain herself, despite a monotonous run of military defeats from 1940-1942, was not defeated because the people and leadership did not believe they had, as a country, been defeated. As with armies, it is the nation with the greater moral cohesion that gains the victory. And Britain's moral cohesion was never higher than in the period 1940-1942.

It must, however, be pointed out that du Picq's conceptions were not based on the idea that high morale alone was enough to win battles - that was a caricature of his theories that was spread by Colonel Grandmaison, to disastrous effect on the French Army in 1914. For du Picq, training and

discipline were the foundations of moral cohesion. He did argue that a badly armed, morally cohesive, Army would defeat a well armed, morally weak Army; but he did not despise superior armaments - in fact, superior arms in the hands of a morally cohesive Army made that Army even more formidable and effective. And superior arms have their own moral effect.

It is this importance which adheres to an Army's and nation's moral cohesion, and to their leadership's will, which simultaneously makes psychological warfare both possible and important. Of all the abovementioned strategists, the one who really makes subversion (for that is what psychological warfare is, for it aims to subvert the enemy's will to fight, by destroying his moral cohesion) his own is Sun Tzu.

As previously mentioned, Sun Tzu is, so to speak, for advanced students; many of his aphorisms can be interpreted simultaneously on several different levels - strategic and tactical; military and political; and physical and psychological. It must also be pointed out that psychological warfare is not merely waged against the enemy's troops (frequently the most resistant target groups) but also against the enemy's leadership and people. It

is towards these ends that Sun Tzu exhorts:

> "Anger his [the enemy's] general and confuse him" (40).
> "Keep him under strain and wear him down" (41).

- a classical example of the multi-applicability of Sun Tzu's statements, this one being equally applicable militarily, politically, tactically, strategically, economically, physically and psychologically -

> "Now an army may be robbed of its spirit and its commander deprived of his courage" (42).

And to what intention, to what result, is all this activity directed?

> "Thus, those skilled in war subdue the enemy's army without battle. They capture his cities without assaulting them and overthrow his state without protracted operations" (43).

and:

> "Thus a victorious army wins its victories before seeking battle; an army destined to defeat fights in the hope of winning" (44).

Properly conducted, psychological warfare is one of the most devastating weapons in a country's armoury. Its use has become extremely common in the world.

To conclude, we see that war is of violence, in order to generate a psychological effect on the target army, nation, and political leadership, in order to achieve a given political end.

NOTES

1. Sun Tzu, The Art of War, Oxford University Press, London, 1963, Ch. I, v. 1, p. 63. (Translated and edited by Samuel B. Griffith.) Sun Tzu's work is organised into chapters, each subdivided into verses - like the books of the Bible.

2. Ibid.

3. Ibid., pp. 142-143.

4. Ibid., Ch. VII, v. 14, p. 113.

5. Machiavelli, N., The Prince, Penguin, Translated by George Bull, 1975, p. 87.

6. Gilbert, F., "Machiavelli : The Renaissance of the Art of War", in E. Meade Earl (ed.), Makers of Modern Strategy, Princeton University Press, Princeton, 1943, p. 22.

7. von Clausewitz, K., On War, Translated and edited by Michael Howard and Peter Paret, Princeton University Press, Princeton, 1976, p. 87.

8. Ibid., p. 75.

9. Ibid.

10. Ibid., p. 76.

11. Ibid., p. 78.

12. Even such a distinguished figure as Sir Basil Liddell Hart totally misunderstood Clausewitz - as a study of his History of the First World War will rapidly reveal.

13. Clausewitz, op.cit., p. 78.

14. Ibid., pp. 86-87, emphasis added.

15. Ibid., p. 88, Clausewitz' emphasis.

16. Ibid.

17. Quoted by Gilbert, op.cit., pp. 13-14.

18. See Sun Tzu, op.cit., Ch. I, v. 25; Ch. III, vs. 4, 5, 10, 11; Ch. IV, v. 10; Ch. XI, v. 53.

19. Ibid., Ch. IV, v. 14, p. 87.

20. Clausewitz, op.cit., p. 127.

21. Ibid., p. 95, Clausewitz' emphasis.

22. On this, see Sigmund Neumann : " Engels and Marx: Military Concepts of the Social Revolutionaries", in E. Mead Earle (ed.), The Makers of Modern Strategy, Princeton University Press, Princeton, 1943, especially p. 158. Another leading student of Clausewitz was Lenin.

23. Rothfels, Hans, "Clausewitz", in E, Meade Earle, The Makers of Modern Strategy, Princeton University Press, Princeton, 1943, p. 104.

24. Sun Tzu, op.cit., Ch. I, vs. 2, 3,, p.63.

25. Ibid., Ch. I, v. 4, p. 64.

26. Ibid., Ch. III, v. 27, p. 83.

27. Paret, P., "The Genesis of On War" in Clausewitz, op.cit., p. 11.

28. Clausewitz, ibid., p. 101.

29. Ibid., p. 102.

30. Clausewitz, quoted by Paret, op.cit., p. 17.

31. See H[illegible]lton, N., Monty: The Making of a General 1887-1942, Hamish Hamilton, London, 1981, [illegible]. 755-848.

32. Clausewitz, op.cit., p. 119.

33. Ibid.

34. See Liddell Hart, Sir Basil, History of the First World War, Pan Books, London, 1970, especially pp. 298-302.

35. du Picq, quoted by Possony [illegible] Possony, S.T. and Mantoux, E., "du Picq and [illegible]ch: The French School", in E. Meade Earle [illegible], The Makers of Modern Strategy, Princeton University Press, Princeton, 1943, p. 210.

36. Ibid., p. 211. Abordage - hand-on clash.

37. See Liddell Hart, Sir Basil, History of the Second World War, Pan Books, London, 1970, pp. 660-661.

38. Clausewitz, op.cit., p.75, Clausewitz' emphasis.

39. Calvocorressi, P. and Wint, G., Total War: Causes and Courses of the Second World War, Pelican, London, 1972, pp. 719-,29.

40. Sun Tzu, op.cit., Ch. I, v. 22, p. 67.

41. Ibid., Ch. I, v. 24, p. 68.

42. Ibid., Ch. CII, v. 20, p. 108.

43. Ibid., Ch. III, v. 10, p. 79.

44. Ibid., Ch. IV, v. 14, p. 87.

CHAPTER 3: SEA POWER

The contemporary world has been moulded more by Sea Power than by any other single factor. North, South America, Australasia, Africa, Asia all exist in their current political forms as a direct result of the successful exercise of Sea Power by various European powers at various times - Portugal initially, Britain ultimately and most successfully. Without the European discovery of Global Sea Power (as distinct from Regional Sea Power), the world would be an unimaginably different place.

Today, the United States of America is, basically, a maritime power (1), while Imperial Russia - and, later, the Soviet Union - have aspired to this status since the reign of Peter the Great (2). The sea provides the mobility and protection for the most potent arm of modern nuclear strategy - the nuclear powered Ballistic Missile Submarine (SSBN). Sea Power has also played a critically important, if often unnoticed supportive, role in the vast majority of foreign intervention operations undertaken by major powers (3).

No understanding of the contemporary use of armed forces is possible without an understanding of what Sea Power involves. As in the preceeding chapters,

this understanding will be achieved through an examination of the ideas of the leading theorists of Sea Power.

The first and most famous of these was American Rear-Admiral Alfred Thayer Mahan. Mahan was the first to realise that the phenomenon of control of the seas was an historical factor which had never been expounded systematically. This gap he set out to remedy, doing so in three monumental studies: The Influence of Sea Power upon History, 1660-1783; The Influence of Sea Power upon the French Revolution and Empire 1793-1812; and Sea Power in its Relation to the War of 1812. In these, his great works, Mahan made three significant contributions:

1. he developed a philosophy of sea power, a philosophy which gained wide acceptance at the highest naval and political levels;
2. he formulated a new naval strategy
3. he was a leading commentator on naval tactics.

Additionally, he, like Clausewitz, recognised that naval war, like land war, was essentially a political act intended to achieve a political end.

Experience shows that technological advances have little impact on strategy, but they nearly always

have a great impact on tactics. Naval technological advances since Mahan have thus rendered many of his tactical, though none of his strategical, observations, obsolete, and they will not be considered here (4).

For Mahan, Power was an absolute necessity for national survival, and the most important form of Power was Sea Power. He pointed out the immense importance of trade to national economics - and that the cheapest, yet most rapid, form of transport for such commerce was by water - whether ocean, sea, lake, river or canal. And, for most goods, this still holds: harbours are still full of ships; the great inland waterways, such as the Great Lakes and Mississipi in North America, the Rhine and Danube in Europe, the Yangtze in Asia, and many more, still bustle with trade.

For, as Mahan pointed out, but is often forgotten, the sea covers 71% of the Earth's surface, and that the obstacles in it - islands, rocks, reefs, etc. are only a small fraction of the total; in a real sense, ships can go anywhere on the Oceans, and, thanks to the great river and lake networks, can also penetrate deep into every inhabited continent except Africa.

Trade, of course, makes countries rich, and the more trade one has, the richer one is. Naturally, countries with their own merchant fleets are better off than those who must use foreign ships; and best off of all are those countries who have capacity to spare to carry other nations' trade as well as their own.

But what of the requirements of war? Mahan believed that wars were inevitable; and that Sea Power was the critical issue in any war. States with powerful navies could protect their merchant fleets, and therefore their trade, and therefore their economies, and, ultimately, their ability to wage war. Conversely, countries with weak navies would see their trade destroyed, leading to economic distress which would increase over time, resulting in the undermining of their war efforts.

Nor was this all; any state that was Mistress of the Seas would possess complete freedom of action to strike her enemies wherever and whenever she desired.

As is well known, Mahan's model for Sea Power was the Royal Navy of the 17th, 18th and 19th centuries. The British always had one objective: command of the sea; to this end they always set out to bring to

action and destroy the only possible threat to this command: the enemy fleets. By contrast, the model of what not to do was the French Navy of the same period; the French sought always to use the sea, never to control it; they sought to avoid fleet action, never to encourage it. The result was that while British ships, both naval and merchant, had total freedom of the seas (despite the attempts of privateers - commerce raiders - to harass the latter), French ships, naval and merchant, rotted in harbour. The French economy suffered terribly as a result. In the 17th and 18th centuries, each war left Britain economically stronger - even th[illegible] of Independence, which was a major military d[illegible] - while simultaneously leaving France even more exhausted.

The wars against the French Revolution and Napoleon were possible only because of British Sea Power. Not only did the Royal Navy keep Britain physically inviolate, but by protecting British commerce it allowed Britain to support not only her own war effort, but also those of her allies. Without British gold, the great armies of Russia, Prussia, Austria and the lesser states could not have been nursed, trained, equipped and deployed in battle against the French. These large, proud forces were, like the much smaller British Army nothing more than

an extension of the Royal Navy. And Napoleon´s downfall - the invasion of Spain and Russia - was the direct result of his desperate attempts to negate Britain´s sea control by use of land power.

But what are the sources of Sea Power (5)? Mahan lists six fundamental factors:

1. Geographical Position: the most obvious illustrations of this are Britain and Japan; islands well placed vis a vis their respective continents to dominate the extraterritorial trade routes and, of course, able to devote most of their miliary effort to sea power (and, later, air power which is analogous to sea power). By contrast, huge Russia has to maintain widely separated and unsupporting fleets, while simultaneously requiring a huge army to guard her massive and geographically open land frontiers. Thus Britain and Japan are 'natural' sea powers, Russia is not.

2. Physical Conformation: this refers to the character of the coastline and condition of the country. A coastline indented with many good harbous is a potential source of great naval strength; poor soil could drive people to take to the sea, for example, Norway; rich

lands could encourage them to ignore the sea, for example, France.

3. Extent of territory: this can be a source of strength or weakness; a large territory with a large population would be a source of strength (for example, the United States of America); but a large territory with a small population would be a source of weakness, especially if it possessed many bays and rivers: these waterways could be easily exploited by hostile naval powers. This is precisely what happened to the Confederacy during the American Civil War, greatly aiding the North's victory.

4. Population: this refers not the the total population of a country, but to the sea-connected element: seamen, shipyard workers, chandlers, etc.: a large sea-connected element of the population is an essential base for sea power - such a population base allows for rapid naval expansion in wartime. Britain remains a classic example.

5. National Character: a trading mentality and a manufacturing capability are required; if these attitudes and abilities exist, and are coupled with a good sea coast, it is unlikely

that a people will be deterred from taking to the sea.

6. Character of Government: this element is absolutely vital; Governments should encourage national interest in the sea, encourage maritime commerce and maintain a strong Navy and the infrastructure needed to make that Navy effective - such as overseas bases. Without such bases, the radius of action of the fleet is greatly curtailed. Britain's global Empire was made possible, and maintained, by her assiduous collection of strategically important overseas bases - Gibraltar, Malta, Cyprus, Aden, Cape of Good Hope, Singapore, to mention a few.

If all six factors were favourable to the development of Sea Power, then the country would inevitably achieve sea power.

But, of course, Sea Power is not an end in itself. It is, as with all forms of power, a means to political ends. Strangely enough, perhaps because it lacked the glamour accorded to the other themes in Mahan's writings, this element has largely been ignored by his admirers.

Mahan termed this overriding political purpose the Object of the war. This Object, in turn, embraced one or more specific Objectives, the achievement of which fulfilled the Object (6). For Mahan, the Objective was a tactical concept, and was concerned with the correct employment of Sea Power to achieve the Object. An analysis of the Object was thus the essential first step of any war. Next, it was necessary to determine the military Objectives to be gained by the employment of armed forces. Finally, once these Objectives had been achieved, their impact on the general politico-military situation must be studied: have they, in fact, accomplished the Object?

This dual concept of Object/Objective provided Mahan with a framework for the analysis and understanding of past wars. And it was from these historical studies that Mahan concluded that the Objective in naval war was Command of the Sea (also known as Sea Control).

Mahan's analytical framework was composed of three elements. Firstly, the identification of the principal and secondary belligerents - a quite straightforward but nevertheless essential step. Secondly, the Object of the war, from the viewpoints of the various belligerents, must be ascertained:

Why have they gone to war? The answer to this question inevitably involves consideration of National Interest and National Policy; as a result, the Object of the war must be stated in terms of the ultimate political effects the various belligerents wish to achieve. The Object, to reiterate, must be political, because war is political. Thirdly, each of the belligerents must select the military objectives whose achievement will create the political effect that is the Object of the war. If the belligerent is revisionist, seeking to modify or destroy the status quo, then it is necessary for it to go on to the strategic offensive. Should the belligerent seek to uphold the status quo then it is inevitably on the strategic defensive - after all, he is defending against a challenge. However, the campaigner for the status quo has the choice of adopting the tactical defensive - awaiting the challenger's attack - or the tactical offensive - pre-empting the challenger.

Whatever the posture of the belligerent - revisionist or status quo - it is imperative that a hierarchy of objectives be established. This hierarchy should be both programmatic (laying down immediate, middle-range and long-range objectives) and geographic (designating the geographic areas for primary and secondary effort, the latter being areas

that can be weakened, with reasonable safety, in order to strengthen the former).

This analytical framework provided Mahan with a tool that was simultaneously simple, yet also comprehensive and flexible - and, note, one that was *not restricted in application to naval conflicts.*

Britain's leading maritime strategist was Sir Julian Corbett, a near contemporary of Mahan, and, unusually for a British strategist, a civilian (a lawyer by training, he later became a civil servant and an eminent historian) (7).

Corbett wrote at a time of great technological change - and a time when officers had not yet become used to the concept of such changes. As a result, many believed that these changes - steam replacing sail; rifled guns replacing smooth bores; turrets replacing broadsides; massive increases in gunnery ranges and ships displacements; the development of wireless; and so on - had rendered obsolete the accumulated strategic experience of the previous centuries. Corbett totally disagreed. In his book, Some Principles of Maritime Strategy, he developed a threefold approach to the subject. First, he presented a theory of War, heavily based on the concepts developed by Clausewitz; second, and based

on his theory of war, he developed a theory of naval war; finally, he examined the specific requirements for the conduct of naval war.

Corbett, unsurprisingly, regarded war as the use of violence to achieve a desired political end. As a Clauswitzian, Corbett placed this at the centre of his theory of war. Military force is employed to fulfill the ends of policy; but policy is, in turn, a conclusion, or decision, or evaluation, derived from a process that is very definitely political, in which key political interests such as National Security (among others) are weighed, balanced, appraised. Corbett recognised that this process was further affected by national, group, and individual perceptions. Thus, when required to plan for a war, the naval and military Commanders must, Corbett argues, ask three fundamental questions. What is the war about? How much value is to be attached to the political objects of the war? And how much value does the enemy attach to his political object of the war? Without a meaningful understanding of the answers to these questions, the armed forces chiefs will be unable to deploy their forces for maximum effectiveness, and so much of the war effort will be wasted and irrelevant - if not disastrous.

Having established his theory of war, which acts as

the overall unifying element, establishing as it does the relationship between the use of naval and ground *forces and the political goals* sought by their use, Corbett moves on to a discussion of maritime strategy.

Corbett viewed maritime strategy as a series of principles - but not prescriptive ('how to') principles, rather analytical principles, describing the subject matter and, if mastered, allowing a greater understanding of naval war. These principles are intended to educate the Fleet Commander, not guide him. To reiterate: they are required for elucidation, analysis and understanding, and most definitely not for prescription.

Corbett states his first principle of naval strategy thus:

> "The *object of naval warfare must* always be directly or indirectly either to secure the command of the sea or to prevent the enemy from securing it" (8).

With the achievement of this Command of the Sea, purely naval strategy is concluded. With Command of the Sea, the successful fleet - and country - can exercise control of the use of the sea. Subsequent naval operations are thus concerned with using the sea to achieve other objects - such as invading enemy territory.

But what does Command of the Sea involve? It is an often forgotten fact that the sea cannot be occupied or possessed; nor can fleets live off it like armies can live off the land. Essentially, the Sea is a means of communication. For Corbett:

> "Command of the sea is essentially control of maritime communications for a specific purpose" (9).

In other words Sea Control is the ability to move forces or supplies or whatever across the sea without encountering significant opposition, plus the ability to prevent the enemy from so doing. The purpose of this Command of the Sea is, of course, dependent on the political perceptions and decisions which originally led to the imposition or achievement of this Control.

It must be stressed that, for Corbett, Sea Control was not, could not, be a Zero-Sum Game. In other words, denying the enemy Command of the Sea does not automatically confer such Command on ourselves, and vice versa. This is precisely the characteristic of maritime conflict that makes possible - and requires - the constant conflicts over Command of the Seas. Another effect of this is the creation of several grades of Control of the Sea. Corbett lists five such grades (10):

1. Absolute Control - in other words, Command of the Sea: here, one side possesses total freedom of action without interference; the other cannot funcion at all.
2. Working Control - here, the dominant state can function with a considerable amount of freedom while only encountering a minimum of risk; the subordinate state can only operate with considerable risk.
3. Control in dispute - in this case, both combatants operate with high levels of risk, and each finds itself required to establish Working Control in certain areas of the sea for limited times, in order to conduct specific operations. In historical terms, this condition has prevailed more frequently than the alternatives.
4. Enemy Working Control - the inverse of 2.
5. Enemy Absolute Control - the opposite of 1.

The point is, Command of the Sea involves control of an opponent. As Corbett emphasises, naval warfare is concerned with communications, not 'holding ground'. The above categories - which are only meant to be rough classifications, not precise statements - indicate that Sea Control is always a relative situation, heavily dependent on geography, time, and the relative fighting capacity of both

sides, and that it always involves a degree of risk.

One means of establishing Sea Control is by battle; but the Sea Battle is solely a means to the end of Sea Control. Once the battle has been won, then the real business of "deadening the national activities at sea" (11) begins. It is this secondary action, this use of Sea Control after it has been gained, that is the instrument for compelling the enemy to make peace.

Thus, one is able to categorise naval operations in war by their relationship to either the Primary action - disputing and/or obtaining Command of the Sea - or the Secondary (but, ultimately, more important) action - exercising Command of the Sea.

In turn, these two forms of action give rise to no less than three general categories of naval operations (12): methods of obtaining Command; methods of disputing Command; methods of exercising Command.

For the stronger power, the best method of obtaining Command of the Sea is to seek out and destroy the enemy battlefleet, in order to terminate as rapidly as possible the condition of disputed Control; failing this, the enemy fleet should be blockaded in

harbour. This is the traditional Anglo-American approach.

When the relative strengths of both combatants are not adequate for either to achieve Sea Control, the condition of disputed Control prevails. This condition can be maitained by the weaker combatant provided it skillfully utilises its maritime assets and the unique characteristics of maritime warfare - for example, evading the enemy battlefield, in order to achieve a 'fleet in being' strategy.

Exercising Command of the Sea is a different matter altogether: it is predicated upon prior achievement of Command of the Sea, and is concerned with using the sea to achieve specific purposes. Examples of the exercise of Command of the Sea would be defence against invasion (requiring the destruction of transports, as the primary target); or attacking enemy trade, or defending one's own trade; amphibious landings and the support thereof; and so on. In these cases, the specific operation in progress, and the requirements for its success, must take priority over all other possible objectives. "The hierarchy of objectives must be observed" (13).

Together, Mahan and Corbett have distilled the experiences of, and become the strategic orthodoxies

for, the Anglo-American maritime tradition. Though the Anglo-Americans are inarguably the greatest practitioners of naval warfare and maritime strategy in history, theirs were not the only experiences and strategies that have existed. And no survey of maritime strategy would be complete without a brief survey of some of the alternative views of sea power held and practised by other Great Powers, albeit with far less success. We shall examine the case of Germany.

Germany, as a state, only came into being in 1871. True, the core of the new Empire, Prussia, had a long and proud history with a superb record of military achievement. This record acted as the firm foundation on which the German Army was established. But Prussia had always neglected the sea. There was thus little basis of naval tradition for the new German Navy. Indeed, from 1872 to 1883 the Imperial Navy was commanded by Army Officers (14)! Thus, from 1872 on, the Navy had to build almost everything from scratch - including the strategies that the new fleet was intended to serve.

In the initial period (1872-1888), while there was a steady development of both equipment and infrastructure, the Navy remained firmly bound to a Coast Defence Strategy, which, in the event of war, sought

to prevent any amphibious invasions or naval bombardments of German territories (15). This was the change dramatically following Wilhelm II's accession to the throne (15 June 1888) and his appointment of then Rear-Admiral von Tirpitz as State Secretaqry of the Navy Office (18 June 1897). In the years between Wilhelm's accession and Tirpitz' appointment, the Emperor had overseen a considerable expansion of the Imperial fleet. However, no strategic doctrine existed for the growing fleet (which now included a sea-going battle squadron), nor was there any consistent or organised naval construction programme. This all changed under Tirpitz (16).

The details of Tirpitz' enormous fleet build-up, which transformed the Imperial German Navy from a minor force to the world's second most powerful fleet, is of no direct concern to this discussion. What is of importance is the strategy it was designed to fulfil (17).

Admiral von Tirpitz not only oversaw the material and personnel build-up of the fleet, but provided its raison d'etre. For Tirpitz, Britain was Germany's ultimate enemy, and the new fleet was to be the instrument par excellence for employment against Britain. Tirpitz' obsession with Britain as

a foe was shared by virtually non-one else in the Imperial government.

Tirpitz had read, but misunderstood, Mahan (19). In his Service Memorandum No. IX, Tirpitz recognised that a successful war at sea was predicated upon Command of the Sea; that this Command could be had only at the expense of the enemy; that the only means to achieve this Command was by a Strategic Offensive; and that such an offensive would require at least a one-third superiority (20). Yet Tirpitz realised that such superiority could never be achieved against the target country - Britain. His response was to develop an ingenious, but highly flawed, theory - that of Risikoflotte (Risk fleet), which became German strategy with the First Naval Law of 1898.

In essence, the Risikogedanke accepted that the German Navy could never be strong enough to defeat the Royal Navy (RN), but sought to achieve a situation whereby, should the two fleets ever clash, the German could inflict enough damage on the RN to endanger the latter's supremacy vis-a-vis third fleets (for example, Russia), this potentiality acting (it was hoped) as a deterrent against Britain. In other words, unable to defeat Britain at sea, the Navy would deter Britain from going to

war with Germany (21). But if Britain should go to war, Tirpitz believed that the requirements of Command of the Sea would necessitate an attack on the German fleet, which could thus plan for battle on its own terms - specifically, in the Heligoland Bight, where mines, submarines, torpedo-boats, shore batteries, etc. would equalise the odds between the two sides (22).

And this was where the misunderstanding of Mahan entered the picture. Tirpitz, and the Imperial Navy in general, saw Command as simply military supremacy, and not as Control of communications, which is actually what it is all about. In short, as long as the Imperial fleet did not threaten British communications, there was no need for the RN to attack it (23). So Tirpitz' strategy had actually no military basis! It had a purely psychological base - and a very questionable and unstable one at that. Should the British refuse to be intimidated by Tirpitz' fleet, or should they react to the threat in a manner other than that expected by Tirpitz, the German fleet would be left, so to speak, high and dry - trapped in numerical inferiority, and lacking any workable strategy.

This is precisely what happened: Britain's rapprochements with France and Russia, plus her

earlier alliance with Japan, combined to 'diplomatically eliminate' all significant third fleets. The whole basis of the Risikogedanke was demolished (24). Moreover, as Command of the Sea involved Control of communications, and as the RN could guard Britain's communications most effectively from its remote base at Scapa Flow, far beyond the reach of the short-ranged German fleet, there was no need for the British to enter the Heligoland Bight and do battle there. The British refusal to follow Tirpitz' script totally demolished the German Navy's strategical posture, and left a bewildered High Command seeking palliatives. None were effective (25).

Paradoxically, the Imperial fleet's greatest contribution to Germany was its post-war suicide by scuttling at Scapa Flow on 21 June 1919, giving:

> "War-weary and humiliated Germany ... an opportunity to celebrate and rejoice" (26).

Fleets, however, do not exist to scuttle themselves. But a post-war evaluation of what, strategically speaking 'went wrong', was delayed by a desperate, and highly effective, rearguard action by Admiral von Tirpitz, seeking to obscure his responsibility for the disaster (27). Not until 1926 was a serious criticism of the Risikoflotte propounded within

Germany - by retired Vice-Admiral Wolfgang Wegener.

Wegener damned Tirpitz' strategy by virtue of its defensive orientation and by the fact that it failed to realise that the North Sea - Tirpitz' arena for decision - was 'strategically dead': i.e. contained no key British Sea Lines of Communication (SLOC). In other words, Wegener exposed Tirpitz' total failure to appreciate that Command of the Sea involved Command of Sea Lines of Communication. For Wegener, German naval strategy should have involved the seizure of Denmark and perhaps South-West Norway, so providing the Imperial fleet with advanced bases vis-a-vis the British, cutting the SLOC with Scandinavia, and threatening that with Russia. This would have forced the British fleet to do battle with the Imperial fleet (27). In the tremendous excitement generated by Wegener's perception of the importance of SLOC's, and by his proposals for circumventing Germany's poor geo-strategic position vis-a-vis Britain, many German commentators failed to observe that he had totally forgotten to consider the German fleet's gross numerical inferiority as against the Royal Navy, which would, in fact, have rendered suicidal any such challenge as proposed by Wegener (29).

This weakness of Wegener's led him and his

successors into a view of sea power as distorted, in its own way, as that of Tirpitz. While Command of the Sea involves Control of SLOCs, it is not restricted to such Control, nor is it achieved by attempting to limit oneself to such control. This Wegener failed to state clearly, and his successors failed to understand. Rather, they developed an almost exclusive focus upon SLOCs, which resulted in a conception of naval warfare being primarily an instrument for undermining trade by means of a 'tonnage warfare' waged by submarines and surface raiders (30).

This misinterpretation reached its peak with Admiral Assmann, writing before and during the first half of the Second World War. Assmann focused almost exclusively upon SLOCs and thus upon 'economic warfare', claiming that this was a new form of naval warfare, introduced by the British with their adoption of the remote blockade in 1914 (31). This was a fundamental misreading of British policy. In 1914 the British already had Command of the Sea - they had possessed it since 1805 and the Battle of Trafalgar; of the other major fleets, Russia, Japan and France were allies; the United States neutral; and the German fleet, thanks to Tirpitz and geography, was unable to contest this British Command. Britain's blockade was simply one aspect

of exercising her Command of the Sea; the fact it was remote and not close was simply a tactial adaptation to neutralise the threat of the submarine and torpedo boat.

Because of this profound error, Assmann was led astray from the crux of true naval strategy - achieve Command first, and Control of SLOCs will automatically follow - to focus on naval warfare as purely a trade conflict; to, finally, an acceptance of enemy (British) Command, to the extent of avoiding action with enemy naval units in favour of an exclusive concentration upon attacks on merchant shipping (32).

Though the German Navy achieved much more in the Second World War than in the First, and though the U-boat force was a major threat to Britain until mid-1942, distorted thinking such as Assmann's prevented the German Navy from achieving its full threat potential vis-a-vis Britain and led to a total misuse of its major surface combatants, which were employed in isolation as surface raiders and not collectively as a Battlefleet, and so were tracked down and destroyed in detail. It also led to the abandonment of work on the aircraft carrier Graf Zeppelin in favour of more U-boats. Unbeknown to Berlin, the British feared a Battlefleet centred

on the Graf Zeppelin far more than the extra U-Boats produced in her stead (33).

The experience of Germany in the period 1898-1945 clearly illustrates the continuing validity of the Mahan-Corbett strategic approach; the inadequacy of alternatives to this approach; and the grave difficulties facing a country with, in naval terms, a poor geostrategic position and inadequate resources, which seeks to dispute Command of the Sea.

NOTES

1. Refer to virtually any of Mahan's publications on this point - for example, Interests of America in Sea Power, 1897.

2. Mitchell, D.W., A History of Russian and Soviet Sea Power, Macmillan, London, 1974; on Peter's obsession with matters maritime, refer to Massey, R.K., Peter the Great, Victor Gollancz, London, 1981.

3. A list of operations in which sea power played a key - if usually supportive and unnoticed - role would be too great to detail here, but would include the UN operations in Korea, France in Indo-China, America in Vietnam and Britain in Borneo (1961-1966).

4. The following discussion of Mahan is based primarily on Mahan, A.T., The Influence of Sea Power Upon History, 1660-1782, Hill and Wang, New York, 1957; Sprout, M.T., "Mahan: Evangelist of Sea Power", in E. Meade Earle (ed.), The Makers of Modern Strategy, Princeton University Press, Princeton, 1953; and Rosinski, H., The Development of Naval Thought, Naval War College Press, Newport, 1977,

5. For this, see especially Sprout, ibid.

6. For a discussion of Mahan's conceptions of Object and Objective, see especially B. Mitchell Simpson III's "Editor's Introduction" to Rosinski, op.cit.

7. For Corbett, see especially ibid.

8. Corbett, Some Principles of Maritime Strategy. p. 87, quoted ibid., p. xviii.

9. Simpson, ibid., p.xix.

10. Ibid., pp. xix-xx.

11. Corbett, op.cit., in ibid., p. xx.

12. Simpson, ibid., pp. xxi-xxii.

13. Ibid., p. xxii.

14. Herwig, H., 'Luxury' Fleet, George Allen & Unwin, London, 1980, p. 13.

15. Ibid., pp. 13-15.

16. Ibid., pp. 17-32.

17. For an account of this build-up, see ibid., passim.

18. Rosinski, H. op.cit., pp. 53ff, 71ff.

19. Ibid., p. 71.

20. Ibid., p. 54.

21. Ibid., pp. 54-55, 71ff; Herwig, op.cit., pp.36-37.

22. Rosinski, op.cit., pp. 55-56.

23. Ibid.

24. Ibid., pp. 71ff.

25. Ibid., p. 56.

26. Herwig, op.cit., p. 247.

27. Rosinski, op.cit., pp. 57-59, 81-83.

28. Ibid., pp. 59ff, 84ff.

29. Ibid.

30. Ibid., pp. 86-87.

31. Ibid., pp. 89-90.

32. Ibid., p. 90.

33. In 1941 the British naval nightmare was that the Germans would conserve their existing major surface units until those still under construction were completed, and then form a Carrier/Battle squadron with the Graf Zeppelin, battleships Bismarck and Tirpitz, battlecruisers Scharnhorst and Gneisenau, and Heavy Cruisers Prinz Eugen and Admiral Hipper. The Admiralty feared that they would not, because of global naval commitments, be able to assemble a fleet sufficiently strong to counter such a Task Force, without leading to disastrous results elsewhere (for example, in the Mediterranean). See ibid., Humble, R., Hitler's High Seas Fleet, Pan/Ballantine, London, 1971; Kennedy, L., Menace, Sphere, London, 1981; Mason, D., U-Boat, Pan/Ballantine, London, 1972; Mullenheim-Reckberg, B., Battleship Bismarck, Triad/Granada, London, 1982; von der Porten, E., Pictorial History of the German Navy in World

War Two, Thomas Y. Crowell, New York, 1976; Roskill, S.W., The Navy at War 1939-45, Collins, London, 1960; Stern, R.C., Kriegsmarine: A Pictorial History of the German Navy 1939-45, Arms and Armour Press, London, 1979.

CHAPTER 4: AIR POWER

Of all the contemporary forms of military power, air power is the youngest (1), least formulated, most controversial (2), and yet, in some ways, the most important. The story of the great theories of air power - propounded by General Guilio Douhet in Italy, General William Mitchell in the United States of America, and Marshal of the RAF (as he became) Lord Trenchard in Britain - and their fate is itself interesting.

Whereas all theories of land and sea warfare - of war in general, in fact - were preceded by centuries of practice, the complete opposite applies to air war. Douhet first wrote on air power in 1909, before any aerial conflict had occurred, while his first serious writings on the topic date from 1921; 'Billy' Mitchell's zealous advocacy of air power also began - at least as far as public notice was concerned - in 1921; while Trenchard's view of aerial warfare dated from at least his experiences in Command of the 'Independent Air Force' carrying out strategic raids against Germany during 1918 (3). In other words, their theories were bold projections into the future based on a weak foundation of experience - a mere four years' worth at the most. Compare this with the centuries that Mahan and

Corbett could draw on when constructing their theories! And many of the aerial activities of the First World War had been embryonic, tentative, uncertain. Strategic bombing was one of the most tentative elements in applied air power during the War. Yet, as we shall see, it was precisely on this far from proven aspect of warfare that the three theorists of military aviation focussed their attention, and upon which they constructed their intellectual edifices. In other words, for the first time in history, military men, to play upon the old cliche, planned for the next war and not the last one. How successful they were shall be shown in due course.

But what were their theories?

Douhet's arguments (4) proceded from two basic assumptions: firstly, that aircraft were offensive weapons of immense capability against which no effective defence was likely; and secondly, that civilian morale would be destroyed by the bombing of population centres. It was upon these foundations that he constructed his theory, which contained five main elements. The first of these was to the effect that

> "in order to assure an adequate national defence, it is necessary - and sufficient - to be in a position in case of war to conquer the command of the air" (5).

Assuming one is, at the outbreak of a war, in such a position, the primary objectives for attack, according to Douhet, should not be the enemy's military installations, but rather his industrial and population centres - invariably targets remote from the actual combat zone between the contending ground forces. It is in this element of his theory that Douhet's assumptions on civilian morale are most obvious, as in this graphic account of the (supposed) impact of attacks upon population centres:

> "At this point I want to stress one aspect of the problem - namely, that the effect of such aerial offensives upon morale may well have more influence upon the conduct of war than their material effects. For example, take the center of a large city and imagine what would happen among the civilian population during a single attack by a single bombing unit. For my part, I have no doubt that its impact upon the people would be terrible ....
>
> "What could happen to a single city in a single day could also happen to ten, twenty, fifty cities. And, since news travels fast, even without telegraph, telephone, or radio, what, I ask you, would be the effect upon civilians of other cities, not yet stricken but equally subject to bombing? What civil or military authority could keep order, public services functioning, and production going under such a threat? And even if a semblance of order was maintained and some work done, would not the sight of a single enemy plane be enough to stampede the population into panic? In short, normal life would be impossible in this constant nightmare of imminent death and destruction. And if on the second day another ten, twenty, or fifty cities were bombed, who could keep all those lost, panic-stricken people from fleeing to the open countryside to escape

this terror from the air?

> "A complete breakdown of the social structure cannot but take place in a country subjected to this kind of merciless pounding from the air. The time would soon come when, to put an end to horror and suffering, the people themselves, driven by the instinct of self-presevation, would rise up and demand an end to the war - this before their army and navy had time to mobilise at all!" (6).

It is clear from this that Douhet was a firm believer in what has become known as Total War, a belief he stated explicitly:

> "The prevailing forms of social organisation have given war a character of national totality - that is, the entire population and all the resources of a nation are sucked into the maw of war. And, since society is now definitely evolving along this line, it is within the power of human foresight to see now that future wars will be total in character and scope" (7).

Douhet devoted much attention to the mathematical details of aerial destruction - the number of tons of bombs required to totally destroy a given area of territory, for example - but these are of no importance to this discussion (8).

The third element of Douhet's theory was that the enemy air force should be destroyed not in air-to-air combat, but by the bombing of its ground installations and of the factories on which its existence depends.

Unsurprisingly, the 'conventional' services - the army and the navy - were assigned secondary roles in Douhet's schemes. Basically, their role was purely defensive, restricted to holding a front in order to prevent enemy ground forces from advancing and overrunning one's air bases and aviation infrastructure before one's air force had paralysed the enemy's ability to maintain ground and naval forces, and destroyed their will to resist. Actually, Douhet appears to have believed that a well planned, well prepared aerial bombardment would cause such a rapid enemy collapse that only minor ground forces would be needed to hold the frontiers - in his book, Command of the Air, Douhet pictured France, in a scenario for a future war, capitulating within 36 hours after four of her cities had been devastated by one hour's bombing each! (9).

Finally, Douhet argued, for reasons of efficiency and economy, that specialised types of aircraft such as bombers or fighters should be disposed of; rather, the backbone of the air force should be composed of so-called 'Battle Planes'. Such Battle Planes would be primarily employed for bombarding enemy targets, would be totally self-defending but could, if required, be used for aerial combat. Douhet saw the airplane as a relatively simple and cheap weapon, capable of changes in function merely

by changing onboard equipment. So, in Douhet's opinion, bombs and/or fuel could easily be substituted for offensive or defensive armament. Furthermore, Douhet believed that it was possible to directly convert civil aircraft into military combat aircraft and vice versa:

> "If we examine carefully the functional characteristics of bombing and combat planes as I have tried to define them, we can readily see that they are in general almost identical with the functional characteristics of civil aviation. When all is said and done, the bombing plane is essentially a transport plane of medium speed and sufficient radius of action, especially equipped to carry bombs ..." (10).

Note the phrase "medium speed" - Douhet regarded speed in aircraft as an issue on which "no emphasis need be placed ... it is of little importance" in comparison to the other elements of aircraft performance (11).

Nor did Douhet believe in the retention of reserves - for him, the proposed aerial onslaught was an all-or-nothing affair from the word go, into which every available aircraft should be thrown, in order to guarantee victory.

Finally, it should be pointed out that, for Douhet, air power was cheap power:

> "An air force adequate to gain the mastery of the air, especially in the first period of the conflict, only requires limited

> *weapons, limited personnel, and small financial resources*" (12).

Here Douhet was claiming discovery of the philosopher's stone of strategy: assured victory - cheaply. Little wonder his views were popular (13).

What of Trenchard? Paradoxically, Trenchard, by virtue of his position as Chief of Air Staff (CAS) for ten years following the First World War, was simultaneously the aerial strategist who made the greatest practical impact and the least articulate contribution to the body of theory! According to Sir John Slessor, Trenchard was:

> "very inarticulate - his mind always worked quicker than his tongue; he was almost physically incapable of expressing his thoughts on paper ... his instructions were often a cause of puzzlement (and sometimes amusement) to his staff officers. His closest friends (or worst enemies), could hardly accuse him of being an intellectual type of officer. But he had a flair, an instinct for getting at the really essential core of a problem" (14).

As a result, it is not possible to present, in Trenchard's case, an outline of a detailed and coherent strategy of air power. But he did succeed in infusing the RAF with a very definite conception of air power, and, perhaps more importantly, in preserving the Force's independence from Army and/or Royal Navy control.

The theoretical background to Trenchard's own opinions, and to the creation of the RAF, were undoubtedly the second Smuts Report on Air Power (issued 17 August 1917) and a memo by air power enthusiast Admiral Mark Kerr (October 1917) (15).

The Smuts Commission on Air Power had been established as a result of popular pressure caused by German air raids on London (using conventional aircraft rather than airships) which had commenced in June 1917. The British public demanded defence and reprisals. The first Smuts Report concerned defence; the second examined Air Power in general (16).

The central theme of the Second Report was aviation's capability for operations independent of those of naval or ground forces, and that as a result of this, aviation forces should be independent of naval and ground forces. These independent air operations, unsurprisingly, took the form of strategic air attacks on enemy industrial and population centres - in Smuts' words:

> "the day may not be far off when aerial operations with their devastation of enemy lands and destruction of industrial and populous centres on a vast scale may become the principal operations of war to which the older forms of military and naval operations become secondary and subordinate" (17).

While Smuts recognised that air power also had a tactical aspect, this was more a token gesture than anything else - the primary thrust was on strategic bombing:

> "It is important for the winning of the war that we should not only have secure air predominance, but secure it on a very large scale; and having secured it in this war we should make every effort and sacrifice to maintain it for the future. Air supremacy may in the long run become as important a factor in the defence of the Empire as sea supremacy" (18).

The thrust of the Smuts Report was reinforced by the Kerr Memorandum, written for the then President of the Air Board, Lord Cowdray, who had complained of Cabinet prevarication in the establishment of a new, independent, Air Ministry to oversee British aerial operations (19).

Kerr's arguments can be most succinctly related in his own words:

> "This memo is to point out, shortly, the extraordinary danger of delay in forming the Air Ministry and commencing on a proper Air Policy.
>
> "In strategy it is necessary to put oneself in the enemy's place, and to decide what he will do. Information which confirms this is valuable.
>
> "Germany will reason thus:
>
> "'Armies and Navies depend for existence on supplies and communications; destroy these and the enemy is beaten. Formerly we worked to outflank an enemy on land, in order to cut his communications; he then had to retire, or be surrounded and surrender. This principle remains, but

> modern warfare renders it impossible to carry it out round the flanks of the Allied Armies; the battle-line is too long, and there is no room for a flanking army of sufficient size on the map. Therefore we must go over the Allied line and stop them from coming over us. It is thus necessary to reduce output in the Army and Navy and make a huge bombing squadron to destroy the British and French aerodromes and machines, before they come and destroy ours, and also to bomb their factories out of existence. When we have done this, the Allies' supplies will be reduced and cut off, and their Armies must either retire or surrender.
>
> "The submarines will continue the same work at sea. Our German policy is therefore, to cut down output in everything except submarines and aircraft, and to increase our squadrons of underwater and air craft. We must strain every nerve to make our attack before the Allies make theirs. If we succeeded in this, their attacking machines will be destroyed before they leave their own aerodromes, and we shall win the war ...'" (20).

It was essential for Britain to obliviate this danger; in Kerr's opinion:

> "It is a race between them and us: every day lost is a vital danger. If the Germans get at us first, with several hundred machines every night, each one carrying several tons of explosives, Woolwich, Chatham, and all the factories in the London district will be laid flat, *part of London wiped out, and workshops in* the south-east of England will be destroyed, and consequently our offensive on land, sea and air will come to an end.
>
> "There is no exaggeration in this, and if we are going to stop it, we must start at once with our preparations to lay their factories flat and to destroy their aerodromes ...
>
> "In short, it means the country who first strikes with its big bombing squadrons of hundreds of machines at the enemy's vital spots, will win the war ..." (21).

In order to ensure that Britain achieved the necessary strategic air force first, Kerr, like Smuts, argued for the creation of a separate Air Ministry. On 16 October 1917, it was announced in Parliament that just such a Ministry and air service would be created; the bill received Royal Assent on 29 November 1917, the Air Council established on 3 January 1918; and the Royal Air Force became an operational entity on 1 April 1918 (22).

The Smuts-Kerr view of aerial warfare can be ragarded as the 'official' British approach to the subject. It was this view that was adopted, vigorously promoted, and indoctrinated into the RAF by Trenchard. Though Trenchard did not produce a coherent memorandum on aerial strategy until 1928, his agreement with Smuts and Kerr is obvious from other statements, parts of memoranda, arguments with the other service chiefs, and proposals to the Cabinet. Thus, in January 1919 he stated that only the lack of means (i.e. heavy bombers, which only became operational after the signing of the armistice) had prevented the RAF from devastating many of Germany's industrial centres (though he did admit that this might have required up to five years of effort) (23). Similarly, Trenchard's concept of air power is discernable in his peacetime 'master plan' for the RAF, submitted to the Cabinet in

November 1919, specifically in the following paragraphs:

> "The principle to be kept in mind in forming the framework of the Air Service is that in future the main portion of it will consist of an Independent Force, together with Service personnel required in carrying out Aeronautical Research.
>
> "In addition, there will be a small part of it specially trained for work with the Navy, and a small part specially trained for work with the Army, these two small portions probably becoming in the future, an arm of the older service.
>
> "It may be that the main portion, the Independent Air Force, will grow larger and larger, and become more and more the predominant factor in all types of warfare" (24).

The focus, clearly, is on strategic air power ('Independent Air Force' being the contemporary description for what would now be referred to as a Strategic Air Force).

A further formulation of Trenchard's views came with an RAF policy paper to the Committee of Imperial Defence in March 1921, wherein he claimed that the major menace to Britain was strategic air attack, and that only the RAF could provide adquate defence against it. But, it must be noted, the basis of this defence would be the RAF's counterstrike potential, not fighter aircraft (25). Trenchard had a very low opinion of the value of fighter aircraft, regarding their prime function as being a political necessity - a sop to the prejudices of an ignorant

citizenry. In fact, for the Home Defence air command, Trenchard prescribed a ratio of two bomber squadrons to every fighter squadron! This imbalance in favour of bombers was justified in the following manner:

> "Although it is necessary to have some defence to keep up the morale of your own people, it is infinitely more necessary to lower the morale of the people against you by attacking them wherever they may be" (26).

As late as March 1939 Trenchard (who had retired ten years previously) was still protesting at the expenditure of resources on defence measures, including fighters (27)!

Trenchard's overall views on aerial strategy can best be summed up by quoting one of his last major memos as CAS:

> "In my view the object of all three services is the same, to defeat the enemy nation, not merely its army, navy or air force.
>
> "For an army to do this, it is almost always necessary as a preliminary step to defeat the enemy's army, which imposes itself as a barrier that must be broken down.
>
> "It is not, however, necessary for an air force, in order to defeat the enemy nation, to defeat its armed forces first. Air power can dispense with that intermediate step, can pass over the enemy navies and armies, and penetrate the air defences and attack direct the centres of production, transportation and communication from which the enemy war effort is maintained .... The stronger side, by

> developing the more powerful offensive, will provoke in his weaker enemy increasingly insistent calls for the protective employment of aircraft. In this way he will throw the enemy on to the defensive and it will be in this manner that air superiority will be obtained, and not by direct destruction of air defences" (28).

In short, for Trenchard, the strategic bomber offensive was everything (29).

Brigadier-General William Mitchell, Assistant Chief of Air Service 1921-25, is undoubtedly the tragic figure in the story of air power. His zealous advocacy for the new branch of the United States Army vis-a-vis the older branches and the United States Navy led to his court-martial in the autumn of 1925, and his subsequent resignation in February 1926. In civilian life he remained a zealous advocate of aviation (30).

Many of Mitchell's arguments and beliefs concerning air power were virtually identical to those of Trenchard and Douhet, and this can be best illustrated by reference to Mitchell's writings:

> "In future the mere threat of bombing a town by an air force will cause it to be evacuated, and all work in factories to be stopped. To gain a lasting victory in war, the hostile nation's power to make war must be destroyed - this means the factories, the means of communication, the food producers, even the farms, the fuel and oil supplies, and the places where people live and carry on their daily lives. Aircraft operating in the heart of an enemy's country will accomplish this

> object in an incredibly short space of time" (31).

and again:

> "The advent of air power, which can go straight to the vital centres and either neutralise or destroy them, has put a completely new complexion on the old system of making war. It is now realised that the hostile main army in the field is a false objective, and the real objectives are the vital centres .... The result of warfare by air will be to bring about quick decisions. Superior air power will cause such havoc or the threat of such havoc in the opposing country that a long-drawn-out campaign will be impossible" (32).

and a final

> "It is necessary that ... cities be destroyed, in the sense that every house be levelled to the ground. It will be sufficient to have the civilian population driven out so that they cannot carry on their usual vocations. A few gas bombs will do that" (33).

Again the standard belief in strategic air power's uniqueness, decisiveness, speed and destructive capability. But, on several important issues, Mitchell's conception of air power diverged considerably from those of Douhet and Trenchard.

Unlike them, Mitchell did not ignore the tactical aspect of air power - though he rated this as secondary to the strategic aspect, he still devoted considerable attention to it. Indeed, his famous controversy with the United States Navy was an outgrowth of his interest in the uses of air power in support of the older services, for, unlike his

contemporaries, Mitchell firmly believed that the destruction of the enemy's ground and naval forces was an essential prerequisite to victory (34) - "whatever the future might hold, war is still a matter of defeating the enemy's armed forces" (35).

One of the consequences of this belief was his advocation of paratroop forces as early as 1918 (36); the other was his rejection of the (implicit) belief of Douhet and Trenchard that rival air forces would by-pass each other in the air, or at least that air-to-air combat would be of only minimal importance. This was coupled to a rejection of the belief in the impotence of the fighter: "the only effective defence against aerial attack is to whip the enemy's air forces in air battles" (37). In fact, for Mitchell, the fighter was very important - for without escort fighters to protect them, the strategic bombers would never reach their objectives (38). In sharp contrast to Douhet, who rejected fighters in favour of his self-defending 'Battle-planes', and to Trenchard, with his ratio of two bombers to every (begrudged) fighter, Mitchell urged a ratio of four fighters to every bomber, and regarded them as the prime means of defeating the enemy's air forces, only following which could the bombers destroy the enemy surface forces and strategic centres (39).

As previously mentioned, these theories were projections into the future based on limited experiences, in contradistinction to all previous strategic theories. Thus no account would be complete without a brief examination of their success - or failure - in practice. This will be done by studying the classic aerial offensive: the Anglo-American strategic bombing offensive against Germany during the Second World War. This offensive, of two parallel yet largely independent campaigns, with which we will deal in turn, was a conscious attempt to prove the concepts of Trenchard and Douhet.

It is well known that the British bombing campaign was an overwhelmingly nocturnal one. This was the result of Bomber Command's rapid and painful discovery that technological advances - especially radar - had totally demolished Trenchard's belief (an exaggerated one even before radar) in the impotence of fighters; Britain's lightly armed bombers were unable to defend themselves against German fighters (40).

The nocturnal British offensive against Germany, which commenced on 15 May 1940, can be divided into several phases. The first, from May 1940 to the end of 1941, was a period of trial and error, of

enormous navigational difficulties (errors of up to 100 miles were not uncommon) and inadequate aircraft - but also of weak German defences. In this period, RAF Bomber Command flew 43,774 sorties, for the loss of 1,019 aircraft - an average loss rate of 2.8%. It had been estimated that the maximum sustainable loss-rate the Command could accept was 5%. The achievements were minimal - a contemporary survey estimated that only one-third of all aircraft dropped their bombs within five miles of the designated aiming-point - i.e. in an area of seventy-five square miles around the target! Moreover, improving German defences began to exact a higher toll, culminating in a 9% loss-rate on the night of 7-8 November 1941.

The second phase of the offensive can, for convenience, be dated from the appointment of Air Chief Marshal Sir Arthur Harris as Air Officer Commander-in-Chief, Bomber Command, on 22 February 1942. Harris called this the 'Preliminary Phase' and dated its conclusion as February 1943 (42). This phase was marked by qualitative improvements in aircraft and navigational aids, by the development of the concept of the 'Bomber Stream' (all the attacking aircraft flew the same route to and from the target) in order to swamp the German defences (the airspace over Europe had been divided, by the

Luftwaffe, into radar-controlled 'boxes', each containing one night-fighter; [illegible], the 'Bomber Stream' concentrated all the bombers into relatively few 'boxes', the defending night-fighters were either totally avoided or completely swamped), by the formal adoption of Area Bombing - previously Bomber Command had pretended only to bomb industrial targets; now it accepted this was impossible and simply set out to devastate German cities - and by the creation of the 'Pathfinder Force' of elite crews to increase nocturnal bombing accuracy (43).

Two important events during this phase were the attack on Lubeck (28 March 1942) when the first fire bomb attack was made - 191 bombers, three quarters of them carrying only incendiary bombs, the remainder carrying the then new 4000 lb bomb, in an attack of 140 minutes, devastated 200 acres of the town, killing 302 people - and the first 'Thousand Bomber Raid' against the heavily defended city of Cologne, two months after Lubeck, in which 1,046 bombers, in a ninety minute attack, devastated 600 acres of the city for a loss rate of only 3.8% (40 bombers) (44). Lubeck and Cologne set the pattern for the future.

In March 1943 Harris began his 'Main Offensive': further technological advances and tactical innov-

ations vastly increased the bombers ability to find their target cities, while greatly increased numbers of aircraft considerably enhanced Bomber Command's capacity for devastation (45). Retrospectively, the 'Main Offensive' has been subdivided into three 'Battles' - the Battle of the Ruhr, the Battle of Hamburg, and the Battle of Berlin, each named after the prime target areas involved (though there were always other targets attacked, both as a result of weather limitations and in an attempt to disperse the German defences).

The Battle of the Ruhr raged from 5 March 1943 to 14 July 1943, involving no less than 43 separate raids - two-thirds of them against the Ruhr itself - causing considerable destruction (for example, in the very first raid of the Battle, against Essen, over 600 acres of the city were destroyed or badly damaged) but exacting a cost of 872 aircraft - a loss rate of 4.7%, dangerously near the 5% limit (46).

The Battle of Hamburg (24 July to 3 August 1943), comprising four massive British nocturnal and two American daylight raids, was marked by the British introduction, on a large scale, of Electronic Counter Measures (ECM) - using strips of silvered paper (code-named 'Window') to jam German radar.

Use of 'Window' reduced British losses to only 12 on the first raid, though total British lossess in this battle finally amounted to 89 aircraft; nevertheless this represented a loss rate of only 2.8%. The devastation caused in Hamburg was enormous, over 50,000 people being killed and over 40,000 injured. It was Bomber Command's greatest success (47).

The Battle of Berlin began, initially, in August 1943, but was temporarily suspended after the first three raids had achieved little for a loss rate of 7.2% (48). German defences had recovered amazingly rapidly from 'Window'. The most important of these defences were the radar-equipped nightfighters, which caused 66% of Bomber Command's losses during the Battle of Berlin. This resulted in a dramatic escalation of the 'electronic war' (49). The Battle was resumed on 18 November 1943 and continued until 30 March 1944, and comprised 16 major attacks, totalling 9,111 sorties, on Berlin, while another 11,113 sorties were flown against other major targets, including Brunswick, Frankfurt, Leipzig, Mannheim, Nuremburg, Schweinfurt and Stuttgart. Damage inflicted was severe, but the cost was high - 1,047 aircraft lost, 5.1% of the total. Worse, while this was the average loss rate (and was itself on the wrong side of the acceptable limit), loss rates on individual missions showed a tendency to

rise far above acceptable levels - despite unprecedented British ECM and ECCM (Electronic Counter-Counter Measures) campaigns to aid the Bombers. Thus, January 1944 saw raids to Berlin lose 6.1%, and to Brunswick, Magdeburg and Stettin 7.2%, of their aircraft; a February raid on Leipzig lost 9.5%; a March raid on Berlin, 9.1%. These alarming losses culminated in the disastrous attack on Nuremburg on 30 March 1944, which experienced an overall loss-rate of 11.8% (in terms of the heavy bomber force, excluding the Mosquito light bombers, which flew so high and so fast as to be virtually immune to German defences, the loss rate was actually 13.6%) (50). With Nuremburg, the Battle of Berlin collapsed. Bomber Command was saved from having to face up to its defeat by its compulsory transfer to operations in preparation for, and support of, the allied invasion of France.

The last phase of the Bomber Offensive ran from September 1944 to May 1945, and was by far the most successful - nearly 100,000 sorties were flown for a loss rate of less than 1%. This, however, was largely due, among other factors, to the advances of the allied armies, which had overrun key elements of the German defence system - radars, airfields, etc.. Yet, even at the end, German civilian morale did not collapse, nor did war production - indeed, as the

British assault had intensified, so had German production accelerated! The cost to Germany had been high - but Britain's losses had not been light: 55,573 bomber aircrew were killed during the offensive (51).

What of the American experience? The Americans began operations in 1942, with a doctrine of precision bombing against industrial, and not population, targets (as it turned out, poor weather conditions often resulted in American 'precision' raids being as indiscriminate as British 'area' attacks.) The 1942 attacks, as the strength of VIII Bomber Command of the 8th Army Air Force steadily increased, were directed against short-range targets, largely in France. Thus, on 5 September 1942, the Americans attacked railway marshalling yards at Rouen and Sotteville. As a result, the Americans often enjoyed strong fighter escorts from the RAF and, increasingly, VIII Fighter Command, 8th AAF. Moreover, in the German air defence system France was rated as a low priority area for fighters, so the Americans encountered no significant fighter opposition. As a result, the 27 operations carried out by VIII Bomber Command betwen August and December 1942 sustained a los rate of less than 2% (52)!

The American command was determined, in 1943, to extend the offensive to Germany itself, confident in the ability of their bombers, flying in large, tight formations, to defend themselves. They had forgotten Mitchell's warnings on the need for escort fighters to protect the bombers, and believed that the painful lessons learned by the British and Germans earlier in the war could be disregarded because of the American aircraft having considerably greater defensive armament. Wedded to the concept of precision daylight bombing, VIII Bomber Command set out to fulfil the objectives laid down by the Casablanca Directive on bombing (53).

Between 27 January and 14 October 1943 approximately 65 targets in Europe were attacked, involving no less than 16,210 sorties; 10,740 aircraft succeeded in reaching their targets. The overall loss rate was just under 5%, though more ominously the loss rate among aircraft that actually attacked the target was a little over 7%. The damage rate sustained was staggering - on any given raid deep into Germany, between 25% and 50% of the attacking bombers could expect to suffer some kind of battledamage (54). Worse, as the German defenders gained experience, they inflicted yet heavier casualties on the Americans. Thus, while the attack on Kiel (14 May 1943) suffered light casualties, the

17 August attack on Schweinfurt and Regensburg cost 60 bombers destroyed out of a total committed of 376. This increasingly unacceptable attrition climaxed in 'Black Week' (8-14 October) in which the Americans lost a total of 148 aircraft - including 60 out of 291 despatched on the second Schweinfurt raid (55). Finally the realisation came: even with all their heavy defensive armament and tight formations, the United States bombers could not defend themselves against fighter attacks. The 8th Air Force abandoned its long-range operations until suitable escort fighters became available.

The third and final phase of American bomber operations began when these escorts had become available in quantity - which was by the Spring of 1944. Henceforth, the bomber formations would be accompanied by large numbers of the superb P-51 Mustang fighter. The bombers were still to suffer heavy losses, but they were bearable losses - while the Luftwaffe's casualties rose alarmingly. Thus, in January 1944 total Luftwaffe aircraft losses, from all causes, amounted to 1,311; in February, 2,121; and in March, 2,115 (56). With these German losses came an American realisation that the real damage to Germany was not being inflicted by the bombers on the industrial infrastructure, but by the escorting fighters on the Luftwaffe. And so began a

conscious policy of attacking targets that would force the German fighters to react (57). It was not the German losses in aircraft that were important - they were easily replaced (despite the fierce aerial onslaught, German production of single-seat fighters rose from 851 a month in the second half of 1943 to 1,581 per month in the first half of 1944) - but the losses of irreplaceable aircrew, killed in the enormous air battles over Germany (58).

From April 1944 the American bombers, like their British counterparts, were primarily employed in preparing for, and later supporting, the invasion of France. However, strategic raids continued. And the Americans finally discovered a weak spot in the German industrial infrastructure that could be effectively attacked by bombers - the synthetic oil plants. These, in 1943, had produced 6.2 million tons of petroleum, as against the 2 million tons imported from Rumania and Hungary; and there were only 80 of them - of which 27 were especially important. And virtually all were within range of the bombers of the United States 15th Army Air Force in Italy (59).

This offensive began on 12 May 1944, and though only a small minority of the American bombing effort was devoted to them (11.6% in June, 17% in July, 16.4%

in August) the results were immediate and dramatic. Germany's petroleum stocks fell from 927,000 tons in March, to 717,000 tons in May; to 472,000 tons in June. The Luftwaffe suffered even more dramatically, its aviation fuel stocks declining from 180,000 tons in April, to 50,000 tons in June, to 10,000 tons in August (60). Amazingly, this campaign was allowed to slacken off, and was never pursued with the necessary vigour (especially by the British, who were roped into the 'Oil Plan' against Harris' will) (61). As with the British, the American bomber offensive continued to the very end of the war, ultimately devastating Germany.

How well had the theories of Douhet, Trenchard and Mitchell stood up to reality? Their belief in the fragility of civilian morale was exposed as totally false - under aerial bombardment the people had not panicked nor forced their governments to make peace. Nor had the target's industrial infrastructure been destroyed - rather, its efficiency had increased considerably. Air power had not rendered the ground services obsolete, as Douhet and Trenchard had claimed - despite being devastated by bombing, Germany still had to be defeated on the ground and physically occupied by allied armies before her resistance ceased. Indeed, the bombers benefitted enormously from this land campaign, for it swept

away much of the essential infrastructure of the German air defence system: ar from strategic bombing paving the way for the armies, the armies had paved the way for the bombers. On the other hand, Mitchell´s belief in the value of air power in direct support of other services was clearly vindicated - one need only think of the great contributions made by tactical air power to the conflict on land and at sea. Douhet´s faith in the bomber´s ability to defend itself and Trenchard´s opinion on the impotence of the fighter were clearly shown to be false, as was their idea that air-to-air combat would be of little importance. In contrast, Mitchell´s stress on the need for fighters to protect the bombers, and the necessity of defeating the enemy air force in combat were vindicated. Finally, strategic air power was not cheap to its employers, not in terms of money, aircraft, or lives lost. It was not the ´philosopher´s stone´ of strategy.

To sum up, the theories of Douhet and Trenchard were effectively demolished by the test of experience, however, important elements (though, of course, by no means all) of Mitchell´s thou indicated. But the debate on air power in certain respects, moved on to a new phase. On August 6, 1945, Colonel Paul Tibbets´ B-29 ´Enola Gay´ dropped

an atomic bomb on Hiroshima, ushering in the age of nuclear strategy.

NOTES

1. Ballistic missiles are merely a specialised sub-branch of air-power (except for submarine launched missiles, which are extensions of sea power).

2. One only has to think of the controversies over British bombing of targets in Germany (1940-45), American attacks on targets in Vietnam (1962-68, 1972), and Israeli strikes on targets in Lebanon (1982).

3. Warner, E., "Douhet, Mitchell, Seversky: Theories of Air Warfare", in E. Mead Earle (ed.), The Makers of Modern Strategy, Princeton University Press, Princeton, 1943, pp. 487-488; Hastings, M., Bomber Command, Pan, London, 1981, pp. 40-45.

4. See Warner, op.cit., pp. 489ff.

5. Douhet, G., The Command of the Air, p. 28, quoted by Warner, ibid., p. 490.

6. Douhet, ibid., pp. 57-58, quoted by Warner, ibid., p. 491.

7. Douhet, ibid., pp. 5-6, quoted by Warner, ibid., p. 495.

8. Except that his results proved, in practice, to be wildly inaccurate. See Warner, ibid., pp. 491ff for Douhet's calculations.

9. Ibid., p. 492.

10. Douhet, ibid., pp. 47-48, quoted by Warner, ibid., p. 493.

11. Douhet, ibid., quoted by Warner, ibid., p. 495.

12. Douhet, ibid., p. 337, quoted by Warner, ibid., p. 494.

13. On the impact of Douhet, see Warner, ibid., p. 495ff.

14. Slessor, Sir John, quoted by Barrier, A., The Bomber Offensive, Batsford, London, 1968, p. 37. Sir John himself was a later Chief of Air Staff (CAS).

15. Powers, B.D., Strategy Without Slide-rule, Croom Helm, London, 1976, pp. 90ff.

16. Ibid., pp. 66ff, 75ff, 90ff.

17. Quoted ibid., p. 90.

18. Smuts, J.C., quoted ibid., p. 91.

19. Ibid., p. 97.

20. Kerr, M., quoted ibid., p. 97.

21. Kerr, quoted ibid., p. 98.

22. Ibid., pp. 98-99.

23. Ibid., p. 160.

24. Quoted ibid., p. 165.

25. Ibid., p. 179.

26. Quoted ibid., p. 188.

27, Hastings, op.cit., p. 59.

28. Quoted ibid., p. 46.

29. This account of Trenchard has been concerned with his views on air power theory after becoming CAS, RAF. It thus neglects his views on air power before 1918, and his practical measures to keep the RAF in existence and to lay the foundations for its later expansion. For an account of these aspects of Trenchard, refer to Powers, op.cit., passim.

30. Warner, op.cit., p. 488.

31. Mitchell, W., Winged Defense, pp. 126-127, quoted by Warner, ibid., p. 498.

32. Mitchell, Skyways, pp. 255-256, quoted ibid.

33. Mitchell, ibid., quoted ibid.

34. Warner, ibid., pp. 498-499.

35. Mitchell, quoted by Verrier, op.cit., p. 25.

36. Warner, op.cit., p. 499.

37. Quoted, Warner, ibid.

38. Verrier, op.cit., p. 25.

39. Verrier, ibid.

40. Hastings, op.cit., pp. 13-39; Middlebrook, M., The Nuremberg Raid, Revised Edition, Allen Lane, London, 1980, pp. 1-2.

41. Middlebrook, ibid., pp. 1-7.

42. Ibid., pp. 7-12.

43. Ibid., pp. 12-14.

44. Ibid., pp. 14-15.

45. Ibid., pp. 16-20.

46. Ibid., pp. 20-21.

47. Ibid., p. 22. For a detailed account of this battle, see Middlebrook, The Battle of Hamburg, Allen Lane, London, 1980.

48. Middlebrook, The Nuremberg Raid, p. 26.

49. Ibid., pp. 31-33.

50. Hastings, op.cit., pp. 306-320; Middlebrook, The Nuremberg Raid, p. 274ff. A sortie is defined as one flight by one aircraft.

51. Hastings, op.cit., pp. 417-425; Middlebrook, The Nuremberg Raid, pp. 304-318. Another key contribution was that of the American day fighter force in defeating the Luftwaffe in air-to-air battle; see below.

52. Verrier, op.cit., pp. 120ff.

53. Ibid., pp. 156ff; the Casablanca Directive, which was simply ignored by RAF Bomber Command, laid down the following order of target priorities :

    1. Submarine Construction Yards;
    2. German Aviation Industry;
    3. Transportation;
    4. Oil Plants;
    5. Other Industrial Targets.

54. Ibid., pp. 170-172.

55. Ibid., E. Bendiner, The Fall of Fortresses, Pan, London, p. 191.

56. Hastings, op.cit., pp. 321-322.

57. Ibid., pp. 322-323.

58. Ibid.

59. Ibid., p. 328.

60. Ibid., p. 330.

61. Ibid., pp. 400ff.

CHAPTER 5: UNITED STATES NUCLEAR STRATEGY 1945-84

The development and employment of the atomic bomb at the end of the Second World War saved the Air Force Marshals and Generals from having to face the truth about their Bomber Offensives of the preceding years. Scientific genius had - belatedly - provided them with an instrument capable of achieving urban destruction approximating that hoped for by Douhet, Trenchard and Mitchell. Unsurprisingly, then, the first phase of post-war United States air strategy was a straightforward continuation of the wartime approach, only with the new atomic weapons supplementing the older, conventional, bombs. That this was so is clear from the writings and speeches of air power advocates at the time. Thus in November 1945, General H.H. Arnold, one of America's leading airmen, wrote that:

> "While this country must employ all of its physical and moral force in the course of peace, it must recognise that real security against atomic weapons in the visible future will rest on our ability to take immediate offensive action with overwhelming force. It must be apparent to a potential aggressor that an attack on the United States would be immediately followed by an immensely devastating air atomic attack on him. The atomic weapon thus makes offensive and defensive airpower in a state of immediate readiness a primary requisite of national survival" (1).

That same month, Arnold had also addressed the Senate Military Affairs Committee:

> "The next war will be preponderantly an air war ... attacks can now come across the Arctic Regions, as well as across oceans, and strike deep ... into the heart of the country. No section will be immune. The Pearl Harbor of a future war might well be in Chicago, or Detroit, or Pittsburgh, or even Washington" (2).

Unsurprisingly, British air pundits agreed with this position; Marshal of the Royal Air Force Lord Tedder asserted at the University of Cambridge in 1947, that

> "I am utterly convinced that the outstanding and vital lesson of the last war is that airpower is the dominant factor in this modern world and that, though the methods of exercising it will change, it will remain the dominant factor as long as power determines the fate of nations" (3).

While no less a personage than Winston Churchill himself, addressing the Massachusetts Institute of Technology in 1949, stated that:

> "For good or ill, air mastery is today the supreme expression of military power. And fleets and armies, however necessary and important, must accept subordinate rank. This is a memorable milestone in the march of man" (4).

Or, as General Arnold summed it up:

> "The influence of atomic energy on air power can be stated very simply. It has made air power all important .... [The] only known effective means of delivering atomic bombs in their present state of development is the very heavy bomber ...." (5).

But for the references to atomic bombs, it would be impossible to distinguish these statements from

those made in the era of air power superenthusiasm before the War.

There were good technical reasons - in addition to psychological and bureaucratic ones - why the development of nuclear weapons did not immediately transform United States air strategy: the acute shortage of both nuclear weapons and correctly configured delivery systems. In 1946, when the new Strategic Air Command (SAC) was created, it possessed only 148 B-29 Superfortress bombers, of which only about thirty had been modified to carry atomic weapons. And only a few atomic bombs existed (6). Moreover, only twenty crews were trained to drop nuclear weapons, and training was hampered because the Air Force had then extremely limited access to the real thing: dummy bombs were employed for loading and bombing practice (7).

The situation had not improved dramatically by 1948, the time of the Berlin blockade. The SAC possessed only thirty-two B-29s capable of carrying nuclear weapons, all concentrated in the 509th Bomb Group. Not one of the ninety or so B-29s sent to Europe during 1948 in response to the blockade could carry atomic bombs. Only in the summer of 1949 did the first nuclear-capable bombers of the 509th arrive in Britain (8). And while the stockpile of nuclear

weapons had improved somewhat, it probably contained no more than 200 bombs - most of them disassembled (9).

By 1950, when the outbreak of the Korean War showed that conventional forces were most definitely not obsolete, there had been an all-round improvement in the United States' nuclear capacity - to some 300 nuclear-capable aircraft (B-29s, B-50s and B-36s) and around 400 bombs (10). Nevertheless, atom bombs were still a scarce resource, this being one of the reasons why McArthur's request that they be used in Korea was turned down (11).

In contrast to the late forties, the decade of the fifties was to see a dramatic expansion in America's nuclear capability, with the acquisition of overseas bases for SAC (initially in 1951 in Britain and French Morocco), the deployment of air-to-air refue'ling tankers, modern new jet bombers (B-47s and B-52s), accelerated production of nuclear weapons (to counter the Soviet acquisition of the bomb), and the achievement of a nuclear capability by the United States Navy's aircraft carriers. By 1955 the SAC possessed approximately 200 B-36s and 1,000 B-47s - all nuclear-capable - while by 1959 it reached its peak with 1,366 B-47s, 738 B-52s (all nuclear-capable), 174 RB-47 reconnaissance aircraft,

and over 1,000 KC-97 and KC-135 tanker aircraft (12). This impressive military build-up had been accompanied by the development of a new nuclear strategic doctrine - popularly called 'Massive Retaliation'.

This, a result of the election of Dwight D. Eisenhower to the Presidency in 1952, represented the first significant development in American thinking on nuclear strategy. This 'New Look', as it was also originally termed, was based on studies undertaken by the National Security Council, which were issued in two documents: NSC-162 and NSC-162/2. These studies, in turn, originated from three main sources: firstly, discontent over the apparently inconclusive, protracted and expensive (in lives, property and money) conventional Korean war; secondly, the need to ensure strong defence against the Soviet Union; and thirdly, the need to keep defence spending to low and stable levels, so as not to strain the United States economy. As the then United States Secretary of State John Foster Dulles put it: "We want, for ourselves and the other free nations, a maximum deterrent at a bearable cost" (13). Traditionally, the second and third objectives underlying the 'New Look' had been mutually incompatible. But this was no longer the case: nuclear weapons provided the answer, because

nuclear defence, contrary to popular imagination, is cheap defence. For a country like the United States of America, it was - and is - the conventional component which absorbs the bulk of defence spending. Thus, under Eisenhower's new strategy, conventional forces were cut while nuclear forces were emphasised. All United States military planning was ordered to be based on the assumption that the use of nuclear weapons would be permitted whenever the military situation warranted, should the United States find itself in a general or major war. There was no way, no intention, that America would wage a general war without use of nuclear weapons. Unsurprisingly, at the end of 1953, this also became official NATO policy (14).

Secretary Dulles himself outlined the intentions of the new strategy:

> "If an enemy could pick his time and place and method of warfare - and if our policy was to remain the traditional one of meeting aggression by direct and local opposition - then we needed to be ready to fight in the Arctic and in the tropics; in Asia, the Near East, and in Europe; by sea, by land and by air .... The total cost of our security efforts ... could not be continued for long without grave budgetary, economic and social consequences ... the President and his advisers, as represented by the National Security Council, had to take some basic policy decisions. This has been done .... Now the Department of Defence and the Joint Chiefs of Staff can shape our military establishment to fit ... our policy, instead of having to try to be ready to meet the enemy's choices. That

> permits a ... selection of military means. As a result, it is now possible to get, and share, more basic security at less cost" (15).

Furthermore:

> "The way to deter aggression is for the free community to be willing and able to respond vigorously at places and with means of its own choosing" (16).

To this end,

> "Local defence will always be important. But there is no local defence which alone will contain the mighty landpower of the Communist world. Local defences must be reinforced by the further deterrent of massive retaliatory power. A potential aggressor must know that he cannot always prescribe battle conditions that suit him" (17).

Superficial examination of Dulles' speech almost immediately gave rise to the idea that the United States was threatening to respond to any Communist aggression, of any magnitude, anywhere in the world, by means of an all-out nuclear attack (18). Nothing could have been further from the truth. Careful reading reveals the stress is actually on selectivity of response:

> "Now [we] ... can shape our military establishment to fit ... our policy .... That permits a ... selection of military means ...".

and, again:

> "... the free community [must] ... be willing and able to respond vigorously at places and with means of its own choosing" (19).

The aim of the 'New Look' was to give the United

States a strategy that had the flexibility to handle, and deliver appropriate responses to, Soviet expansionism wherever, whenever and however it might occur. The 'Massive Retaliation' element of the strategy was intended to cover only a certain part of the threat spectrum - a direct attack on the United States, or Western Europe, for examples. The United States ran down its conventional forces, but by no means dismantled them: a limited war capacity was retained, while sufficient conventional forces were deployed to require significant attack to overwhelm them. Nor was it necessarily so that if nuclear weapons were employed they would have been unleashed in a cataclysmic 'armageddon' style onslaught. And even if the 'worst possible case' came about, and the United States had engaged in a large-scale nuclear attack on the USSR, it would not have taken the form of an indiscriminate 'spasm' of popular imagination (and fiction).

For American war plans, under 'Massive Retaliation', were based upon wartime and post-war objectives that were both specific and explicit. Around 1957, American objectives, in event of full-scale war with the USSR, were:

1. to reduce the Soviet Union's influence and power to a level at which it could no longer threaten global peace and security;

2. to liberate the satellite states from Soviet domination;
3. to ensure that any post-war regime or regimes on traditional Russian territory would be incapable of waging aggressive war;
4. to destroy the authority structure of the Soviet Communist Party; and
5. if a Communist regime did survive in the USSR, to ensure that its military-industrial potential was inadequate for it to wage war on comparable terms with America (20).

In short, the strategy was intended to reduce the USSR's post-war power and influence; thus, the targeting emphasis was on military and other strategic targets, and not on the indiscriminate destruction of cities. 'Massive Retaliation' was aimed at specific political and military targets, not the obliteration of Russia, even though the United States did not really have, at that time, the technical capacity to carry out such pinpoint attacks.

Nevertheless, despite the flexibility and selectivity inherent in the 'New Look', the feeling arose that it was not flexible enough, especially with regard to the requirements of limited war. So, perhaps, it was not surprising when John F. Kennedy

became President in 1961 he, in keeping with his image as vigorous, young and forward-looking, should have ordered the development of a new strategy to supercede the misunderstood 'Massive Retaliation'.

The result was 'Flexible Response', first publicly proclaimed in 1962. However, it is essential to realise that the title 'Flexible Response' was used to cover no less than four different nuclear strategies adopted under the tenure of Defence Secretary Robert McNamara (1961-68) in the Kennedy and Johnson Administrations.

The first of these 'Flexible Response' strategies really was flexible: it sought and provided an increased variety of capabilities and options, an ability to react to enemy threats at any level of the threat spectrum. This flexibility comprised both strategic nuclear and conventional forces (which were boosted in strength) and, at the nuclear level, sought to avoid the situation arising in which use of nuclear weapons automatically meant armageddon. As McNamara himself said at Ann Arbor in 1962:

> "The United States has come to the conclusion that to the extent feasible basic military strategy in a general nuclear war should be approached in the same way that conventional military operations have been regarded in the past. That is to say, principal military objectives should be the destruction of the enemy's military forces, not of his civilian population" (21).

The following year, he made the point more clearly:

> "We should never think of ourselves as forced by limitations of resources to rely upon strategies of desperation and mutual destruction. The relative numbers and survivability of the United States strategic forces should always permit us to retaliate against all the urgent Soviet military targets subject to attack, thus contributing to the limitation of damage to ourselves and our allies. The damage-limiting capability of the superior strategic forces is, I believe, well worth its incremental costs" (22).

And again:

> "By building into our forces the flexible capability, we at least eliminate the prospect that we could strike back in only one way, namely against the entire Soviet target system, including the cities. Such a prospect would give the Soviet Union no incentive to withhold attack against our cities in the first strike. We want to give them a better alternative. Whether they would accept it, no one could say. Considering what is at stake we believe it is worth the additional effort on our part, however, to have these options" (23).

Thus, in the period 1962-63, United States strategy contained, as its basic elements at the strategic nuclear level, the concepts of city avoidance, selective targeting, counterforce attacks (i.e. attacks on enemy nuclear/military/strategic targets), damage-limitation in event of war, and that attacks on urban centres (countervalue attacks) were only the ultimate threat of a reserve force. This reserve force - which had to be secure from enemy attack to be effective - coupled with the United States intention to engage in city avoidance

or counterforce strikes was the basis of America's plans for damage-limitation. City avoidance would deprive the Soviets of a rationale for attacking United States cities, while the reserve force promised awesome retaliation should they try anyway (24).

To achieve these ends, the Kennedy Administration greatly accelerated projects initiated by Eisenhower and initiated some new ones. Because of the successful Soviet deployment of Intercontinental Ballistic Missiles (ICBMs) which, unlike bombers, were apparently unstoppable, the focus was on missiles. America's first operational ICBM, the Atlas-E, had been deployed in 1960; the Atlas-F and Titan-I followed in 1962, to be rapidly superceded by the second-generation Minuteman-I and Titan-II, of which it was originally intended to deploy 1,200 and 120 respectively (the Minuteman was, and is, a 'light' ICBM, the Titan-II a 'heavy' one - it was five times heavier than the Minuteman). However, by the mid-1960s (by which time United States Strategy had begun to change) the force level was stabilised at 1,000 Minuteman-I and -IIs, and 54 Titan-IIs. The United States Navy Polaris programme - the first unit of which, the USS George Washington, had been commissioned in December 1959 - was considerably accelerated, though McNamara reduced the planned

fleet from 45 to 41 submarines. Long-range air-to-ground missiles were delivered to equip the SAC's B-52 bomber force (25).

As against this, production of the B-52 was ended in 1962, and its intended successor, the XB-70, was cancelled. Moreover, systems now considered obsolete or inappropriate to the new strategy were very swiftly phased out of service - B-47 bombers, Snark, Mace and Matador cruise missiles, Thor and Jupiter Intermediate Range Ballistic Missiles (IRBMs) and Atlas and Titan-I ICBMs. By 1966, SAC could muster only 591 B-52s, 83 B-58s (a short-range supersonic bomber produced in small numbers in the late fifties and early sixties) and 16 RB-47s, in addition to the force of KC-135 tankers (26).

Meanwhile, Secretary McNamara's strategic thinking had begun to change, with the introduction of the concept of 'assured destruction'. Originally, 'assured destruction' had been intended as a measuring concept - as a means of deciding 'how much is enough' in terms of nuclear hardware, by providing a standard based on population destruction and industrial damage - i.e. the very kind of targets that 'Flexible Response' originally sought to avoid. This means of analysis eventually itself became the conceptual framework, dominating (instead

of serving) strategic thinking. However, in the new strategy of the mid-sixties (actually 1964/65) the concept of damage-limitation was retained as the partner for 'assured destruction'. Thus, in his 1964 annual statement to Congress, McNamara argued against a concept of deterrence based solely on city destruction, arguing that "City destruction is not a new concept. It has been debated for many years. But I know of no responsible official who would support it today" (27). He further argued that American strategic nuclear forces:

> "must be visibly capable of destroying the Soviet society under all conditions of retaliation. In addition, in the event that such a war is forced upon us, they should have the power to limit the destruction of our own cities and population to the maximum extent practicable. Such a damage-limiting strategy is the most effective course to follow. In every case we have studied, we have found that forces in excess of those needed to similarly destroy Soviet industry would significantly reduce damage to the United States and Western Europe" (28).

The emphasis on damage-limitation, and thus on a flexible approach to targeting, was retained, but already the roots of what Van Cleave has described as a "bizarre detour" (29) in American strategic thinking under McNamara were becoming visible. The next, 1966/67, phase of McNamara's strategy was to take the United States firmly down this detour.

This involved an almost exclusive emphasis on

'assured destruction'; not only was the concept of damage-limitation abandoned, it was actively disparaged:

> "Our forces must be sufficiently large to possess an assured destruction capability. By this I mean an ability to inflict at all times and under all conditions an unacceptable degree of damage upon any aggressor or combination of attackers, even after absorbing a surprise attack. It is this clear and present ability and not the ability partially to limit damage that provides the deterrent" (30).

While McNamara admitted that damage-limitation might be of some benefit to deterrence, he now argued that for this to be of any significance, it:

> "would have to be extremely effective, that is, capable of reducing damage to truly nominal levels and we now have no way of accomplishing this" (31).

On top of all this, McNamara rejected the concept of city avoidance and firmly indicated that the American intention was now city destruction (countervalue targeting):

> "If we were to strike after [an enemy attack] the question is what would we launch against? I think all would agree that we would launch against their cities since they have already launched all their forces against us" (32).

The adoption of this 'strategy' was based on the assumption that the United States was faced by a requirement to deter an all-out, one-salvo, Soviet attack on the United States, and that as a result, the problem facing the United States was simply one

of having enough surviving capability to inflict unacceptable damage on the USSR (apparently estimated at 25% of the population and 50% of the industry (33)). But the United States nuclear forces were not merely intended to protect the United States of America, they were further meant to provide a protective 'umbrella' to key United States allies, specifically Western Europe, Canada and Japan. McNamara's new 'strategy', by locking the United States nuclear forces into a predominantly countervalue targeting plan, totally destroyed, in principle, the credibility of this umbrella. It was simply unbelievable that the United States would risk total destruction to try and protect her allies. Only the fact that the United States retained a clear superiority over the USSR in nuclear firepower propped up the umbrella. But like an edifice deprived of its foundations, all that was required was a shock and the nuclear umbrella would fall apart. McNamara himself provided it, with his concept of 'Mutual Assured Destruction' adopted by 1968/69.

'Mutual Assured Destruction' inevitably acronymed - and deservedly so - into MAD, was a unilateral attempt to work out the rules of deterrence for both sides, and was quite different from 'assured destruction'. The latter said that the United

States had to have an assured destruction capability, irrelevant of what the Soviets had, or what strategy they espoused. But MAD said something very different: that, if the United States had an assured destruction capability, the USSR also should have it, and would have every right to use it. The ideas underlying MAD were as follow: if both sides had deterrence as their objective; if this deterrence was based, by both, on a retaliatory strike; if this retaliatory strike was based on countervalue destruction, then the result would be that both sides would find themselves in a mutual deterrence relationship which would be stable so long as neither side tried to reduce the assured destruction capability of the other. Such reduction could only be possible through the deployment of Counterforce systems threatening the survivability of the opponent's retaliatory forces, or of Anti-Ballistic Missile (ABM) systems threatening his ability to reach his targets. In short, McNamara came to see defence against nuclear attack, not as impractical, but as undesirable - because, under MAD, it would be destabilising. Any attempt by one side to achieve counterforce capability would force the other to do likewise, triggering an arms race. Thus, MAD produced a strong rationale for arms control; for arms control would preserve the mutual deterrence relationship. But effective arms

control, under MAD, had a pre-requisite - nuclear parity between the United States and the USSR (34).

With this conceptual background to United States nuclear defence policy it is unsurprising that, in the late sixties, only minor augmentations occurred to United States strategic nuclear forces - balanced by reduction in SAC´s bomber force. In the field of Research and Development (R&D) no new ICBM was developed under McNamara, though a new Submarine-launched Ballistic Missile (SLBM) - Poseidon - was, and work commenced on Multiple Independently Targeted Re-entry Vehicles (MIRVs). However, Poseidon, with its combination of relatively low accuracy and very high survivability, was useless as a Counterforce but ideal as a Countervalue weapon; while MIRVs, by allowing one missile to attack several separate targets, acted as a guarantee of America´s ´assured destruction´ capability. In short, both fitted neatly into McNamara´s concepts in the second half of the sixties.

McNamara´s acceptance of parity between the United States and USSR as good and desirable totally destroyed, in practice, the credibility of the United States umbrella. While the United States had retained superiority, there had always been the chance that the United States would run grave risks

for her allies; now, with parity proclaimed as an American objective, no such chance remained. MAD completed the damage initiated by the 'assured destruction' concept of 1966/67. Moreover, MAD did not possess a secure foundation; rather, as has been made clear above, it rested on a series of major 'ifs'. Should only one be wrong, MAD would be seriously compromised. Should all be wrong, the United States would be in severe trouble. And there were indications that the USSR did not agree with American conceptions of the nuclear balance - for example, the deployment of the huge SS-9 ICBM, starting in 1967, and for which no conceivable role existed under either 'assured destruction' or MAD. This strongly suggested that Moscow accepted neither of these policies. McNamara's approach to nuclear defence from 1966 deprived America of flexibility, selectivity and, short of an all-out onslaught on the Continental United States itself, all credibility in the face of any major international crisis. Liddell-Hart had defined strategy as "the art of distributing and applying military means to fulfil ends of policy" (35). Not only did McNamara's 'assured destruction' and MAD policies not do this, they actually prevented the United States from fulfilling the ends of its policy. They were not strategies, not even non-strategies, but, in reality, anti-strategies.

Little wonder, then, that the new Nixon administration of 1969, inheriting an anti-strategy and faced by a Soviet nuclear build-up more rapid than anticipated - from 1962 to 1969 the number of Soviet ICBMs increased from 200 to more than 1,000 - initiated a review of American requirements for strategic nuclear forces. It was against this background - and against the background of the extremely expensive and increasingly unpopular Vietnam war - that the concept of 'sufficiency', as against superiority or parity, was adopted as the basis of United States nuclear strategy. There were four elements to sufficiency:

1. Assured destruction - though not based on simple calculations of population casualties; it was left open as to what form of measurement would be used;
2. crisis stability - United States nuclear forces must not develop any vulnerabilities that would tempt the USSR to launch a counterforce strike in times of crisis, thus, the ICBM force would not be allowed to become vulnerable;
3. 'essential equivalence' - the United States must have equal destructive capacity to that of the USSR; if it did not, the resulting imbalance could not only have military implications, but also strong political

implications; this element was especially important to President Nixon, who felt it was an essential prerequisite to any effective United States foreign policy; and

4. damage limitations against at least light attacks by deployment of the Safeguard ABM system (36).

This, however, was only the beginning of a series of studies on United States nuclear strategy, stimulated by the continuing Soviet build-up and by the unsatisfactory nature of the first Strategic Arms Limitation Talks (SALT I) agreement. On January 10, 1974, Defence Secretary James Schlesinger announced:

> "a change in the strategies of the United States with regard to the employement of central strategic forces has taken place. A change in targeting strategy as it were" (37).

He added that:

> "To a large extent the American doctrinal position has been wrapped around something called 'assured destruction' which implies a tendency to target Soviet cities initially and massively and that this would be the principal option the United States would have. It is our intention now that this not be the only option and not the principal option" (38).

This was, Schlesinger argued:

> "Because of the growth of Soviet capabilities, the range of circumstances in which an all-out strike against Soviet cities can be contemplated has narrowed considerably, and we must have alternatives for the employment of strategic

> forces other than what would be a suicidal strike against the cities of the other sides" (39).

In short,

> "The point that is different about the targeting doctrine that I am outlining is the emphasis on selectivity and flexibility" (40).

The fact that McNamara's 'anti-strategy' was totally non-credible had been clearly recognised - indeed, was openly stated by Schlesinger himself (41) - and a 'new' genuine, strategy adopted. This 'new' strategy, in may respects, hailed back to those that had existed before McNamara's "bizarre detour", and was composed of three main elements. Firstly, pre-planned options for limited attacks were created, both in case of war with the USSR and for extended deterrenc.. Secondly, the capacity for 'assured destruction' would be regarded as a secure reserve and not as America's principal means of retaliation even in the event of a full-scale war; thus ensuring that even if deterrence failed, it would not all fail at once. To this end, the United States had to devote more attention to forces that could survive even protracted nuclear conflict. Thirdly, 'assured destruction' was no longer to be viewed simply in terms of damage to cities and deaths of civilians; rather, it was - as in the 1950s - viewed with regard to reducing post-war Soviet influence and power (42). Under Schlesinger and Nixon, America

again had a strategy - a means "of distributing and applying military means to fulfil ends of policy" (43). This 'Schlesinger strategy' was formally embodied in Presidential order NSDM-242.

This period of strategic re-examination was accompanied by the deployment of a new SLBM - the aforementioned Poseidon, which was deployed on 31 submarines which had previously carried Polaris; again, each submarine carried 16 missiles - and an improved version of the Minuteman ICBM, the Minuteman III, each of which carried three Re-entry Vehicles (RVs); 550 were deployed, but they replaced the same number of earlier Minuteman versions. Work also began on a new, long-range bomber, to be designated the B-1 (44).

The new course was endangered by the arrival of the Carter Administration in 1977 - both Carter and his Defence Secretary, Harold Brown, supported much of the MAD doctrine. Indeed, Brown had been one of McNamara's subordinates. However, the developments of Soviet nuclear forces - now clearly far in excess of those required for MAD - could not be ignored. Nor could the advice of the Joint Chiefs of Staff, who supported NSDM-242, while the secret report of the famous 'B-team' of President Ford also had an impact (45). The result was that, though the Carter

Administration conducted its own strategic study, the result, embodied in the document PD-59, really marked the acceptance of the basic elements of NSDM-242, and included a re-affirmation of the requirement for 'essential equivalence'. Again, there was the stress on flexibility and selectivity in targeting, in avoiding Countervalue attacks except [illegible], to control escalation (if possible), and to ensure that if there was a failure of deterrence, it would not be a total failure.

Unfortunately, a new problem had arisen - did the United States possess the necessary forces to carry out this strategy? For advances in Soviet missile technology had begun to reach the level where the survivability of the United States ICBM force was endangered - the USSR had, or would soon have, enough missiles with enough accurate warheads to destroy virtually all America's ICBMs, and have considerable numbers of missiles left over. In 1978 Admiral E.R. Zumwalt, former Chief of Naval Operations, estimated that the USSR would "soon" have the ability to destroy 90% of United States ICBMs with only 20% of their MIRVed ICBM force (46). This would leave the United States with only its Countervalue SLBM force and present the American President with the dilemma of annihilation or acquiescence in Soviet expansion.

Modernisation of United States strategic nuclear forces was thus a matter of urgency. To this end, President Carter - reluctantly - authorised development of the M-X ICBM, long-range Cruise Missiles, and continued the already initiated programme for the development of the Trident-I SLBM. Yet, as against this, development of the longer-range Trident-II was postponed indefinitely, and the new B-1 bomber cancelled - in favour, so the Administration argued, of a revolutionary new 'Stealth' bomber, even though this was clearly years away from production, let alone service. Nor was this all; problems in the shipyard bulding the new Ohio class ballistic missile submarines for the Trident missiles, and in the Navy management of the project, caused long delays and incredible cost overruns: USS Ohio herself, funded by Congress in 1974, due for completion in 1979, was not actually completed until 1982. As a result, the size of the United States SLBM force began to decline from 1980 on (47). Moreover, the M-X was bedevilled by arguments over whether or not it should be deployed, and if so, how. The problem of reconciling a secure basing system with the needs of verification for arms control purposes within reasonabe cost was not solved by the end of the Carter Administration.

Thus, when the Reagan Administration was inaugurated

in 1981 it was not so much nuclear strategy that needed attention as the forces necessary to implement it. Indeed, it had been one of President Reagan's campaign promises that he would close the gap between America's strategy and her capability for carrying it out (48). This, however, proved easier said than done. The bitter disputes over how the M-X should be based continued, the Reagan Administration deciding, in late 1981, to deploy 100 missiles as rapidly as possible in existing silos, while research continued into long-term basing systems. As this decision did nothing to reduce, let alone solve, the vulnerability problem, trenchant criticism was directed against it. Less controversially, the Reagan Administration re-activated the B-1 programme, ordering 100 of the improved B-1B variant, to be armed with Air-Launched Cruise Missiles (ALCMs), as well as continuing the Stealth project, and reversed the Carter decision not to develop the Trident-II.

The continuing controversy among nuclear strategists over especially the M-X basing issue finally led the President to appoint a Commission on Strategic Forces, better known as the Scowcroft Commission, primarily to survey the alternatives for a secure land based ICBM force, and to indicate the best solution. After four months of deliberation, it

delivered its report in April 1983, covering virtually all elements of the United States strategic forces. In effect, it confirmed the previous decisions of the Reagan Administration. Alternative proposals, most of which were unsound strategically, politically or economically, were largely dismissed. However, an extremely sound alternative to M-X - the production and deployment of 1,000 single warhead, highly accurate, mobile ICBMs - was also downplayed, being seen, by the Commission, as a long term development; by contrast, the supporters of the 'Midgetman' (as the missile has been dubbed) saw - and see - it as a real alternative to the M-X (now dubbed 'Peacemaker'). At this stage, with the Peacemaker heavily funded and the Midgetman receiving some development funding, and with the future possibilities for laser and particle-beam weapons, the outcome of the current strategic debate cannot be foreseen.

Thus, at the end of the Reagan Administration's first term in office, the United States has a viable, flexible strategy, which can be, and is, constantly updated and refined to deal with altering situations, yet is sadly deficient in the nuclear forces need to implement it - a deficiency which is still years away from being eliminated. It is not a good position to be in.

NOTES

1. Arnold, General H.H., Third Report to Secretary for War, 12 November 1945, quoted by Armitage, M.H. and Mason, R.A., Air Power in the Nuclear Age 1945-82, Macmillan, London, 1983, pp. 16-17.

2. Quoted, ibid., p. 16.

3. Quoted, ibid., p. 1.

4. Quoted, ibid.

5. Arnold, op.cit., quoted by Freedman, L., The Evolution of Nuclear Strategy, Macmillan, London, 1981, p. 23.

6. Polmar, N., Strategic Weapons: An Introduction, Crane Rusak, New York, 1982, p. 10.

7. Armitage and Mason, op.cit., p. 18.

8. Polmar, op.cit., p. 11.

9. Armitage and Mason, op.cit., p. 181.

10. Polmar, op.cit., pp. 11-12.

11. Polmar, ibid., pp. 13-16, including the other reasons for the rejection.

12. Polmar, ibid., pp 17-18, 22-23.

13. Speech before the Council on Foreign Relations, January 12, 1954, reprinted in Head, R.G. and Rohke, E.J., American Defence Policy, John Hopkins University Press, Baltimore, 1973, p. 10.

14. van Cleave, W.R., "Countervailing Strategy", in Kaltefleiter, W. and Schumacher, U. (eds.) Conflicts, Options, Strategies in a Threatened World, 1981, Institute of Political Science, Christain-Albrechts University, Kiel, 1982, p. 327.

15. Dulles, op.cit., p. 63. Emphasis in original.

16. Ibid.

17. Ibid.

18. Thus, writing in the New York Times on January 1954, columnist James Reston wrote that the United States was telling the Russians and Chinese "as clearly as Governments ever say

these things, that in the event of another proxy or bushfire war in Korea, Indochina, Iran or anywhere else, the United States might retaliate instantly with atomic weapons against the USSR or Red China". Quoted in Freedman, op.cit., p. 86.

19. Dulles, op.cit., emphasis added in second quotation.

20. Cited by van Cleave, op.cit., p. 329.

21. Quoted, ibid., p. 330.

22. Speech to Economic Club, New York, 1963, quoted ibid., pp. 330-331.

23. Quoted, ibid., p. 331.

24. Ibid., p. 331.

25. Polmar, op.cit., pp. 44-49.

26. Ibid.

27. Quoted by van Cleave, op.cit., p. 332.

28. Quoted ibid.

29. Ibid., p. 325.

30. Quoted, ibid., p. 332.

31. Quoted, ibid.

32. Quoted, ibid.

33. Ibid., pp. 332-333.

34. Ibid., pp. 333-334.

35. Quoted by Freedman, op.cit., p. xvii.

36. van Cleave, op.cit., pp. 335-336.

37. Quoted, ibid., p. 336.

38. Quoted, ibid., p. 337.

39. Quoted, ibid.

40. Quoted, ibid., p. 338.

41. See ibid.

42. Ibid., pp. 338-339.

43. See No. 35 above.

44. Polmar, op.cit., p. 54, p. 91

45. Established on the advice of the President's Foreign Intelligence Advisory Board, the 'B-Team' was intended to provide an independent (that is, outside of the official intelligence community, whose experts thus became the 'A-Team') analysis of Soviet Strategic capabilities and objectives. van Cleave, op.cit., p. 341.

46. Polmar, op.cit., pp. 95-96.

47. Ibid., p. 105.

48. van Cleave, op.cit., p. 343.

CHAPTER 6: SOVIET MILITARY DOCTRINE, MILITARY SCIENCE AND STRATEGY 1945-84

> "Soviet military thought possesses an idiom and a hierarchy (of structure) which are characterised by a certain degree of precision in usage and application ... it does not easily 'fit' Western strategic concepts .... Whatever difficulties it may pose .... Western analysts must approach it on Soviet terms and refrain either from substituting trendy Western strategic and arms control jargon, or dismissing the Soviet military idiom as propaganda or the untutored flummery of an archaic military caste" (1).

It is for these reasons that it is necessary to devote a separate chapter to the structure, content and evolution of Soviet military thought, in order to comprehend the Soviet approach to nuclear weapons.

Soviet military thought is divided into the following precisely defined concepts: Military Doctrine, Military Science, Strategy, Operational Art, and Tactics. Each will be considered in turn.

A Soviet military dictionary defines military doctrine as:

> "a nation's officially accepted system of scientifically founded views on the nature of modern wars and the use of the armed forces in them, and also on the requirements arising from these views regarding the country and its armed forces being made ready for war.

> "Military doctrine has two aspects: political and military-technical. The basic tenets of a military doctrine are determined by a nation's political and military leadership according to the socio-political order, the country's level of economics, scientific and technological development, and the armed forces' combat material, with due regard to the conclusions of military science and the views of the probable enemy" (2).

In 1975, Marshal A.A. Grechko, then Soviet Defence Minister, described military doctrine as

> "a system of views on the nature of war and methods of waging it, and on the preparation of the country and army for war, officially adopted in a given state and in its armed forces" (3).

According to Grechko, doctrine would serve to answer these basic questions:

> "What enemy will have to be faced in a possible war?
>
> "What is the character of the war in which the state and its armed forces will have to take part; what goals and missions might they be faced with in this war?
>
> "What armed forces are needed to execute the assigned missions, and in what direction must military development be carried out?
>
> "How are preparations for war to be implemented?
>
> "What methods must be used to wage war?" (4)

While, in the view of General-Major S.N. Kozlov,

> "present day military doctrine is the political policy of the Party ... an expression of state military policy, a directive of political strategy ..." (5).

In short, military doctrine serves as the Soviet Communist Party's guide to the purpose, structure and future of the armed forces, while simultaneously governing the Soviet military leadership's actions with regard to meeting the military requirements of the Party. It forms the intellectual and policy framework directing both war planning and the acquisition of forces. Emanating from the highest circles of the Party leadership, doctrine is both extremely stable and authoritative: once pronounced, it provides the necessary stamp of approval for more precise planning, sets the armament production norms and guides the military's weapon acquisition policies. Though doctrine can be - and has been - modified to deal with the new military and scientific developments, it cannot be debated (unless decreed otherwise by the high Party leadership) once it has been pronounced. Pronounced doctrine possesses an aura of finality and an authority that is binding on all the Soviet armed forces and also on all the rest of the Warsaw Pact armed forces. There is no real Western equivalent to the Soviet concept of military doctrine.

Next in the hierarchy of Soviet military thought we find military science, which is officially defined as:

> "a system of knowledge concerning the nature, essence and content of armed conflict, and concerning the manpower, facilities and methods of conducting combat operations by means of armed forces and their comprehensive support.
>
> "Military science investigates the objective laws governing armed conflict, and elaborates questions pertaining to the theory of military art, which is the basic component of military science, as well as questions pertaining to the organisation, training and supply of armed forces, and also deals with military historical experience" (6).

While Kozlov describes it as

> "a unified system of knowledge of the preparation for and conduct of armed conflict in the interests of the defence of the Soviet Union and other socialist countries against imperialist aggression" (7).

Military science, which is, of course, firmly rooted in the ideology (the Soviets claim it is a science) of Marxism-Leninism, is composed of several major elements. These are: military-technical sciences; military training and education; Party-political work; military economics (that is, military support, fiscal support and technological support); military history (history of wars and history of military art); force posture (i.e. organisation, material, personnel and mobilisation); the theory of military art; and the theory of military science (8). Of all these components, the most important is the theory of military art.

The Soviets take great care to distinguish between military doctrine and military science, and for good reason:

> "There are clear cut differences between military science and military doctrine. Military science, in its development, relies on the analysis of objective laws, which are independent of human will, and on the practice of armed combat.
>
> "Military science is the theory of military affairs. Doctrine, on the other hand, is based on the theoretical data of military science and the political principles of the state ....
>
> "The difference between military science and doctrine consists in the fact that doctrine, elaborated and adopted by the state, is a unified system of views and a guide to action, free of any kind of personal subjective opinions and evaluations. Science, on the other hand, is characterized by controversy. In the system of theories known as military science, there may be several different points of view, diverse scientific concepts, original hypotheses which are not selected as doctrine for practical application and thus do not acquire the character of official state views on military questions" (9).

In short, while doctrine, once pronounced, is unquestionable, military science can remain an area for heated debate. However, any debate in the realm of military science (or military art) must not be confused with dissension, or interpreted as signs of dissatisfaction or discontent in the military. All military debate is controlled and approved by the Party, through its prime (but not sole) means of control over the armed forces, the Main Political

Administration (MPA), which is directly responsible to the Central Committee of the Communist Party of the Soviet Union (CPSU) itself. For the MPA controls, and is responsible for, all Soviet military publications, military propaganda, and the military publishing house. Nor must military science be confused with the Western concept of 'Military Philosophy', which is damned in the USSR as a 'bourgeois concept' based on metaphysics and idealism.

Of all the components of military science, the one most relevant to this discussion - and which is rated as the most important by the Soviets themselves - is the theory of military art. This is because it covers the study of actual methods and *forms of combat*. It, in turn, consists of three elements: Strategy, Operational Art, and Tactics. Each is considered, in Soviet eyes, to be an integral field of scientific knowledge; all are viewed as being, at the same time, interrelated and interdependent. Kozlov defines strategy as being:

> "the part of military art that studies the foundations of the preparation and conduct of war and its campaigns as a whole. In practice, it is policy's direct weapon. With respect to strategy, policy plays the leading and directing role";

moreover, strategy is "general and common for all the services of the armed forces of the country"

(10). Marshal Sokolovskiy and General-Major Cherednichenko give a more extensive definition:

> "Military strategy as a science may be stated as: determination of the nature, character, and condition of the outbreak of various types of wars; the theory of organisation of the armed forces, of their structure, and development of a system of military equipment and armament; the theory of strategic planning; the theory of strategic deployment, establishment of strategic groupings and the maintenance of combat readiness of the armed forces; the theory of preparation of the economy and the country as a whole for war in all respects, including preparation of the population in a moral sense; the creation of reserve supplies of arms, combat equipment, and other material resources; the development of methods of conducting armed struggle, of types and forms of strategic operations; determination of forms and methods of strategic leadership of the armed forces, the development of command systems; the study and evaluation of a probable enemy; the theory of strategic intelligence; and the theory of possible results of a war" (11).

From these sources it is clear that Soviet military strategy is both operationally oriented and heavily infused with politics, for it is a direct instrument of politics, and as such, reflects the Party's political strategy. The Party's input determines the political objective of the war, and this, in turn, indicates the tasks the military must fulfil. Strategy is the instrument for the fulfillment of these tasks. In short, military strategy is intended "to devise the means for winning war" (12). Noteworthy is the insistence that strategy be

"*general and common*" for all the armed forces, clearly reflecting the Soviet belief that wars are conducted by the combined services and branches of the armed forces, and that only within the framework of a single strategy can all their activities be co-ordinated. Also interesting is the subordination of the economy and population to the requirements of military strategy.

Because *political considerations are dominant* in both military doctrine and military strategy, there exists a possibility that the two may be confused. Soviet sources seek to prevent this by elucidating the relationship between them:

> "A relationship does exist between military doctrine and strategy. Strategy, as a scientific theory, develops the basic methods and forms of armed conflict on a strategic scale and, at the same time, carries out the military leadership of war. Theoretical positions of strategy influence military doctrine and its scientific development. At the same time, strategy directly executes doctrine and its instrument in working out plans for war and preparation of the country for it. During time of war military doctrine recedes somewhat into the background, since armed combat is guided primarily by military-political and military-strategic ideas, conclusions and generalisations, which flow from actual conditions. Consequently, war and armed combat are directed not by doctrine, but by strategy" (13).

Naturally, when doctrine changes, so does strategy.

Subordinate to strategy are operational art and

tactics. The concern of operational art is with "the theory and practice of preparing for and conducting combined and independent operations by major field forces or major formations of services" (14), and encompasses Front (Army Group, in Western parlance) and Army operations. Each of the Soviet armed forces - there are five of them: Strategic Rocket Forces, Troops of National Air Defence, Ground Forces, Air Forces and Navy - has its own operational art. Operational art is responsible for determining the means for preparing and conducting those operations intended to fulfil strategic goals.

At the bottom of the Soviet hierarchy of military thought we find tactics - "the part of military art directly studying the basis for preparation and combat actions of small units, units and large units of all combat arms and services of the armed forces" (15). Not only does each Soviet armed service develop its own tactics, but often each arm or branch of a particular service develops its own tactics - for example, within the Ground Forces you will encounter Tank tactics, Infantry tactics, Artillery tactics, etc..

Having ascertained what the Soviets mean when they talk about doctrine, military science, strategy and so on, it is now necessary to examine the content

and evolution of the most important of these concepts: military doctrine and strategy.

Soviet sources consider that there have been, to date, three stages in the development of post-war Soviet military doctrine: 1945 to 1953; 1953 to 1960; and 1960 to the present.

The first period, marked by the continued total dominance of the Soviet scene by Stalin, was characterised by an intriguing dichotomy between theory and practice. Under Stalin, no discussion was permitted in the area of doctrine, nor was it permitted to discuss the possible nature of future war. Soviet officers had to speak, act and write as if nuclear weapons did not exist, or at best denigrating their capabilities. Indeed, after only three articles in 1945 and 1946, not one single article devoted to either atomic weapons or nuclear energy is known to have appeared anywhere in the Soviet military press until 1953! The proclaimed basis of Soviet doctrine in this period was Stalin's five 'Permanently Operating Factors', first announced in 1941. In order of priority, they were:

1. stability of the rear;
2. morale of the army;
3. quantity and quality of divisions;

4. armament; and
5. organising ability of the command personnel (16).

The ranking of stability of the rear as the first priority illustrated Stalin's all-consuming fear of being toppled in an internal revolt, triggered by defeat at the hands of the Germans - in the same manner that Tzarism had collapsed 25 years before. Even urgent frontline priorities were subordinated to it - for examples, Stalin massively increased, by perhaps as much as 100%, the number of NKVD internal security troops after the German invasion, when there was a desperate need to reinforce the crumbling Red Army; while, in the Battle of Lvov, the Soviet 4th Army was sacrificed simply to win time for the NKVD to liquidate thousands of Ukrainian political prisoners held in the town, so that the Germans could not free them and employ them against the Soviet regime (17). Of course, no one could question these permanently operating factors. So, in the realm of military thought, this period was one of total stultification.

However, it was very different in the realm of action. Soviet nuclear research actually pre-dated the outbreak of the war, while 1943 saw a Central Committee (i.e. Stalin) decision directing atomic

weapons research. A special organ was created to co-ordinate all nuclear research and development, and after the United States bombing of Hiroshima and Nagasaki, Stalin laid down the policy objective of eliminating the United States nuclear monopoly as quickly as possible (18). Moreover, in 1945, Stalin ordered that the American B-29 strategic bomber, several of which forcelanded in Siberia after raids over Japan, be [illegible]d and put into production (19). In 1946, two _Katyusha_ regiments were merged to form the USSR's first ballistic missile unit (20). And in 1947, the Soviets initiated their ICBM programme - well before the Americans (21). Finally, in 1949, and far earlier than the West expected, Russia detonated her first atomic bomb (22).

Why was all this urgent activity not reflected in doctrine? Partially, it was a matter of necessity: despite the intensive development programme, nuclear weapons were a long way from making a significant contribution to Soviet military power. Primarily, it was for political and psychological reasons. With the Eastern European empire still in the process of being digested, Stalin is unlikely to have wished to draw attention to atomic weapons, given the United States monopoly (or, after 1949, considerable superiority) in such weapons and their

delivery systems. Related to this was the desire to persuade the West that Moscow could not be intimidated, not even by nuclear weapons.

This period in the development of Soviet doctrine came to an end with the death of Stalin on 5 March 1953. There followed a period of transition, with the commencement of a Party instituted and controlled debate on doctrine, centred in the new (1953) Military Science Directorate of the Soviet General Staff. The first known product of this process was General-Major N.A. Talenskiy's article 'On the Question of the Laws of Military Science' in the September 1953 edition of the General Staff's classified and restricted journal Military Thought. In fact, Talenskiy implied that Stalin's 'permanently operating factors' were not basic principles of war, and called for a critique of the then accepted military concepts. Over the following year, the journal published many letters concerning Talenskiy's article, indicating Party approval for the debate. However, for reasons unknown, Talenskiy himself was relieved of his post as editor of Military Thought, ultimately joining the Institute of History of the Soviet Academy of Sciences.

This limited debate occurred in the realm of a restricted publication; in the open press, the

Stalin Line was re-affirmed by Marshal A.M. Vasilevskiy, former Minister of Defence, who did so in two articles published in the magazine Red Star in February and May 1954 repectively. Likewise, Colonel P.A. Sidorov's 1954 basic military text, On Soviet Military Science re-affirmed the importance of the permanently operating factors (23).

Only with the appointment of Marshal G.A. Zhukov as Minister of Defence, in February 1955, did the confidential debate intensify. He is reported to have given a secret address at this time in which he severely criticised Stalin's concepts and called for a 'new look' in military affairs. The very next month Marshal P.A. Rotmistrov openly questioned the validity of Stalin's permanently operating factors, specifically in the case of nuclear war initiated by means of a surprise attack. Within twelve months Stalin's concepts had been consigned to the intellectual scrap-heap by most Soviet military thinkers. And in the famous Twentieth Party Congress of 1956, Khrushchev called for a re-examination of questions of military science. This resulted, in May 1957, in the convening of a secret conference to re-consider Soviet military science. In turn this was followed in 1958, by a series of secret high-level seminars, which ultimately reached the conclusion that the development of nuclear

weapons and guided missiles had radically altered all aspects of warfare, and that basic concepts needed to be considerably revised as a result. All these discussions were carefully monitored by the Party Secretariat, Politburo and by Khrushchev himself.

In order to achieve the necessary revisions in basic concepts, senior officers, including the Minister of Defence, were instructed to prepare studies on the impact of nuclear armed missiles on military art. These were to emerge as the famed Special Collection, published in Military Thought from January 1960 onwards. Meanwhile the Party leadership had concluded that the nuclear-tipped missile would be the decisive factor in any future war (24).

Also in this period, the Soviet Union's nuclear capacity increased as projects initiated under Stalin came to fruition. In August 1953, the Soviets exploded their first hydrogen bomb. By the end of 1954, no fewer than 1,500 TU-4s had been produced for the Soviet Air Force's 'Long-Range Aviation' - a force which had been virtually non-existent in 1945 - while 1954-55 saw the entry into service of the 3,800 mile range TU-16 (NATO code-name Badger) jet bomber, which could reach much of the United States on one-way missions. And in 1956-

57 deliveries began of the turboprop TU-20 (Bear) bomber, which had a combat radius of 3-4,000 miles. By the end of the fifties the Soviets had well over 1,000 Badgers and approximately 150 Bears in service (25). Moreover, on August 3, 1957, the USSR had tested the world's first ICBM, the SS-6 (a NATO code designation). And on October 4, 1957, they used an ICBM booster to launch Sputnik 1, the world's first artificial satellite, following up rapidly with Sputnik 2 on November 3, 1957, and Sputnik 3 in May 1958. Nor was the Soviet Navy inactive: September 1955 had seen the first experimental launch of a ballistic missile from a Soviet submarine. Between 1955 and 1957 seven Zulu (NATO code-name) diesel-electric submarines were converted to carry two launch tubes for the 300 nautical-mile range SS-N-4 Sark surface launched missiles. They were followed by a programme initiated in 1958 (and concluded in 1962) which produced 23 Golf diesel-electric and 8 Hotel nuclear-powered ballistic missile submarines, each carrying three SS-N-4s (26). Couple all this with an efficient Soviet dis-information programme to exaggerate Soviet nuclear power, and Khrushchev's nuclear bluster, and it is little wonder that the United States became afraid of a 'missile gap'.

All this ordered and monitored intellectual ferment culminated with the proclamation, by Khrushchev, in

a speech before the Supreme Soviet on 14 January 1960, of a new military doctrine for the USSR. With modifications, it remains Soviet doctrine to this day. There were six main elements in the new doctrine, as outlined by Khrushchev. The first of these was that there was no longer any fatal inevitability of war between communism and capitalism; this position, first propounded at the twentieth Party Congress of the CPSU in 1956, and re-affirmed at the Twenty-First Congress, was a reversal of one of the long-standing beliefs of the Party. This change was in reaction to the development of nuclear weapons. Second, should war occur, it would not commence, as in the past, by cross-border invasions, but by means of nuclear missile strikes deep into the interior. In Khrushchev's own words: "Not a single capital, no large industrial or administrative centre, and no strategic area will remain unattacked in the very first minutes, let alone days, of the war" (27). However, while the USSR must expect a surprise attack, such an attack will not, of itself, win the war. This would be because duplicate launch sites had been constructed and because the surviving nuclear missiles, which would be fired from them, would be sufficient to successfully deal with the aggressor. Fourth, because the USSR possessed both nuclear and thermonuclear weapons, and the rockets

to carry them, the Soviets could "wipe [any attacker] off the face of the earth" (28). True, such a nuclear exchange would inflict huge losses on the Soviet Union, but it would survive, whereas Western capitalism would be destroyed. Fifth, Soviet missiles were superior to American ones, and the USSR would seek to maintain this lead until a disarmament agreement was reached. Finally, national defence in the modern era was dependent upon firepower, not manpower; because of this, and because of Moscow's possession of nuclear weapons, the manpower of the Soviet armed forces would be reduced.

Ever since, this speech has been identified by Soviet sources as signalling the change in Soviet doctrine - though Khrushchev himself has never been mentioned by name since his ouster. The importance of this speech was highlighted, along with the details of the new doctrine, by the then Soviet defence minister, Marshal Malinovskiy, in a speech before the Party's Twenty-Second Congress in October 1961. This speech is worth quoting at length:

> "In that speech [i.e. Khrushchev's 1960 address], a thorough analysis was given of the nature of modern war, which lies at the base of Soviet military doctrine. One of the important positions of this doctrine is that a world war, if in spite of everything is unleashed by the imperialist aggressors, will inevitably take the form of nuclear rocket war. That

is, the kind of war in which the main means of striking will be the nuclear weapon and the basic means of delivering it to the target will be rocket. In connection with this, war will also begin in a different way from before and will be conducted in a different way ....

"The use of atomic and thermonuclear weapons, with unlimited possibilities for their delivery to any target in calculated minutes with the aid of rockets, permits the achievement of decisive military results in the shortest period of time at any distance and over enormous territory. The objects of crushing nuclear strikes will be groupings of the enemy armed forces, industrial and vital centres, communications junctions - everything that feeds war.

"A future world war, if not prevented, will take on an unprecedentedly destructive character. It will lead to the death of hundreds of millions of people, and whole countries will be turned into lifeless deserts covered with ashes ....

"In spite of the fact that in a future war the decisive place will belong to the nuclear rocket weapon, we nevertheless come to the conlusion that final victory over the aggressor can be achieved only as a result of the joint actions of all the services of the Armed Forces. This is why we are giving the necessary attention to perfecting all kind of weapons, teaching the troops to use them skillfully and to achieve decisive victory over the aggressor.

"We also consider that, in contemporary circumstances, a future world war will be waged, in spite of enormous losses, by massive, multi-million armed forces.

"... The importance of the beginning period of a possible war is that in this period the first massive nuclear strikes can, to an enormous degree, predetermine the whole subsequent course of the war, and lead to such losses in the interior and in the troops that the people and the country might be placed in exceptionally serious circumstances.

"Evaluating circumstances realistically, it must be taken into account that the imperialists are preparing a surprise nuclear attack against the USSR and other socialist countries. Therefore, Soviet military doctrine considers the most important, the main and paramount task of the Armed Forces to be in constant readiness for the reliable repulse of a surprise attack of the enemy and so frustrate his criminal plans.

"The fact is that in contemporary circumstances, any armed conflict inevitably will escalate into general nuclear rocket war if the nuclear powers are involved in it. Thus, we must prepare our Armed Forces, the country and all the people for struggle with the aggressor, first of all and mainly, in conditions of nuclear war.

"Our country is big and wide. It is less vulnerable than capitalist countries. But we clearly recognise that this would be for us an exceptionally severe war. We are deeply convinced that in this war, if the imperialists thrust it on us, the socialist camp will win and capitalism will be destroyed forever" (29).

This, then, is Soviet doctrine. Note the strong nuclear emphasis, and note again, the emphasis on preparing the whole country - and not just the armed forces - for nuclear war, and the belief that victory, though costly, is achievable in nuclear war. Malinovskiy's outline of Soviet doctrine has been repeated again and again since, sometimes in more detail, sometimes in less. Thus we find the same arguments made in the third (1962) edition of the authoritative Party-military work, Marxism-Leninism on War and the Army, in Malinovskiy's own pamphlet Vigilantly Stand Guard Over the Peace, which appeared in December 1962, less than two

months after the end of the Cuban missile crisis; P.M. Derevyanko's Problems of the Revolution in Military Affairs (1965 - after the fall of Khrushchev; the appearance of this book indicated that there would be no change in Soviet doctrine under the new leadership); the fourth (1965) edition of Marxism-Leninism on War and the Army; The History of Military Art (1966 - a joint effort by staff members of the Frunze Military Academy and the Lenin Military-Political Academy); Marshal Zakhavov's (editor) Fifty Years of the Armed Forces of the USSR (1968); and S.N. Kozlov's Officer's Handbook (1971), among many others. Only two modifications have since been made to the doctrine, which has been communicated to, and popularised among, junior officers, NCOs, soldiers as well as the civilian population, by means of the slogan 'The Revolution in Military Affairs'.

The first of these modifications occurred following NATO's adoption of the strategy of 'Flexible Response' in Europe during 1967 (precisely at the time when McNamara was moving away from Flexible Response in practice!). In Europe, Flexible Response held that an East-West war could initially be fought with only conventional weapons. That the Soviets had modified their doctrine to cope with this first became apparent in the fifth (1968)

edition of Marxism-Leninism on War and the Army, which included the following:

> "Our military doctrine gives the main role in defeating an aggressor to the nuclear rocket weapon. At the same time it does not deny the important significance of other kinds of weapons and means of fighting and the possibility in certain circumstances of conducting combat operations without the use of nuclear weapons" (30).

The emphasised section was totally new; it had not appeared in any earlier edition. The revisions in the fifth edition were credited to Lt-Col V.M. Bondarenko who, in the December 1968 issue of the highly authoritative journal Communist of the Armed Forces, expanded on this modification and placed it firmly in its context within 'the revolution in military affairs':

> "In our times conditions may arise when in individual instances combat operations may be carried out using conventional weapons. Under these conditions, the role of conventional means and the traditional services of the armed forces are greatly increased. It becomes necessary to train troops for various kinds of warfare. This circumstance is sometimes interpreted as a negation of the contemporary revolution in military affairs, as its conclusion.
>
> "One cannot agree with this opinion. The point is that the new possibilities of waging armed struggle have arisen not in spite of, but because of the nuclear missile weapons. All this forces the conclusion that the present situation is one of the moments in the revolution in military affairs. It flows out of this revolution, continuing it, instead of contradicting it.
>
> "On the basis of this, we are able to

> define the contemporary revolution in military affairs as a radical upheaval in its development, which is characterised by new capabilities of attaining political goals in war, resulting from the availability of nuclear weapons to the troops" (31).

The new acceptance of the possibility of purely conventional fighting is thus firmly rooted within the 'revolution in military affairs' and securely placed under the Soviet nuclear umbrella. It is thus an extension, not a contradiction, of the doctrine laid down at the beginning of the decade. Bondarenko's arguments were repeated subsequently by other Soviet sources - including the then Soviet Defence Minister, Marshal A.A. Grechko. Colonel Seleznev summed up the modified doctrine in March 1970:

> "The main and decisive means of waging the conflict will be the nuclear rocket weapon. In it, classical types of armaments will also find use. In certain circumstances, the possibility is admitted of conducting combat operations by units and subunits with conventional weapons" (32).

The Soviet Union had - and has - acknowledged the possibility that a conflict will initially involve conventional weapons only. But they remain firm in their belief that nuclear weapons would probably be used from the start, and that these weapons remain the decisive factor in any war.

The second modification to the doctrine occurred in

the early seventies. The first, cautious hint of the new adaptation came right from the top - Party Secretary L.I. Brezhnev himself, who in March 1971 addressed the Twenty-fourth Party Congress:

> "The Soviet people can be sure that at any time in the day or night our glorious armed forces are ready to repel an enemy no matter from where it comes. Any possible aggressor is fully aware that in the event of an attempt of a nuclear missile strike on our country, he will receive a devastating retaliatory strike" (33).

At first observers saw this as a reference to China; but that this was too narrow an interpretation began to become clear the following year. For 1972 saw the publication of a new book, edited by Colonel Kulish, entitled Military Force and International Relations. It was a new departure in Soviet military writings, for its central theme was that the USSR required the ability to project military force abroad:

> "Greater importance is being attached to Soviet military presence in various regions throughout the world, reinforced by an adequate level of strategic mobility of its armed forces.
>
> "In connection with the task of preventing local wars and also in those cases wherein military support must be furnished to those nations fighting for their freedom and independence against the forces of international reaction and imperialist interventions, the Soviet Union may require mobile and well-trained and well-equipped forces ....
>
> "Expanding the scale of Soviet military presence and military assistance furnished by other socialist states is being viewed

today as a very important factor in international relations" (34).

Then, in 1974, Defence Minister Marshal Grechko came out with an unprecedented statement that most authoritatively confirmed the new addition to Soviet doctrine:

> "At the present stage the historic function of the Soviet Armed Forces is not restricted to their function in defending our Motherland and the other socialist countries. In its foreign policy activity the Soviet state purposefully opposes the export of counterrevolution and the policy of oppression, supports the national liberation struggle, and resolutely resists imperialists' aggression in whatever distant region of our planet it may appear" (35).

Henceforth the Soviet armed forces would operate anywhere in the world where the Party leadership deemed its interests were at stake. This was a logical extension of Soviet doctrine, and provided the doctrinal base for the writings of the Chief of the Soviet Navy, Admiral Gorshkov, as well as signalling a new direction for the development of the Soviet Navy.

Nevertheless, the core of Soviet doctrine remains unchanged: the nuclear missile r[illegible] the decisive factor in any world war; howe[illegible]uclear parity has largely neutralised America[illegible]uclear forces, the possibility of waging a conventional war, under the protection of the Soviet nuclear umbrella, is

recognised; projection of military force abroad is the logical extension of this.

What is the strategy that has been developed to implement this doctrine? In January 1960, the very month Khrushchev first pronounced the new doctrine, a highly classified edition of Military Thought appeared, initiating what is known as the Special Collection, which, according to Colonel Oleg Penkovskiy, was a series of articles devoted to the discussion of future wars and of the requirements of the new doctrine. The first article, by General-Lieutenant Gastilovich, set the theme for the whole series. The emphasis was on nuclear warfare. Whereas previously wars had begun on the borders of the combatant countries, argued Gastilovich,

> "If war starts now, military action will evolve in a different way because countries have available means of delivering weapons over thousands of kilometres ....
>
> "About 100 nuclear charges, exploded in a brief period of time in a highly industrialised country with a territory of about 300-500 thousand kilometres, will suffice to transform all of its industrial areas and administrative-political centres into a heap of ruins, and the territory into a lifeless desert contaminated with deadly radioactive substances" (36).

Penkovskiy summarised the contents of the whole Special Collection as follows: any future war would commence with a sudden, surprise nuclear attack upon the enemy; there would be no declaration of war -

indeed, the Soviets would do their best to avoid such a declaration; local wars were envisaged, but only as preludes to a global nuclear exchange; and while the intention would be to achieve a rapid victory, there was recognition of the possibility that even nuclear war could be protracted and that the USSR must be prepared for this (37).

The accuracy of Penkovskiy's account was confirmed with the publication of the unclassified book, Military Strategy, edited by Marshal V.D. Sokolovskiy (former Chief of General Staff), in mid-1962. The focus was unhesitatingly nuclear. Indeed, this was the justification for the book, as Sokolovskiy wrote in his introduction:

> "the appearance of weapons of mass destruction in the armament of modern armies and in particular the development and perfection of missiles with nuclear warheads have necessitated a fundamental review of many tenets of military strategy" (38).

Military Strategy reflects the doctrine propounded by Khrushchev and Malinovskiy, translated into strategy. Thus, "a third world war would be first of all a nuclear rocket war"; therefore "The initial period of the war will be of decisive importance for the outcome of the entire war"; as a result, the prime task facing Soviet strategy was the development of reliable methods of "repelling a

surprise nuclear attack of an aggressor" (39). As in the Special Collection, the stress was on a devastating initial (officially, 'retaliatory') nuclear strike upon the enemy; a short war if possible, but with the ability to fight a long one if required; on thorough preparation in peacetime for the eventuality of war; and on the need to prepare the population so that it would survive in nuclear war conditions.

June 1963 saw the publication of the second edition of Military Strategy: though, in the interim, there had been the Cuban missile crisis and the signing of the Test Ban Treaty, there were no significant differences from the first edition. Moreover, in 1964, the second edition of a work entitled On Soviet Military Science appeared; the first (1960) edition had briefly mentioned nuclear weapons, but had focused on conventional ones. Now, in 1964, the focus was strongly nuclear. As in the realm of doctrine, the fall of Khrushchev had no impact on the new Soviet strategy. Soviet writings on strategy continued to focus on nuclear weapons. Thus, in 1966, Marshal Sokolovskiy and General-Major Cherednichenko wrote that:

> "The determination of the composition of the armed forces for peacetime and especially for time of war, the making of a reserve of arms, military equipment and primarily, nuclear rocket weapons as a means of war, as well as material

> reserves, deploying strategic groups and organising the all-round security of the armed forces in time of war - this is the crucial task of military strategy" (40).

And, as if this was not clear enough, the authors go on to spell it out bluntly:

> "The most acute problem of strategy in contemporary circumstances is the working out of methods of waging nuclear rocket war" (41).

Nineteen sixty eight saw the publication of the third edition of Military Strategy; this edition was nominated for the prestigious Frunze Prize in 1969 and is listed in the Soviet Military Encyclopedia (the first volume of which appeared in 1976) as a basic reference book on strategy. The nuclear emphasis was unadulterated, though, in accordance with the modifications in doctrine, Military Strategy now recognised that non-nuclear wars could be fought, and that the Soviet armed forces should be ready to fight such wars. As with doctrine, Soviet strategy was not in the least affected by the signing of the SALT I Treaty. For example, in the book Scientific-Technical Progress and the Revolution in Military Affairs (1973), we find:

> "The possibility of using nuclear missile weapons has required the development of active and decisive forms and methods for strategic as well as tactical operations without any delay from the very outset of the war" (42).

Since then, the only modification to Soviet strategy has concerned the projection of Soviet forces into

any and all parts of the world, reflecting the modification to doctrine in the early seventies. Nevertheless, the fundamental tenet of Soviet strategy remains unaltered - the armed forces must be prepared for the possibility of a nuclear war.

Having established their nuclear doctrine and strategy, the Soviet Union has engaged in an on-going process of providing itself with the forces necessary to implement them. Organisationally, a completely new and separate armed force, the Strategic Rocket Forces, was established in May 1960 to control all strategic land-based Ballistic Missiles, while in 1961 the Civil Defence organisation was transferred from the control of the Ministry of the Interior to the Ministry of Defence.

In terms of hardware, the last quarter-century has seen a most impressive build-up in the Soviet arsenal. In late 1962, the Soviet nuclear forces had comprised some 100 TU-20 Bear and Myasishchev Mya-4 Bison heavy bombers, 1,350 medium jet bombers, and 35 SS-6 and SS-7 ICBMs (43), the products of projects launched under Stalin's regime. In 1963, the SS-8 ICBM became operational, and under the new doctrine, deployment of ICBMs was accelerated. By the end of 1964, the number of Soviet ICBMs had increased to approximately 200. Moreover, the

Soviets had begun to construct hardened silos from which to launch these missiles. In 1967, the SS-9, then the world's biggest ICBM, entered service. Around the same time the smaller SS-11 became operational, followed in 1969 by the SS-13. By the end of 1970, the USSR had deployed 1,100 operational ICBMs, including 275 giant SS-9s, as against America's total of 1,054, of which only 54 were heavy ICBMs (44). Between 1967 and 1972 the Soviets had deployed over 200 ICBMs every year, finally reaching a total of no less than 1,600. This level was institutionalised in the SALT I agreement, which allowed the USSR a total of 1,618 ICBMs (45). Henceforth, the emphasis would be on upgrading the quality - i.e. the accuracy and reliability - without reducing the throw weight (i.e. the size of the warheads) of Soviet ICBMs. Thus the seventies saw the deployment of vastly more accurate, and MIRV-capable, ICBMs - the SS-17 and SS-19 medium missiles and the SS-18 heavy missile; while another medium ICBM, the SS-16 has not been operationally deployed (though an IRBM version, the fully-mobile SS-20, has been). By 1981 Soviet ICBM strength stood at 1,398, down in quantity but up in quality, with modernisation taking place at the rate of approximately 175 new missiles a year. Moreover, both the SS-17 and SS-18 employ 'cold-launch' techniques - i.e. the ICBM is first ejected from the

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silo and then ignites its rocket motors - thus considerably reducing launch damage to the silo, making re-loading and re-use of the silo practical and raising the disturbing question: how many re-load ICBMs does the Soviet Union have? The threat these developments pose to the United States of America has already been discussed in the preceeding chapter.

With SLBMs the story is the same - massive increases in both quantity and quality. The Hotel class ballistic missile submarines were fol[illegible]n 1968 by the Yankee class, each carrying sixt[illegible]merged launched SS-N-6 SLBMs, possessing a range of 1,300 nautical miles; by the end of 1970, 17 Yankees were operational. These were supplemented by cruise missile armed submarines - 57 of them (23 diesel-electric and 34 nuclear) - capable of attacking United States coastal cities with their 400 nautical miles range SS-N-3 missiles (47). The Yankee programme ended in 1974 after the construction of 34 submarines, and was followed by the Delta class, which, in turn, is composed of three sub-classes. The Delta I sub-class carries twelve of the 4,200 nautical mile range SS-N-8 SLBMs; the Delta II sixteen of the SS-N-18 SLBM. The latest Soviet programme, dating from approximately 1980, is the massive Typhoon submarine carrying no less than

twenty SS-N-20 SLBMs (48).

By contrast, the Soviet strategic bomber force suffered from a long period of neglect, perhaps resulting from geographic factors (the USSR is poorly placed to act as a base for air attacks on the United States of America). This only began to be rectified in the mid-seventies, with the deployment of the TU-22M Backfire bomber in 1974. With air-to-air refuelling, the Backfire can achieve intercontinental ranges (49). More importantly, the early eighties has seen the development and testing of a new, truly intercontinental bomber, originally known as RAM-P but now codenamed Blackjack. Believed to possess an unrefuelled combat radius of 4,000 nautical miles, and reportetly capable of a maximum speed of twice the speed of sound (Mach 2), it will be a very formidable aircraft when deployment begins in 1987. On top of this, the USSR appears to be developing long-range cruise missiles - the 1,500 nautical mile range AS-X-15 and the 2,000 nautical mile range supersonic BL-10 - to arm the Backfire and Blackjack, a combination which would pose an enormous threat to the continental United States of America (50).

Similarly, doctrinal and strategic recognition of the value of conventional forces has been followed

by a considerable upgrading in the quality of all Soviet conventional systems - tanks are better armed; artillery has become self-propelled; aircraft have longer ranges and better payloads etc.. Likewise, doctrinal and strategic acceptance of the value of power projection has begun to have an impact on the type of ships built for the Soviet Navy. Hitherto a sea denial force intended to attack United States aircraft carriers, Polaris submarines and NATO convoys, it is in the process of becoming a sea control force with its own aircraft carriers, modern replenishment ships, ocean-going amphibious vessels and longer endurance cruisers and destroyers. Moreover, the Soviet Union has practised power projection abroad in Angola (1975-76), Ethiopia (1977) and Afghanistan (1979) with considerable success.

Thus, 1984 finds the Soviet Union with a logical, coherent and widely disseminated and understood military doctrine and strategy, which has, moreover, remained unaffected by the changes in the Soviet leadership over the past twenty years (Khrushchev to Brezhnev 1964, Brezhnev to Andropov 1982, Andropov to Chernenko 1984), and for the implementation of which the necessary forces (both in terms of quantity and quality) exist. As the Scotts point out:

"... Soviet military doctrine and strategy has an integrity of its own ... even with the revolution in military affairs, Soviet military doctrine is still 'classical' in that war remains an extension of politics and that deterrence is not an end in itself" (59).

NOTES

1. Dziak, J.J., Soviet Perceptions of Military Power: The Interaction of Theory and Practice, Crane, Rusak and Co., New York, 1981, p. 17.

2. Dictionary of Basic Military Terms (A Soviet View), p. 37, quoted in ibid., p. 22.

3. Grechko, A.A., Armed Forces of the Soviet State, p. 340, quoted in Scott, H.F. and W.F., The Armed Forces of the USSR, Arms and Armour Press, London, 1981, p. 37.

4. Grechko, ibid., pp. 340-341, quoted in Dziak, op.cit., p. 22; also quoted, in a slightly different translation, by Scott and Scott, op.cit., p. 37.

5. Kozlov, S.N., The Officer's Handbook (A Soviet View), p. 63, quoted in Dziak, op.cit., p. 23. General-Major is a Soviet rank equivalent to Brigadier in the British Army and Brigadier-General in the United States Army and must not be confused with those Armies' more senior ranks of Major-General.

6. Dictionary of Basic Military Terms (A Soviet View), p. 38, quoted in Dziak, ibid., p. 29.

7. Kozlov, S.N., op.cit., p. 57, quoted in Scott and Scott, op.cit., p. 69.

8. Scott and Scott, ibid.

9. Kozlov, op.cit., p. 65, quoted by Dziak, op.cit., pp. 33-34; emphasis added.

10. Kozlov, ibid., p. 68, quoted by Scott and Scott, op.cit., p. 70.

11. Sokolovsky, V.D. and Cherednichenko, M., "Military Strategy and its Problems", p. 35, quoted in Dziak, op.cit., p. 31; emphasis added.

12. Dziak, ibid., p. 30.

13. Kozlov, op.cit., p. 78, quoted in Scott and Scott, op.cit., p. 74; emphasis added.

14. Dictionary of Basic Military Terms (A Soviet View), op.cit., p. 150, quoted in Scott and Scott, ibid., p. 70.

15. Kozlov, op.cit., p. 70, quoted in Scott and Scott, ibid.

16. Scott and Scott, ibid., p. 38, and Freedman, L. The Evolution of Nuclear Strategy, Macmillan, London, 1981, p.58; Freedman reports that the permanently operating factors were promulgated in 1942.

17. Tolstoy, N., Stalin's Secret War, Pan, London, 1981, pp. 237-254; Stalin's bloody obsession with 'the stability of the rear' is the central theme of this study.

18. Dziak, op.cit., p. 13.

19. There is an amusing, though almost certainly apocryphal, account of this in Suvorov, V., The Liberators: Inside the Red Army, Hamish Hamilton, London, 1981, pp. 127-131. The copy was called the Tupolev TU-4, and given the NATO code-name Bull.

20. Dziak, op.cit., Katyushas were truck-mounted multiple unguided rocket launchers.

21. Freedman, op.cit., p. 61.

22. Scott and Scott, op.cit., p. 38.

23. Ibid., p. 40.

24. Ibid., p. 41.

25. Polmar, N., Strategic Weapons: An Introduction, Crane Russak, New York, 1982, pp. 27-28. Combat radius is the distance an aircraft can fly, with its payload, to a target, and still have sufficient fuel to return to its original home.

26. Polmar, ibid., pp. 30-32; Freedman, op.cit., p. 139.

27. Khrushchev, N., "Disarmament for Durable Peace and Friendship", speech to the Fourth Session of the Supreme Soviet, USSR, 14 January 1960, quoted in Scott and Scott, op.cit., p. 42.

28. Ibid.

29. Ya Malinovsky. R., "Report to the Twenty-Second Congress the CPSU", quoted in Scott and Scott, ibid., pp. 43-44.

30. Ya Sushko, N. and Tyushkevich, S.A., (eds.), Marxism-Leninism on War and the Army, 5th ed., 1968, p. 292, quoted in Scott and Scott, ibid., p. 54, emphasis added.

31. Bondarencko, V.M., "The Modern Revolution in Military Affairs and the Combat Readiness of the Armed Forces", in Communist of the Armed Forces, December 1968, p. 29, quoted in Scott and Scott, ibid., p. 55, emphasis added.

32. Seleznev, I.A., 'V.I. Lenin - The Founder of Soviet Military Science", in Communist of the Armed Forces, March 1970, p. 6, quoted in Scott and Scott, ibid., p. 56.

33. Brezhnev, L.I., "Address to the Twenty-Fourth Congress of the CPSU", quoted in Scott and Scott, ibid., p. 56.

34. Kulish, V.M. (ed.), Military Force and International Relations, p. 137. quoted by Scott and Scott, ibid., p. 57.

35. Grechko, A.A., "The Leading Role of the CPSU in Building the Army of a Developed Socialist Society", Problems of the History of the CPSU, May 1974, quoted in Scott and Scott, ibid., p. 57.

36. Gastilovich, A.I., "The Theory of Military Arts needs Review" in Special Collection No. 1, 1960, quoted in O. Penkovskiy, The Penkovskiy Papers, Doubleday, New York, 1965, pp. 251-252.

37. Penkovskiy, ibid., pp. 257-258.

38. Sokolovskiy, V.D. (ed.), Soviet Military Strategy, 1975, p. 387; this English translation contains passages from all three editions, to permit comparison; quoted in Scott and Scott, op.cit., p. 75.

39. Sokolovskiy, ibid., p. 306, quoted in Scott and Scott, ibid., pp. 76-77.

40. Sokolovskiy, V.D., and Cherednichenko, M.I., "On Contemporary Military Strategy" in Communist of the Armed Forces, April 1966, quoted in Scott and Scott, ibid., p. 78.

41. Ibid, emphasis in original.

42. Lomov, N.A. (ed.), Scientific-Technical Progress and the Revolution in Military Affairs, 1973, p. 133, quoted in Scott and Scott, ibid., p. 80.

43. Polmar, op.cit., p. 39.

44. Ibid., pp. 40-41.

45. Ibid., pp. 77-78.

46. Ibid., pp. 78-80.

47. Ibid., pp. 41-43.

48. Ibid., pp. 80-82.

49. Ibid., pp. 83-84.

50. Carus, W.S., "Appendix II: The Evolution of Soviet Military Power since 1945" in E. Luttwak, The Grand Strategy of the Soviet Union, Weidenfeld and Nicolson, London, 1983, pp. 179-180; and Flight International, Vol. 125, No. 3898, 21 January 1984, p. 138.

51. Scott and Scott, op.cit., p.89.

CHAPTER 7: WARS OF NATIONAL LIBERATION AND COUNTER-INSURGENCY

At the opposite end of the spectrum from nuclear weaponry and strategy, and apparently bearing little relation to it, lies insurgency, or unconventional, or irregular warfare. But the two apparent extremes are far more closely linked than many realise - linked by the Soviet doctrines of Peaceful Coexistence and Wars of National Liberation.

For, while, as has been seen, the Soviet view of nuclear weapons and strategy is very different from that of the United States, there was, for many years, the inescapable fact that the United States possessed a clear nuclear superiority which would, in event of a fullscale war, gravely endanger the survival of the USSR. Yet Moscow was, and is, ideologically bound to pursue the goal of world revolution (1). How to further this aim without provoking the United States of America to a nuclear response? The answer was a three pronged strategy: Peaceful Coexistence, Wars of National Liberation, and a massive and relentless military build-up, all interlinked and interacting with each other.

While the Soviet concept of Peaceful Coexistence pre-dated the development of nuclear weapons, it had

been a mere tactic to help the USSR survive a period of great weakness following the revolution and civil war (2). *Khrushchev*, however, elevated it into a strategy (3). This new development was first outlined at a closed plenum of the Soviet Communist Party (CPSU) Central Committee in July 1955. The whole purpose of Peaceful Coexistence was, and is, to allow the USSR to expand its ideological empire without triggering a massive Western response - indeed, while actually lulling the West into a false sense of security - by engaging in subversion, ideological intrusion, diplomacy, etc. (4).

That this is so is clear from many Soviet statements and writings made since the official pronouncement of the policy at the 20th Party Congress in 1956. Thus, in 1959, the 'Statement of the 81 Communist and Workers Parties' stated:

> "The policy of peaceful coexistence is a policy of mobilising the masses and launching vigorous action against the enemies of peace. Peaceful co-existence of states does not imply renunciation of the class struggle ... In conditions of peaceful coexistence favourable opportunities are provided for the development of the class struggle in the capitalist countries and the national liberation movement of the peoples of the colonial and dependent countries. In their turn, the successes of the revolutionary class and national liberation struggle promote peaceful coexistence ... [Communists] will do their utmost for the people to weaken imperialism and limit its sphere of action by an active struggle for peace, democracy and national liberation" (5).

Khrushchev himself, on 6 January 1961, stated that:

> "the policy of peaceful coexistence as regards its social content, is a form of intense economic, political and ideological struggle of the proletariat against the aggressive forces of imperialism in the international arena" (6).

Ten years later, V.N. Egorov, an official Soviet ideologist, was to write

> "... while political and ideological disputes between states should not lead to war, the concept of peaceful coexistence means intensification of the struggle of the working classes, of all the Communist parties, for the triumph of socialist ideas" (7).

While the following year (1972), Leonid Brezhnev proclaimed

> "While pressing for the assertion of the principles of peaceful coexistence, we realise that successes in this important matter in no way signify the possibility of weakening the ideological struggle",

rather,

> "We should be prepared for an intensification of this struggle and for it becoming an increasingly more acute form of the struggle between the two social systems. We have no doubt as to the outcome of this struggle, because the truth of history and the objective laws of social development are on our side" (8).

In 1979, an even more candid statement, by Gen-Maj. D.A. Volkogonov, appeared in the journal Communist of the Armed Forces:

> "Peaceful coexistence facilitates the weakening of the omnipotence of the military-industrial complex in the capitalist world while creating political, economic, and ideological struggle by the proletariat" (9).

The 'executive arm', so to speak, of this Grand Strategy is the Strategy of Wars of National Liberation. The intention was, and is, to harness Third World anti-Western nationalism to the USSR's revolutionary cause. As the authoritative journal, Voprosy istorii KPSS stated:

> "The fate of human progress depends upon whom seventy under-developed countries choose to follow. This is a matter of great historical significance" (10).

The Soviet Military Encyclopedia (1978) has defined Wars of National Liberation as follows:

> "National Liberation struggle is a form of war waged by peoples of colonial, independent, or formerly colonial countries ... in which Socialist countries become the decisive factor when the peoples launch an armed struggle against internal reactionaries" (11).

To this end, in January 1966 the Soviet Union organised a Tri-continental Conference in Havana, Cuba. The month before, Tass had stated:

> "The Soviet Union, in taking part in the Havana conference ... will do everything it can to help consolidate the front of the struggle against imperialist aggression" (12).

At the conference itself, Brezhnev pledged that the USSR would

> "strengthen the fraternal links of the CPSU with the communist parties and revolutionary democratic organisations in Asia, Africa and Latin American countries",

and, furthermore, stressed that the global success of communism was "bound up with the successes of the national liberation movement" (13). Sharaf R.

Rashichov - head of the Soviet delegation to Havana, First Secretary of the Party Central Committee of Uzbekistan, and candidate member of the Presidium of the Central Committee of the CPSU - declared:

> "Our purpose is the formation of a united front against the common enemy ... [and] international imperialism, headed by the United States" (14).

The Conference, in the words of Cuban Communist Party Central Committee member Lionel Soto, marked

> "a new, higher stage in the liberation movement ... [It] will be peaceful catalyst, also strategically. It will spur on social revolution in the capitalist countries" (15).

A resolution at this Conference re-affirmed the link between the concepts of Peaceful Coexistence and national liberation:

> "This doctrine [peaceful coexistence] applies only to relations between states with different social and political systems. It cannot apply to relations between the social classes, between the exploited and the exploiters within separate countries, or between the oppressed peoples and their oppressors" (16).

A 'Committee of Assistance and Aid for the Peoples Fighting for Their Independence' was established to act as a central body for policy and strategy for Wars of national liberation. The 513 participants hailed from the then Portuguese colonies of Angola and Mozambique, from Zaire, the then Rhodesia, North and South Yemen, South Africa, South West Africa/ Namibia, 'Palestine', Laos, Cambodia, South Korea,

Dominican Republic, Venezuela, Guatemala, Peru, Columbia, Cyprus, Panama, Sabah, Sarawak and Brunei (17).

This 1966 Conference was followed up by two more Soviet sponsored Conferences, both in 1969. First, there was the liberation conference at Khartoum, attended by representatives of subversive movements from South Africa (ANC), Rhodesia (ZAPU), South West Africa/Namibia (SWAPO), Angola (MPLA), Portuguese Guinea (PAIGC), and Mozambique (FRELIMO). Then, in October, at Alma Ata (in Kazakhstan), the 'symposium' on 'The Leninist Teaching of National Liberation Revolution and the Present Developing Countries', which delegates from fifty Third World countries attended (18).

Nor is Moscow's support for wars of national liberation merely rhetorical. As early as 1964 the *Soviet Politburo decided to increase its spending on* Terrorism by 1000% (19). Within months of the conclusion of the Tricontinental Conference a whole network of training camps for insurgents had been created in Cuba, supervised by KGB Colonel Vadim Kotchergine (20). Since then, this network of training camps has grown worldwide, embracing countries such as Czechslovakia, East Germany, Hungary, Bulgaria, North Korea, South Yemen,

Algeria, Libya, Angola, Mozambique as well as the USSR itself (21). The Soviet Union's training camps appear to be concentrated in and around Moscow, Odessa, Tashkent and Simferopol (where one camp alone can simultaneously train 400 recruits), and provide instruction in mine-laying, ambush techniques, fire co-ordination, revolutionary tactics in general, driving, radio and television techniques, political indoctrination and intelligence. These camps are apparently run by Soviet Military Intelligence, the GRU (22). One terrorist, captured by the Israelis, reported that in 1976 she had been trained at Camp Khayat (South Yemen), at which time the trainees had included recruits from Holland, Germany, Ireland, Iran, Turkey, Latin America, Eritrea and Japan; Cuban instructors had been prominent (23).

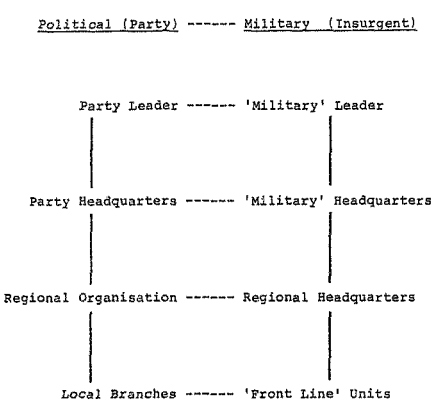
How is this strategy of 'National Liberation' *organised and implemented at the level of the target* state? When considering this 'operational' aspect of the strategy, one must always remember that military action and politics cannot be divorced from each other; rather, they are closely interlocking. And in no form of conflict is this interlocking more evident than in wars of national liberation, which are, of course, wars of insurgency. In this regard, it is necessary to return to Clausewitz:

> "It is clear, consequently, that war is not a mere act of policy but a true political instrument, a continuation of political activity by other means. What remains peculiar to war is simply the peculiar nature of its means .... The political objective is the goal, war is the means of reaching it, and means can never be considered in isolation from their purpose" (24).

Nor should one forget his rider to this:

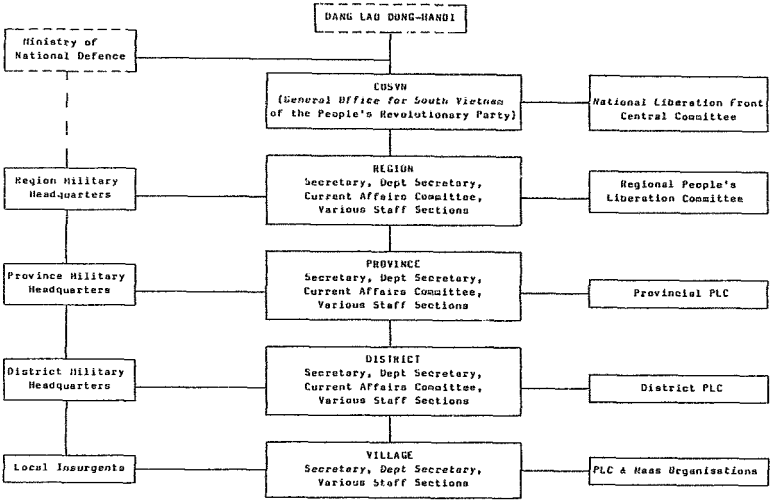
> "War ... is an act of policy .... That ... does not imply that the political aim is a tyrant. It must adapt itself to its chosen means, a process which can radically change it ..." (25).

In practice, this interaction is illustrated and exemplified by the invariable dual structure of the various insurgent organisations: a political structure with a parallel 'military' structure. This always applies, whether the movement is rural or urban or both. Though of course the political structure - the 'Party' - is always established first, each level in the political hierarchy comes to be matched by an equivalent level in the 'military' hierarchy, while the geographical divisions of the party are almost always congruent with the various zones of 'military' operation. This can be illustrated schematically as follows:



Source: Paget, J., Counter-Insurgency Campaigning, Faber and Faber, London, 1967, p. 182.

Real organisational structures tend to be somewhat more complex, but they nevertheless follow this basic pattern, as can be seen from the organisational chart for the Viet Cong:



Adopted from Internal Security Defence Review, Vol. 1, No. 1, March 1983, p. 13, Figure 1.

Neither of these wings can effectively operate without the other.

The actual process of subversion, in its classical form, involves four stages. Firstly, there is the creation of the underground party organisation, by the party itself. This involves the infiltration, subversion and intimidation of the local population in the target area. The infiltrators will focus on real or imagined grievances felt by the inhabitants, in an attempt to win over the target population. But this approach is always accompanied by coercion in the form of terrorism. This is a slow process that can, and usually does, take years. As the underground organisation develops and spreads, it destroys the security of the people and disrupts the flow of intelligence to the Security Forces - who are usualy unaware of this process of subversion. Once in place, the party can provide logistic support and intelligence for the active insurgents of the military wing.

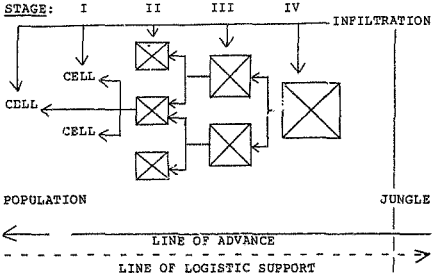
With the successful establishment of the party organisation in the target area, the second stage begins. The active insurgent or military forces begin to come into being with the creation of village insurgent squads. These units are often 'part-time' formations, rendering detection

difficult; their function is to reinforce the underground organisation, and to physically eliminate the representatives of the central government resident in the villages. Such governmental representatives have often already had their power and status undermined by the activities ot the party. It must never be forgotten that this second stage of insurgency is totally dependent on the party underground for its survival and effectiveness.

The next, third stage is the creation of regional insurgent forces, composed of full-time insurgents. These, again, act in support of the elements of the above two stages, providing yet greater security for the underground organisation and virtually eliminating the danger of Security Force strikes on the village squads, if only by becoming the primary targets for such strikes. But they also act offensively, placing greater pressure on the government and forcing it into the defensive. In turn, these Regional Forces can only survive because of the activities of stages one and two, providing them with essential logistical support and intelligence (such as locations and strengths of Police posts, routes of government patrols, threats from major Security Force operations, etc.). The Police are an especial target for these Regional units.

The final, and highest, stage of the classical insurgency pattern is the formation of regular units. Initially, these are small formations established in safe, remote, areas or in friendly foreign sanctuaries. Ultimately, they reach divisional strength; their function is to engagge and destroy the major units of the government's army. Yet, despite their size, and relative power, they are still interlinked with the other levels of insurgency who provide the critically needed flow of intelligence, logistics, replacements, and rear area security. Even at this late stage, all the elements are totally interdependent, with the underground party still the essential, irreplaceable foundation on which the whole complex structure is founded and without which the other elements would rapidly be destroyed.

This process of insurgency can be schematically illustrates as follows:



Adopted from R. Thompson, No Exit from Vietnam, Chatto and Windus, London, 1969, pp. 32-33.

However, this classical model has rarely been achieved - virtually only in China and Indo-China. In most other cases, a hybrid model has come into being comprising two levels: the underground party organisation, which functions in exactly the same manner as the underground organisation in the classical model; and the Regional insurgent units, which also have to fulfil some of the roles of the village squads in the classical model. The Regular, that is conventional, units never occur in these hybrid cases. It was this hybrid version of insurgency that was apparent in Malaya, Angola, Mozambique, Rhodesia, Nicaragua and which is currently being practised in South West Africa/ Namibia and El Salvador, to give only a few

examples. It has also been adopted by nationalist insurgent groups, such as the IZL in mandated Palestine and EOKA in pre-independence Cyprus, which otherwise had no significant link-up with the Soviet strategy of National Liberation. In urban insurgency, this 'two level' model of underground organisation and insurgent force is the only applicable one. However, there is a considerable difference in scale between rural and urban insurgent forces - the former are almost invariably considerably larger than the latter.

But, whatever version of insurgency is experienced, all have one critically important print in common, which bears repeating: all are totally dependent for survival and ultimate success on the underground organisation. Without this organisation, there would be no food, no recruits, no secure bases, no intelligence; the insurgents would be blind, deaf, sick and starving - and thus, easy targets for the Security Forces.

Many historical examples can be given of the process of subversion; a recent case, involving the hybrid model, will be examined - Rhodesia (now Zimbabwe) (28). All early insurgent infiltration attempts, carried out by the Zimbabwe People's Revolutionary Army (ZIPRA) of Joshua Nkomo's Zimbabwe African

People's Union (ZAPU) in the period 1967-68, had failed disastrously because ZAPU had totally neglected to create the necessary underground organisation without which the Terrorists of ZIPRA could not survive. And they did not survive. This strategic incompetence greatly aided the rival Zimbabwe African National Liberation Army (ZANLA) of Robert Mugabe's Zimbabwe African National Union (ZANU) in two ways. It illustrated how not to conduct insurgency, and it resulted in gross over-confidence and complacency on the part of the Rhodesians - Security Forces and government both. They simply assumed that all further infiltration attempts would be repeats of ZIPRA's inept efforts. No meaningful attempt was made to examine the lessons learnt - and publicised - by other countries fighting insurgency elsewhere in the world. Thus they failed to take any precautions against the construction of an underground organisation.

Yet the creation of precisely such an organisation was ZANU/ZANLA's top priority; and they commenced it under the worst possible conditions - from rear bases in distant Tanzania via war-torn and Portuguese ruled Mozambique. Had the Rhodesians been alert, ZANU would never have succeeded in establishing its organisation, ZANLA's operations would have been aborted before they began, and the

history of Southern Africa would have been different. However, this was not to be, and ZANU successfully established itself within *Rhodesia*, ZANLA following.

The actual process of creating the *underground* was quite a simple and straightforward combination of carrots and sticks. It would begin with one or more ZANU political commissars, accompanied by a small escort group, moving through a tribal area. They would repeatedly call the local people to meetings, to explain who they were, what they were doing, and what their objectives were. At these meetings the commissars announced the commencement of the Chimurenga, the 'liberation war' to drive the white conquerors out of the country, so ending their oppression (shown by their unpopular insistence on soil conservation schemes and veterinary regulations and restrictions) and exploitation (illustrated by their wealth, housing, cars, etc.) of 'the people'. On the successful conclusion of the Chimurenga, all the 'petty' regulations would be abolished, and European land and wealth distributed to the tribesmen. In order to achieve this end, the villagers had, of course, to support the 'freedom fighters'. Of such promises was the carrot formed; promises of better, freer times to come.

But there was also the stick. The commissars would warn their audiences of the fatal consequences of becoming 'sellouts' - agents of the government. To give emphasis to these warnings, the commissars would order the tribespeople to point out government supporters, or 'stooges and puppets' in the revolutionary jargon; invariably, several unfortunates were identified as such. They were promptly, publicly and brutally killed by the escort group. The cost of opposing the Chimurenga was thus made graphically and terrifyingly clear. It proved most effective. These indoctrination sessions usually concluded with a rousing address from the commissar and the singing of Chimurenga songs, the learning of which was compulsory.

Once this preliminary work of 'politicising the people', to employ the jargon, was successfully concluded, the commissars established the local underground organisation. In Rhodesia it took an extremely simple, though nevertheless very effective, form, with three main elements. Firstly, and most importantly, there were the Contactmen. Their role was vital; they collected all scraps of intelligence concerning Security Force movements (which the local tribespeople were duty-bound to report, on pain of death); selected the base sites for the ZANLA groups when they arrived; organised

the necessary logistic support (primarily food) for them; were responsible for all communications between the ZANLA units (radios could not be employed because of the danger posed by Radio Direction Finding), and for arranging security for all meetings between such units. Secondly, there were the 'Policemen', subordinate to the Contactmen and responsible for maintaining discipline among the tribespeople; any breaches of discipline were reported to the local ZANLA commander - the Policemen had no 'executive' powers themselves - who then decided upon, and carried out, the necessary punishment. Finally, there were the Mujibas, who ranged in age from the very young to the very old. They acted as intelligence gatherers and messengers, either under the control of the local Contactman, or directly under the local ZANLA group. The more flexible Mujiba structure came, in some measure, to supersede the more rigid Contactman-Policeman system.

Only once this organisation was in place and operational would ZANLA units actually deploy in the area. The ZANU commissars would then move on to 'politicise' another area, and then another, and so on, ZANLA always following behind. This process was still continuing when the war ended.

Though the Rhodesian Special Branch, and its executive arm, the Army 'Selous Scouts' Regiment, became familiar with this process - and were able, to a degree, to delay and disrupt it - during the course of the war, they were unable to convince the government and Security Forces establishment of its significance, with the result that the Rhodesians lost the war, though they won every battle.

What is the situation with regard to urban subversion? Here, whether the insurgency is purely urban or merely the urban extension of a primarily rural insurgency (as in Vietnam), the underground is split into two branches. There is the branch that functions in exactly the same manner as the rurally based underground, providing the necessary support, communications and intelligence network for successful operations by the active insurgents who arrive later. However, the urban party members adopt a lower profile than their rural equivalents: they seek employment in ordinary, useful jobs; they are strictly enjoined to lead a quiet, decent, respectable, very definitely (apparently) law-abiding life. In short, they do nothing in their everyday activities that will draw attention to themselves or generate suspicion about their activities. In fact, the ideal is that their neighbours will regard them as good people to have

next door (29). Only after having established their cover, and rendered themselves above suspicion, will they begin to function.

The second branch of the party infiltrates key institutions of society (invariably centred in major towns and cities), in order to undermine society from within. Such institutions, apart from the Security Forces themselves, are the media, churches, universities, political parties, etc.. The idea is to disseminate propaganda from positions that are usually accorded respect and credibility, in order to de-legitimise the government and Security Forces, confuse the people, to try and turn the young and future elites against their own socio-political and belief systems, and legitimise the insurgents and their cause. The importance of this branch of the underground cannot be overestimated.

What is the ultimate objective of all insurgent groups? Is it to destroy the Security Forces and so ride victoriously to power? Actually, while there have been a few cases where the insurgents have indeed become powerful enough to achieve military victory over their enemies (for example, the Chinese 'People's Liberation Army'), these are very much the exceptions. The actual aim is more subtle, even more effective - to break the political will of the

opposing government, to convince it that it cannot win the war, that it must accede to the insurgents' demands, that it must surrender. Or as the Cypriot nationalist insurgent leader General Grivas put it:

> "It should not be supposed that by these means [that is, Terrorism] we shall expect to impose a total defeat on the British forces in Cyprus. Our purpose is to win a moral victory through a process of attrition, by harassing, confusing and finally exasperating the enemy forces with the effect of achieving our main aim" (30).

To this end, military victories are unnecessary: insurgent forces, as in Aden, Algeria and Rhodesia, have achieved this while losing virtually every battle they were involved in. Indeed, militarily absurd or irrelevant operations are launched - because of their political and propaganda value (for example, the Viet Cong attack on the United States Embassy at the commencement of the 1968 Tet offensive). The party and the active insurgents both have key roles in this process of breaking the will of the target government.

A key function of the party in this process that must be examined more closely is that of generating propaganda both within and without the country. As already indicated, real or imagined local grievances are typical themes for party propagandists to adopt. Mao Tse Tung regarded this approach as being of key importance:

> "In all practical work of our Party, correct leadership can only be developed on the principle of from the masses to the *masses. This means summing up (that is,* co-ordinating and systemising after careful study) the views of the masses (that is, views scattered and unsystematic) and taking the resulting ideas back to the masses .... Then it is necessary once again to sum up the views of the masses and once again take the resulting ideas back to the masses so that the masses can give them *their whole-hearted support.* And so on, over and over again ..." (31).

Or, in other words, the party members must constantly seek for local grievances that can be exploited to further the party's objectives. These grievances allow the insurgents to pose as the means whereby the people's ambitions will be realised; yet, whenever victory is achieved in a war of National Liberation, the victorious insurgents invariably repudiate every promise made, and reverse key policies taken, during the war.

Thus, in both China and Vietnam, land-hunger was endemic among the peasantry; few peasants owned the land they worked, rather, they rented it - at heavy rates - from local landlords. In both cases the insurgents exploited these grievances by seizing, in the areas they dominated, the landlord's ground, distributing it to the peasants, granting them the ownership of the land in the process. This was a most successful form of propaganda. However, on coming to power, the revolutionaries reversed all

their previous policies on land - ownership was banned and the peasants forced into collectives and communes against their will. This betrayal provoked an uprising in North Vietnam centred in the province of Nghe An - which had hitherto been referred to in Viet Minh propaganda as 'the Mother of the Revolution' - which was fiercely suppressed by the new revolutionary government of Ho Chi Minh. At least 50,000 peasants were killed and 150,000 imprisoned in forced-labour camps; some sources put the number of dead and imprisoned as high as 500,000 - out of a total population of 17 million (32).

Another key propaganda line is that attacking the Security Forces (and by association, the government that controls them). This uniformly takes the line of claims of atrocities - of massacres in the field; of torture and murder of prisoners under interrogation, or, if no credible evidence of physical ill-treatment is possible, of 'psychological' damage allegedly arising from interrogation and imprisonment techniques (33). If the target country possesses a modicum of freedom, such accusations are voiced from within respected and legitimate organisations such as the communications media, the churches, universities, legal profession, etc. by agents of the party previously infiltrated into these positions, by sympathisers ('fellow

travellers'), and misguided moralists (Lenin's 'useful idiots'). As a result, these accusations receive greater credibility and attention than they would otherwise have enjoyed. The occasional - almost unavoidable - lapses of discipline on the part of the Security Forces help this campaign, it often being ignored that while such lapses were few and far between, systematic terror was a central instrument of the insurgents (34). This terror is itself a powerful propaganda weapon, already indicated in the example of Rhodesia. The more savage the act of Terror, the more effective it is - there were documented cases, during the Malayan Emergency, of pregnant women being disembowelled by Terrorists (35). By contrast, except when the Security Forces behave with systematic ruthlessness exceeding that of the insurgents, the processes of the government appear to be slow, cumbersome and less deadly than those of the insurgent - and therefore safer to disregard. Where the Security Forces also make systematic use of Terror, they inevitably destroy the insurgent forces and party.

The externally directed propaganda, though it may stress different themes to those of the internal propaganda, has the same general goals of de-legitimising the target state, its Security Forces, undermining its right to self-defence and external

aid, and seeking to legitimise the insurgents as popular liberators of the oppressed masses and as the inevitable future government. Often this propaganda is generated and disseminated by foreign sympathisers (36).

Ultimately, if the insurgents are successful, the target government, apparently unable to protect its supporters, or contain the spread of the insurgency, bitterly attacked from within and subject to pressures mobilised by the insurgents' propaganda from without, suffers a collapse of morale, loses the will to continue fighting, and surrenders. Thus it was in Cuba, Nicaragua, Rhodesia and every other case where the 'War of National Liberation' proved successful.

Such success is, however, by no means inevitable. Wars of National Liberation have been defeated, in Greece (1944-49), Malaya (1948-60), and Dhofar (1965-75), amongst others. The basis for these victories will now be examined.

The British victory in the Malayan Emergency (1948-60) is widely regarded as the classic counter-insurgency (COIN) campaign. At first, the British tried to fight the Communists as they had fought the Japanese - that is, by conventional jungle warfare

tactics. However, the numbers of the regular insurgents was relatively small (initially some 4,500; at their peak 10,000), while the jungle in which they hid was large. Much energy was wasted in meaningless sweeps and patrols, while insurgents - organised as the 'Malayan Races Liberation Army' (MRLA) - seemed to be able to strike at will (37). The breakthrough came when the British realised that the MRLA was the less important arm of the insurgency; the prime arm being, of course, the Malayan Communist Party (MCP). The British thus changed their strategy, and set out to destroy the MCP.

Detention without trial, already in force, was stepped up, allowing the Security Forces to pick up suspected members of the MCP. However, the most dramatic - and often totally misunderstood - element of the new strategy was the re-settlement of 500,000 Chinese squatters, living on the fringes of the jungle, into protected 'New Villages'. It has often been assumed that this was a 'hearts and minds' strategy, to improve the squatters' standard of living. This did happen, but it was a valuable side-effect. The central objective of the strategy was the double-pronged one of providing security for the villagers and destroying the MCP (these two being opposite sides of the same coin). To these

ends, the *first building constructed in* each New Village was a Police Station. Searching for underground operatives is directly analogous to searching for criminals; protecting people from party intimidation is directly analagous to protecting people from criminal gangs (especially those engaged in protection rackets!); these tasks are thus best undertaken by Policemen. To provide the necessary manpower, the Police Force was expanded from 10,000 to 40,000 in six months (38). Ultimately, the Police Force numbered 60,000 - as against 70,000 soldiers (39).

Transported into the New Villages along with the ordinary squatters, within whose society they had embedded themselves, the members of the MCP found themselves trapped within a guarded perimeter, under constant and intensive Police observation, unable to supply food to the MRLA (it was forbidden to take food out of the Villages) and with communication to their colleagues outside rendered very difficult (all *people entering* or leaving the village were searched). They faced the choice of either fleeing *before inevitable discovery*, or waiting to be arrested, caught like a goldfish in a bowl. Either result destroyed the party organisation in the Village and provided the Villagers with security against intimidation. Replacements infiltrated into

the village by the MCP suffered the same fate as the original party agents.

The natural response of the part of the MCP would have been to use the MRLA to attack and destroy the Villages from without - after all, Policemen, even if heavily armed, are not soldiers, and cannot be expected to perform as soldiers without detriment to their primary role. However, this threat was obviated by having Army and Home Guard detachments at each village to defeat any MRLA attacks.

With the re-establishment of security among the people and the concomitant breaking up of the party organisation, an effective 'Hearts-and-Minds' could be, and was, waged, focusing on the government's determination to win the war, on the victories of the Security Forces, on the wisdom of helping the government, etc., accompanied by health and education projects, all greatly helped by the fact that the Villagers were effectively a captive audience.

While the New Village strategy was placing the MCP under severe pressure, the MRLA was also receiving considerable attention from the Security Forces. Routine patrols and ambushes on jungle trails were increased. The elite Special Air Service (SAS) were

re-activated to infiltrate into the jungle (often by parachute) to locate the MRLA´s bases, which were then destroyed - by the SAS itself, or by other troops (Gurkhas, Paratroops or Marines) guided by the SAS, or by air strikes called up by the SAS.

Under these increasing, culminative pressures, the will of the MCP broke; in late 1957 all surviving members were ordered to retreat to the Thai border. Of the once 10,000 or so strong MRLA, only 500 obeyed: some 6,711 had been killed, 1,289 captured and 2,704 had voluntarily surrendered (41).

This achievement had, nevertheless, required years of great effort, and determination to win, and close co-operation between the uniformed Police, Special Branch, Army, Military Intelligence, and the Civil Service Administration. In order to guarantee the necessary co-ordination, the British appointed a ´Supremo´ to command all elements of the campaign: General Sir Gerald Templer, appointed in January 1952 to be both High Commissioner (the highest civil-political office) and Director of Operations (the highest military office).

The key lesson from Malaya is the necessity, for victory, of the destruction of the underground and the concomitant re-establishment of security among

the people; the New Villages were a very effective means to that end. But they were not the only means - fortunately, as there are situations in which this approach is completely unusable (for example, if the peasants to be protected already own their own land). Two, proven, alternative means of providing security and disrupting the underground will also be examined.

The first of these was the United States Marine Corps (USMC) Combined Action Platoon (CAP) programme in Vietnam (42). South Vietnam was covered, at village level, by a militia recruited from the peasantry and designated the Popular Forces (PF). However, it was of limited effectiveness, being less well armed and trained then the Viet Cong (VC), and was usually deployed behind barricades or within bunkers - that is, protecting itself, while leaving the ordinary villagers open to VC intimidation. As Vietnamese villages are composed of a series of straggling hamlets, establishing an all-round defensive perimeter was impracticable. A United States Army attempt at a 'New Village' strategy - moving peasants into 'Protected Hamlets' - failed because the prime purpose of the New Village strategy was misunderstood, and no effective action was taken to destroy the VC infrastructure within the new Hamlets.

However, the approach of the USMC was totally different. They sought, in the CAP programme, to provide the villagers with effective security by upgrading the quality of the PF, and so stimulate the flow of intelligence needed to break up the VC organisation. The means to these ends was provided by integrating a squad of Marines into a platoon of PF - hence 'Combined Action Platoon'. The Marine element of ' ' provided advice, training, discipline, gement and increased firepower; the PF element added intimate knowledge of, and rapport with, the area and people, and therefore superior access to possible sources of information. Most of the training provided by the Marine squads - composed of carefully screened volunteers - was of the 'on the job' variety. The CAP did not reside inside defended perimeters, but conducted a mobile defence, composed of patrols and ambushes by day and especially night, around the villages. By these means, the VC's tactical mobility was disrupted, greatly curbing their ability to intimidate. The CAP's nocturnal activities were especially disruptive, as the night was the traditional time for VC activity. With the increased security, the villagers became more and more ready to provide their neighbours in the PF with information, which the PF shared with their USMC colleagues, resulting in the arrest of the local members of the

underground - so increasing security, so increasing the confidence of the peasants, so increasing the flow of intelligence to the CAP, so further disrupting the VC infrastructure, and so on. The great strength of the CAP was that the USMC members were permanent residents in the Village, effectively becoming part of Village life, with the double effect that the Marines came to understand the people in a way that their compatriots in more conventional units could never achieve, and provided that initial foundation of confidence necessary for the construction of the CAP. The attachment of a United States Navy Corpsman (medic) to all the CAP's also provided a useful, if basic, element of 'Hearts and Minds' into the programme. The programme was also extremely effective as a 'force multiplier': it employed some 2,000 USMC and USN personnel, equivalent to a USMC battalion, yet it resulted in the deployment of no less than 114 platoons - more than a 20,000 man USMC division could deploy (43). Such was the success of this programme that even after the ultimate (never premature) withdrawal of the USMC squads, the VC was totally unable to re-establish itself in the CAP Villages. Tragically, this programme was not, perhaps could not be, adopted all over South Vietnam, which finally fell to a conventional armoured onslaught from North, after the United States of America had abandoned her

erstwhile ally.

However, the Thai Armed Forces - who had fought in Vietnam - took note of the hard-earned lessons of that conflict, and especially of the success of the CAP, and adopted a version of their own in their fight against Communist insurgents in the remote areas of Thailand. The British 'New Village' approach was of no value to the Thais as the country possesses a land-owning peasantry: forced resettlement would have guaranteed a Communist victory (44).

The Thai strategy involved moving from still secure areas outward into insecure areas; it was thus, in an important sense, pre-emptive. The process of pacifying an infected area began in the most secure Village - that is, where the pre-conflict everyday sense of security of the people was still largely intact. This Village would receive a Rural Development Team, which would assist the villagers in the construction of necessary utilities like a school and/or clinic. Where possible, the King himself - held in high respect by the people - would visit the Village to inspect progress or perhaps open a school, or irrigation system, with the result that the Village would gain considerable prestige as a 'King's Village'. Throughout this process, and at all times, it would be made clear that the Armed

Forces were on hand to help and, if necessary, defend the Village.

The next phase of the strategy involved the Army asking for help in its task of defending the village. To date, volunteers have not been lacking. The resulting Village Defence Force (VDF) is armed with the most modern available weapons suitable for their role - which has important psychological benefits in terms of increasing the prestige and confidence of the VDF. As in the CAP programme, each VDF is built up around a nucleus of professional soldiers, this time from the Thai Army, resulting in the same beneficial consequences that stemmed from the original USMC/PF CAPs. Ultimately, the VDF receives greater firepower in the shape of additional machine-guns and even mortars, and modern communications in the shape of high-capability radios, allowing effective contact with the regular Army. The VDF is also allowed to keep any weapons captured off the insurgents - another prestige consideration, though in one case this Army did confiscate a weapon captured by a VDF - a PT76 tank, taken from the Khmer Rouge! (45)

The result is a simultaneous strengthening of local security, disruption of the Communist underground, and establishment of a successful 'hearts and minds'

programme. Moreover, focusing on one village at a time creates a powerful 'demonstration effect': the advantages of supporting the government became manifest. This makes the Thai penetration of those neighbouring Villages suffering from stronger Communist infiltration far easier than would otherwise have been the case. Naturally, the Communists seek to disrupt the programme, but the well armed VDF is usually capable of defending the Village itself. The powerful radios in the Village can swiftly summon a special Rapid Reaction Force of airmobile troops and combat aircraft should assistance be required.

This programme within the Villages is usually accompanied by an infrastructural development programme between the villages - that is, construction of a modern road network. This is for both military (that is, rapid movement with reduced danger from landmines) and 'Hearts and Minds' (that is, increasing local standard of living) purposes. As a Thai officer summed it up:

> "Roads bring trade to a village; trade brings prosperity and gives people something to lose. Our tarmac roads mean we can move fast into an area if we have to" (46).

Again, the insurgents desperately sought to disrupt h programmes - in one province clashes with

insurgents cost the lives of over 110 Thai Security Force personnel before a new road network was completed; the impact of the Thai strategy is equally clearly shown by the fact that this province is now secure (47).

Despite their differing approaches all three of these strategies were successful means to exactly the same ends: the re-establishment of security for the people, thus creating and increasing the flow of intelligence to the Security Forces, and creating a situation in which government propaganda and 'Hearts and Minds' programmes become effective, while simultaneously disrupting the underground organisation, so destroying the security and support base of the insurgents, depriving them of intelligence and logistics, and totally discrediting their propaganda. And it is in the achievement of these ends, by employment of those means most suitable to a given situation, that the secret of a successful COIN strategy lies.

NOTES

1. Those who have doubts about this should refer to Elliott Goodman's invaluable study The Soviet Design for a World State, Columbia University Press, New York, 1960.
2. Goodman, ibid., pp. 164ff.
3. Kunert, D., Wars of National Liberation, the Super-powers and the Afro-Asian Ocean Region, South African Institute of International Affairs, Johannesburg, 1977, p. 3.
4. See ibid., passim.
5. Quoted ibid., p. 4.
6. Ibid., pp. 4-5.
7. Ibid., p. 5.
8. Ibid.
9. Quoted by Weeks, A.L. and Bodie, W.C. (eds.), War and Peace: Soviet Russia Speaks, National Strategy Information Centre, New York, 1983, p. 8.
10. Quoted by Kunert, op.cit., p. 10.
11. Quoted by Weeks and Bodie, op.cit., p. 29.
12. Quoted by Kunert, op.cit., p. 16.
13. Quoted ibid.
14. Ibid.
15. Ibid.
16. Ibid.
17. Sterling, C., The Terror Network, Weidenfeld and Nicolson, London, 1981, p. 14.
18. Kunert, op.cit., p. 23.
19. Sterling, op.cit.
20. Ibid., p. 15.
21. Ibid.
22. Greig, I., The Communist Challenge to Africa, South African Freedom Foundation, Sandton, 1977,

p. 169 and Freemantle, B., KGB, Michael Joseph, London, 1982, p. 61.

23. Sterling, op.cit., pp. 90-91. The terrorist was a Dutchwoman, Ludwina Janssen, captured in Israel on her first mission. Those who doubt the Soviet Union's involvement in insurgency on a global basis should refer, in addition to secondary sources such as Greig, op.cit., Laffin, J., The PLO Connections, Corgi, London, 1982, and especially Sterling, op.cit., to the Israel Defence Forces series Documents Captured by IDF in Lebanon June 1982, especially Subversive Activities by Palestinian Terrorist Groups and Libya in Africa; Protocol of Talks between PLO and Soviet Delegations in Moscow, 13 November 1979; The Nature of the Activities of the Palestinian Terrorists in South Lebanon and their ties with Eastern Bloc Countries; Palestinian Terrorists Training in the Soviet Union: Report to Ararat by Head of Delegation; Relations between the Palestinian Terrorists and Various Foreign Subversive and Terrorist Groups; and Relations between the Palestinian Terrorists and Cuba.

24. Clausewitz, On War, Princeton University Press, p. 87.

25. Ibid., pp. 86-87.

26. Paget, J., Counter-Insurgency Campaigning, Faber and Faber, London, 1967, p. 20ff.

27. The following discussion is based upon Sir R. Thompson, No Exit from Vietnam, Chatto and Windus, London, 1969, pp. 32ff; Pimlott, J., "Ho Chi Minh's Triumph" in Thompson, R., (ed.), War in Peace, Orbis, London, 1981; Miller, D., "[illegible]'s Army", in War Monthly, No. 28, pp. 26-31.

28. The following discussion is based upon Stiff, P. and Reid-Daly, R., Selous Scouts: Top Secret War, Galago, Alberton, 1982, pp. 15-78.

29. See the references to the Red Brigades manual Standards of Security and Work-Style, quoted by Sterling, op.cit., pp. 300-301.

30. Quoted in Internal Security Defence Review, Vol. 1, No. 1, March 1983, p. 8.

31. Mao Tse Tung, "On Protracted War", quoted in ibid., p. 7.

32. Wolf, E.R., Peasant Wars of the Twentieth Century, Faber and Faber, London, 1964, pp. 103-207 (figures on p. 191); Lewy, G., America in Vietnam, Oxford University Press, New York, 1978, p.16. On the propaganda line and tactics of the Chinese Communists, see Snow, E., Red Star Over China, Pelican, London, 1972.

33. A classic case, in its absurdity, of such accusations were those directed by Italian radicals against the Swiss authorities over the imprisoned Terrorist Petra Krause, related by Sterling, op.cit., pp. 80-81: "The indomitable committee demanding her extradition to Italy spoke only of a fine and sensitive woman ... whose experience at the mercy of her Swiss jailers was a 'bloodchilling case of the violation of human rights' ... reports spoke of her 'slow death ... under the psycho-physical tortures of her rigorous isolation' in the Zurich jail, and the tormenting sound of a nearby 'excessively noisy' hydraulic pump"! Krause's supporters feared a heavy prison sentence for her should she be tried by the Swiss authorities, who had plenty of evidence against her; whereas they calculated a good chance of acquittal in Italy due to lack of evidence. Their calculations proved correct when Krause was indeed extradited by the Swiss.

34. Vietnam remains a classic case, with tremendous attention on the massacre at My Lai coupled with total disregard for Viet Cong atrocities occuring every day. Pefer to Lewy, op.cit., passim and Internal Security Defence Review (hereafter ISDR) op.cit., among many sources.

35. One such terrorist was An Hoi, who later surrendered and was deported to China; Geraghty, T., Who Dares Wins, Arms and Armour Press, London, 1980, pp. 36-38.

36. Snow, op.cit., is itself a classic piece of such propaganda by a foreign sympathiser. See also Laffin, J., op.cit., especially pp. 49-71.

37. For the following discussion of the Malayan Emergency, refer to Barber, N., The War of the Running Dogs, Collins, London, 1971; Carver, M., War Since 1945, Weidenfeld and Nicolson, London, 1980; Geraghty, op.cit.; Kitson, F., Bunch of Five, Faber and Faber, London, 1977; Paget, J., op.cit.; and Thompson Sir R., "Emergency in Malaya" in Thompson, R. (ed.), War in Peace, Orbis, London, 1981.

38. Paget, op.cit., p. 52.

39. Thompson, "Emergency in Malaya", p. 83.

40. On the role of the SAS, see Geraghty, op.cit.

41. Thompson, "Emergency in Malaya", p. 83.

42. The following account is taken from ISDR, op.cit., pp. 34-36.

43. Ibid., p. 36.

44. The following account is based on ibid., pp. 28, 34-35.

45. Ibid., p. 34.

46. Quoted by ibid., p. 28.

47. Ibid.

PART II

THREE CASE STUDIES

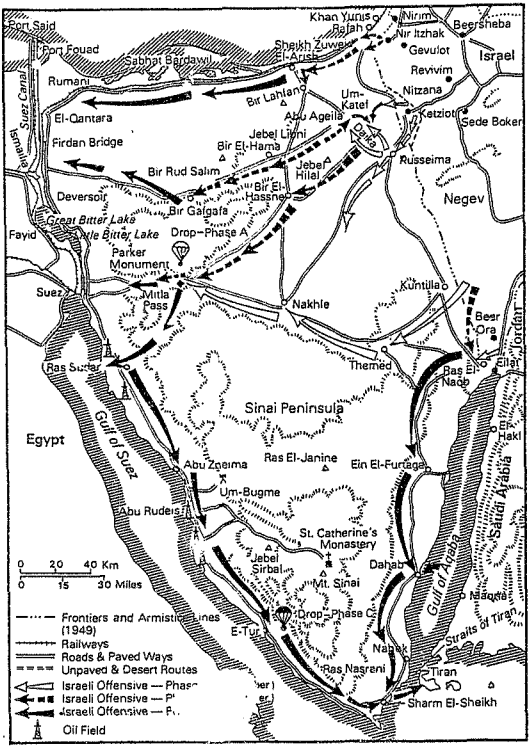
CHAPTER 8: CASE STUDY I
THE SINAI WAR OF 1956

The Sinai Peninsula, which forms the landbridge between Africa and Asia, can be described as an inverted triangle (see Map 1). It is approximately 2000 kilometres wide in the north, between the Suez Canal and the Israeli border, and extends some 400 km from El Arish on the northern coast to the southern tip of Ras Muhammed, between the Gulfs of Aqaba and Suez. The terrain of the Peninsula can be divided into three zones: in the extreme north, along the shores of the Mediterranean, there is a narrow, flat coastal plain possessing only scant vegetation; south of this there is a 'middle zone' of arid and rugged ridges, with peaks reaching an altitude of some 3,500 ft, interspersed with stretches of constantly shifting sand dunes. Finally, the southern half of the Sinai is dominated by jagged mountains reaching 8,000 ft in height, riven with deep, powdery Wadis totally devoid of water. From these southern mountains a ridge extends northwards, parallel to the Gulf of Suez and the Suez Canal, and some 30 to 50 km inland from them. Pierced by only a couple of passes, it is a major obstacle to east-west movement.

All in all, the Peninsula is a most inhospitable

environment (especially in the south) and, except for the narrow coastal plain in the north, is extremely sparsely inhabited.

Unsurprisingly, only limited communication routes exist in the Sinai (see Maps 1 and 2). On the east-west axis, there were (and are) four: in the extreme north, the tarred coastal road running from Kantara on the Canal to Rumani, El Arish, Rafah and thence on to Gaza. Alongside this road, there was a narrow gauge railway line. This route served as the main Egyptian supply line to the Sinai and Gaza Strip. The second major east-west axis originates at Ismailia on the Canal, skirts the northern edges of the high western ridge, and proceeds, via Bir Gafgafa, Bir El-Hama, and Abu Ageila, to the Israeli border, and beyond to Nitzana. Further south, and roughly parallel to the Ismailia road, was the third major east-west axis, which ran from Suez City, through the Mitla Pass, thence swung north-east through Bir El-Haasne and Kusseima, across the Israeli border, and ultimately to join the Ismailia road near Nitzana. During 1956 this route was only partially tarred. The fourth east-west axis - at this time often little more than a track - originated at the Mitla Pass and ran south-east through Nakhle and Themed, and thence either north-east to Kuntilla or south-east to Ras El-Naqb and



MAP 1: The Sinai Peninsula and Operation Kadesh (Source: Herzog, C: The Arab-Israeli Wars: War and Peace in the Middle East, Arms and Armour Press, London, 1982.)

thence across the border to Eilat.

North-south axes were also few - in the east, a good road ran from El Arish to Abu Ageila and Kusseima; from there a dirt road had been driven to Kuntilla and Ras El-Naqb. In the centre, a tarred road ran from El Arish to Bir Lahfan, Bir El-Hassne and on to Nakhle. In the extreme west of the Peninsula a good road ran from El-Qantara all the way down the Peninsula to Sharm El-Sheikh. The only other overland route to Sharm El-Sheikh was a camel track, along the Peninsula's Aqaba coast, from Eilat (see Map I) (1).

Assigned to Egypt in an agreement concluded between the British and Ottoman Empires in 1906, the Sinai has been of strategic importance since the rise of civilisation in the Nile Valley and the Near East. Given the nature of the terrain, warfare in the Sinai has always revolved around the control of the few communications routes across the Peninsula, and of the features dominating them (2). An arena of conflict during the First World War, the Sinai was thereafter left in peace until the re-establishment of the State of Israel in 1948. Egypt was one of the five Arab states that immediately invaded the infant state in an unsuccessful attempt to crush it at birth. An armistice was achieved in early 1949,

the armistice lines becoming the international frontiers. However, during the course of the fighting, Egypt had successfully occupied the Gaza Strip, which was not, and had never been, part of the Sinai. In fact, the Strip had formed part of the Palestine Mandate, and, under the November 1947 UN partition plan, had been intended to form part of the proposed Arab Palestinian State, to exist alongside Israel. However, Egypt and Jordan who, at the end of the fighting, found themselves in occupation of this Arab Palestinian territory, refused to allow the establishment of such a state, instead taking possession for themselves (de jure in the case of Jordan, de facto in the case of Egypt).

The defeat at the hands of Israel was a major - though not the sole - cause of the wave of political instability which swept over most of the Arab combatants following 1948. The situation in Egypt was complicated by the presence of powerful and resented British forces who were guarding the Suez Canal. Anger at defeat and outrage at the British presence combined in July 1952 to spark a coup by young officers, led by Lt-Col Gamal abd al Nasser. The successful plotters appointed General Mohammed Naguib as their leader. In June 1953, a Republic was declared, while in April 1954 Nasser replaced Naguib as Prime Minister. Soon after this, in July,

Nasser achieved a major foreign policy success - an agreement with Britain whereby the latter undertook to withdraw all her forces from Egypt over a period of twenty months; an agreement to which Britain faithfully adhered. Naguib was finally dismissed from the government during November. Throughout this, both Nasser and Naguib had been energetic in their attempts to revitalise the Egyptian Army in order to achieve revenge against Israel (3).

Israel, in the meantime, had been overwhelmingly concerned with consolidation, post-war reconstruction, and the absorption of Jewish immigrants from abroad. During the first three years following independence, Jewish immigration into Israel averaged 18,000 a month, with the result that the country's Jewish population doubled between May 1948 and June 1953 (4). Most of Israel's energies were devoted to the absorption of this human flood, with the result that few resources were left for defence.

This was despite Israel's very poor geostrategic position. Israel was, and is, a long narrow country. In the period 1949-67 it shared 330 miles of border with Jordan, 165 with Egypt, 47 with Syria and 49 with Lebanon. Seventy-five percent of Israel's population and industry was concentrated in the narow coastal strip from Haifa to Tel Aviv,

which ranged in width from a mere 25 miles (at Haifa) to only 9 miles at Netanya. This strip was completely dominated by the Jordanian controlled highlands of Judea and Samaria. Access to the nation's capital, Jerusalem, was along a narrow corridor also dominated by Jordanian positions. Nearly all Israel's population centres were within artillery-range of Jordanian positions, and all of Israeli Jerusalem was within small-arms range. The only factor that alleviated this strategically appalling situation was that Jordan was weak. However, the movement of any other Arab army into the so-called West Bank (or Judea and Samaria) would pose a mortal threat to the Jewish state. To the south-west, the Egyptian controlled Gaza strip reached within 30 miles of Tel Aviv, while in the north-east, Syrian positions on the Golan heights totally dominated the Galilee area and the Hula Valley. Israel was also extremely vulnerable to attack from the air, Haifa (the country's main port) being only seven minutes by jet from Damascus, while Tel Aviv was only ten minutes flight from Egyptian airfields in the Sinai (5). Given this geostrategic position, given the experience of the War of Independence with its heavy Israeli casualties (over 4,000 dead), given the traumatic experience of the Holocaust, it is little wonder that the Israelis were deeply concerned with ensuring their security,

and that they concluded that they could never risk fighting a defensive war on their own territory.

That Israeli security concerns were not purely psychological was illustrated by the increasing belligerency of their Arab neighbours, both in word and deed. The Arab states closed all their borders with Israel (except at Rosh HaNikrah on the Lebanese border, where diplomats could cross, and the Mandelbaum Gate in Jerusalem, open to non-Jews) and severed all communication links with the Jewish State. Travellers with Israeli visas in their passports were forbidden entry into Arab states, and an economic boycott was imposed on the country. Arab leaders called openly for revenge against Israel, for "the restoration of the stolen rights of the Palestinian people", "the liberation of Palestine", the reconquest of the "stolen territory", "the liquidation of Zionist aggression" or, quite simply, for the Jews to be "pushed into the sea" (6). And Arab irregulars crossed Israel's borders and launched attacks on her population and infrastructure.

These raids commenced only a few months after the end of the War of Independance, and soon became a major problem for the new state. It was against this background of continuing instability and insecurity that Israel established her basic defence

policy and structure. Lacking the financial resources to maintain a large standing army, the Israelis adopted a modified version of the Swiss militia system, with (initially) two years compulsory military service for men and women (except for rabbinical students - most of whom volunteered anyway - married women, mothers and religious girls) followed by reserve training and call-up obligation to the age of 49 (these requirements have since been altered considerably). Thus, the Israeli Army consisted of a small 'active force', composed of the conscripts and the professional officers, NCOs and specialists who trained and led them, and a large reserve element to be mobilised in the event of war. These reservists were essential to Israel's whole strategy, as the standing army was, by itself, too small to wage war. By 1951 Israel's total mobilised strength, active and reserve, male and female, had reached 100,000. In contrast, both the Air Force and Navy, because of their considerably higher technical requirements, became virtual professional forces, only a minority of their personnel being provided by conscripts and with the reserves being relatively unimportant. The Army was divided into three operative-level, geographically based, operational and administrative Commands - Northern, Central and Southern (7).

Three factors gave Israel the time to organise itself following the 1949 Armistice. First was the aforementioned political instability in the Arab world. Second, though the strongest of Israel's opponents, Egypt at first did not encourage cross-border infiltration from her territory into Israel (in fact, up until 1953 Egypt had entrusted the defence of the entire Sinai peninsula to a single reinforced Battalion) (8). Thirdly, in May 1950 Britain, France and the United States issued a tripartite declaration on the Middle East, which stated that:

> "should the three Governments find that any one of these states [i.e. Israel and its Arab neighbours] contemplates violating the frontiers of armistice lines, they will ... act both within and without the framework of the United Nations in order to prevent such a violation".

Furthermore, the three countries would provide only those weapons which the states of the Middle East required for legitimate self-defence (9). This declaration and the policies based upon it, provided the region with a precarious stability for some years afterwards.

This declaration did not prevent Egypt's ban on the transit of Israeli ships or 'strategic goods' through the Suez Canal - a ban in direct contravention of the 1888 Constantinople Convention and the 1949 Armistice agreement. In July 1950 further

regulations banning transhipments to Israel *via* third countries were introduced. Israeli protests led in September 1951 to the UN Security Council ordering Egypt to halt its blockade. Cairo thought it prudent to comply.

Then, as previously related, in 1952 Naguib and Nasser seized power, and matters soon began to deteriorate again, with a gradual reimposition of the blockade. Ultimately, the blockade became accepted internationally as a *fait accompli*, especially with the signing of the 1954 Anglo-Egyptian agreement on the evacuation of British forces from the Canal zone - an agreement that totally ignored Egypt's illegal blockade. Israeli protests were ignored, and when the Israeli freighter *Bat Galim* was seized while testing the blockade, there was little international reaction (10).

Though this blockade of the Canal hampered Israel's trade with East Africa and Asia, even more serious was the equally (if not more) illegal blockade of the Straits of Tiran. These narrow straits, only some three miles wide, lie between the mainland of the Sinai peninsula and the small islands of Tiran and Sanafir, and comprise the only navigable channel between the Gulf of Aqaba and the Red Sea. In 1949 the Egyptians had, with the agreement of Saudi

Arabia, occupied and fortified the two islands as well as Ras Nasrani on the peninsula, and had closed the straits to all shipping bound for Israel's southern port of Eilat. This blockade not only prevented Israel from trading with the East - a very serious matter for a small country trying to absorb many immigrants - but also rendered the development of the Negev virtually an impossibility (except in the extreme north). A belated Israeli appeal to the Security Council in 1954 met, inevitably, a Soviet veto (11).

Moreover, Egyptian vigilance in the Gaza Strip relaxed, making it easier for the locally based irregulars to cross the border and attack Israel. On top of all this there was the continually hostile rhetoric from Arab leaders. In November 1954 the then Egyptian Premier told an Arab newspaper, published in East (i.e. Jordanian) Jerusalem that:

> "There will be no solution to this problem, nor will there be peace between the Jews and ourselves, as long as a single crumb of what belongs to you remains in enemy hands" (12).

During the same month the Syrian Prime Minister addressed his parliament stating:

> "Peace with Israel is unthinkable. Some Arab statesmen are accustomed to saying erroneously that there will be no peace with Israel before Israel implements the UN resolution. I am opposed to such statements. There is no connection

> between the return of the refugees and implementation of the rest of the UN resolution and peace with Israel. Even if the refugees are returned to their lands, we will not make peace with Israel on any account. The Arabs will not agree to peace as long as Jews live in the heart of the Arab states and sow unrest and fear in our midst. The first round unfortunately was unsuccessful. There is no doubt that the Arabs will prepare for a second round with all their energy" (13).

With cross-border violence occurring on most of Israel's frontiers, Israeli casualties rose steadily - 137 in 1951, 147 in 1952, 162 in 1953, and 180 in 1954 - the overwhelming majority being civilians (14).

Given these circumstances - political and economic blockade, active violence - plus Israel's lack of a great power patron to guarantee her security, and the recent traumatic history of the Jewish people, it is little wonder that Israel's response was a programme of retaliatory raids. These were directed against villages which sheltered Arab raiders, or against Police Stations and Army Posts of the host nations. In the case of the former, homes used by the terrorists were demolished, while the latter were attacked because of the Arab states' legal responsibility for actions initiated from their territories.

However, the situation with regard to Egypt

continued to deteriorate. Whereas before the revolution, Egypt had opposed irregular raids across the border from Gaza into Israel; now, under Nasser, there ocurred a transition from opposition to acquiescence and finally to active support. The result, inevitably, was increasing cross-border activity originating from Gaza. Between May and July of 1954, Israel complained nearly four hundred times of violations of her frontier by irregular raiders. Egypt had become Israel's major opponent, and the major sponsor of raids upon the latter's people and territory.

Raids were now made deep into Israel, mining roads, bridges and waterpipes, disrupting Jerusalem's development programme for the southern desert and killing and maiming civilian settlers. February 1955 alone saw no less than 45 such incidents (15). Unsurprisingly, Israel retaliated. Due to the unintentional deaths of approximately 70 civilians during a raid on the Jordanian village of Kibya on 12 October 1953, Israel had largely ceased to raid villages, and focused almost exclusivley on military and police posts. So it was, than on 28 February 1955, the IDF launched a large scale attack on Egyptian Army headquarters in Gaza, killing 38 Egyptian soldiers and wounding 24 (16).

Nasser's reaction was to increase support for the fedayeen (as the terrorist irregulars were called), as an instrument by which to harass Israel even further. Contrary to what one might expect, most fedayeen were Egyptians, not Palestinians from the Gaza Strip. Egypt also provided assistance to the fedayeen operating from Jordan to Syria. By the end of 1955, approximately 260 Israeli citizens had been killed or wounded by fedayeen raids (mainly from Egypt) (17). The confrontation with Egypt was deepened by Israeli-Egyptian military clashes over the El-Auja Demilitarized Zone (DMZ) on the Sinai frontier. These turned, in October-November 1955, into full-scale battles from which Israel emerged victorious, Egypt losing some 55 dead and over 60 captured (18). Even more ominously for Israel, given the country's poor geostrategic position, was the announcement, also in October, of a new joint Egyptian-Syrian military high command (19). But, most ominously of all, in September Nasser had publicly announced a major arms deal with Czechoslovakia.

Nasser was driven by a dream of a unified Arab world, free of 'imperialist' influence, led by Egypt under his rule. The destruction of Israel, in his view, would be a major step towards the achievement of these goals. But Egypt needed arms to carry out

his ambitions, and the country did not have enough - in 1955 Israel enjoyed a rough parity in military hardware with Egypt (20). Under the terms of their Tripartite declaration, the western powers refused to supply anything other than what was required for defensive purposes. However, at the 1955 Bandung Conference of Non-Aligned States, China's Premier Chou En-Lai suggested that Nasser approach the USSR, which was eager to undermine Western influence, though, for political reasons, the arms deal was arranged through Czechoslovakia and not directly with the USSR.

The importance of this agreement can hardly be exaggerated. It provided the USSR with its first foothold in the Middle East, ended forever the *Western monopoly in the region, destroyed the policy* underlying the Tripartite Declaration, shattered the *precarious regional balance and pushed the Arab-*Israeli conflict into an escalatory spiral from which it never recovered. By the standards of the day and the region the Czech arms agreement represented a massive increase in Egyptian military capacity, both quantitavely and qualitatively. Included in the deal were some 300 T-34/85 medium and IS-III heavy tanks, 100 SU-100 assault guns, 200 BTR-152 armoured personnel carriers, 500 medium field guns and howitzers, 200 57mm anti-tank guns,

134 anti-aircraft guns, 1000 recoilless rifles, large quantities of scout cars, trucks, and small arms; 120 MiG-15 jet fighter-bombers, 50 IL-28 light jet bombers, 20 transport aircraft; and two Skory-class destroyers, 15 minesweepers, several submarines and a number of torpedo boats (22). In the aftermath of the announcement of the agreement, Radio Cairo proclaimed:

> "The day of Israel's destruction is coming closer. There will be no peace on the borders, for we demand revenge and revenge means death to Israel" (23).

The arms deal came as a terrible shock to Israel. Ben Gurion was later to recall that:

> "The Czech-Egyptian arms deal transformed Israel's security situation for the worse at one stroke. The quantitative inferiority of our military equipment, which had existed ever since the War of Independence, became a dangerous position of qualitative inferiority as well" (24).

Ya'acov Herzog, a senior foreign ministry official, recalled that

> "it really threw us into deep anxiety" (25).

General Moshe Dayan, then Chief of the Israeli Defence Force Staff, summed up the new situation:

> "These arms ... represented a stunning acceleration of the pace of rearmament in the Middle East. In quantity alone, they tipped the arms balance drastically against Israel; in quality, the tilt was even more drastic. We had never imagined that we could ever match the size of the arsenals possessed by the Arab states. But we believed we could bridge the gap by

> the superior fighting capacity of our troops, as long as we could match the quality of their weaponry .... The Czech arms deal placed in doubt the capability of the Israeli army to give expression to its qualitative human advantages.
>
> "It was clear to us in Israel that the *primary purpose of this massive* Egyptian re-armament was to prepare Egypt for a decisive confrontation with Israel in the near future. The Egyptian blockade, Egyptian planning and direction of mounting Palestinian guerrilla activity against Israel, Nasser's own declarations, and now the Czech arms deal left no doubt in our minds that Egypt's purpose was to *wipe us out*, or at least, win a decisive military victory which would leave us in helpless subjugation" (26).

The Israeli General Staff estimated that it would take six to eight months for the Egyptians to absorb *and digest the major* portion of their new arms. As the first batch of weapons arrived in Egypt in November 1955, that meant that Israel could expect an attack any time from late spring to late summer 1956. Little wonder, then, that in October 1955 Ben Gurion authorised Dayan to prepare plans for an attack on Sharm-el-Sheikh.

In the interim, however, Israel desperately needed *modern arms* to balance Egypt's acquisitions. Neither Britain nor America was willing to provide them. That left only France; the power friendliest to Israel since independence. However, France's relations with Israel were of a somewhat unorthodox nature, in that they were mainly conducted <u>via</u> the

Defence Ministry, not the Foreign Ministry. Indeed, while the Defence and Interior Ministries had played important roles in ensuring arms supplies to Israel during the War of Independence, the Foreign Ministry was often cold and aloof to the Jewish state. This rather bizarre situation of different state departments following different, and at times, contradictory foreign policies was the result of the political fragmentation and parliamentary instability which characterised the fourth French Republic. The average life of a fourth Republic (1944-58) cabinet was less than seven months, and each Cabinet minister tended to treat his own department as a private fief, rarely attempting to co-ordinate with his Cabinet colleagues. On occasion, the Prime Minister had to intervene to settle intra-Cabinet disputes on policy - usually in Middle Eastern matters, in Israel's favour. This French sympathy for Israel originated in the fact that many leading politicians of the fourth Republic were ex-Resistance or Free French fighters, and had forged close links with Jewish underground organisations during the Second World War. Moreover, French support for Israel irritated Britain, and that, for some ministers, was itself a good enough reason to aid Jerusalem (27).

Thus it was that France, from the early fifties,

began to supply Israel with limited amounts of modern arms. However, a 1952 Israeli attempt to buy French Ouragan jet fighters failed because of French Foreign Ministry opposition - the Quai d'Orsay held that it violated the Tripartite Declaration. Having accepted this, Paris was chagrined to observe Britain sell Meteor jet fighters to Israel, and several Arab states, including Egypt. The Quai d'Orsay was finally forced to back down, and Israel ultimately received the Ouragans and other arms (28).

From 1954 on, France's ties with Israel, though still mainly via the Defence and other Ministries rather than the Quai d'Orsay, became closer. It appears that this was the result of fears that Anglo-American manoeuvres were destroying French influence in the region, and perceptions within the Defence hierarchy which viewed Israel as a potentially valuable military ally against the perceived common threat of Arab nationalism - a perception promoted by considerable active Egyptian support for the Algerian rebels fighting for independence from France. Even Foreign Ministry opposition to Israel eased somewhat as it became clear, following 1953, that ex-British Egypt was Israel's main enemy, not ex-French Syria (29).

So it was natural to turn to France in an attempt to restore the shattered regional balance. Israel's approach met with a sympathetic response; when Israeli Foreign Minister Sharett visited Paris in October 1955, he was greeted by Prime Minister Edgar Faure:

> "I've always been a friend of Israel, but now it is not a *question of friendship*. It is for reasons of political realism that France is called upon to help you ..." (30).

France offered Israel Mystere IV jet fighters (equal to the MiG-15), tanks and artillery, all at cost price, Quai d'Orsay opposition being overcome through the simple expedient of pointing out France's need for convertible currency the deal would bring in. Unfortunately, delivery was delayed by the fall of the Faure Cabinet and by American objections to the deal (31).

However, the new Cabinet of Guy Mollet was just as friendly towards Israel, and just as hostile to Egypt. Indeed, at the end of January 1956 Mollet had proclaimed his opposition to territorial concessions by Israel and his intention to continue to supply arms to that country, in order to restore the local Balance of Power. To that end, in April the first batch of Mystere IVs arrived in Israel, where they were euphorically greeted by Prime Minister Ben Gurion (32). Further French arms

followed, Quai d'Orsay opposition being avoided by the simple expedient of keeping the transactions secret from it. Nevertheless, Foreign Minister Christian Pineau was a full 'member' of the 'conspiracy'. Other French arms began to arrive in Israel during July. Indeed, early that month Foreign Minister Pineau informed Israel that, irrespective of British or American policy, France would no longer place any limitations on the export of arms to Israel.

Thus the Israelis, with French aid, had begun to close the arms gap somewhat. However, Israel's geostrategic situation had deteriorated alarmingly in May, when Egypt and Jordan had reached an agreement on the co-ordination of their Armed Forces. And fedayeen raids continued, across both the Egyptian and Jordanian frontiers. Despite the grave threats that were obviously building up around *Israel, and despite his preliminary instructions to* Dayan the previous October, Ben Gurion was extremely reluctant to initiate military operations. He was acutely aware of his country's isolation in the world, an isolation that only now, in 1956, was finally coming to an end, thanks to France. He was heavily burdened by the responsibility of being entrusted with the fate of the first Jewish state in some 2000 years, and was deeply aware, thanks to

recent history, of the importance of preserving its independence and sovereignty. He was determined not to take premature or unnecessary risks or engage in hasty action. There is no evidence Ben Gurion ever read - or even heard of - Sun Tzu, but there can be no doubt that he would have agreed totally with the latter's grim warnings:

> "War is ... the province of life and death; the road to survival and ruin"

and

> "A sovereign cannot raise an army because he is enraged, nor can a general fight because he is resentful. For while an angered man may again be happy, and a resentful man again be pleased, a state that has perished cannot be restored, nor can the dead be brought back to life".

therefore

> "... the enlightened ruler is prudent and the good general is warned against rash action. Thus the state is kept secure and the army preserved" (33).

Ben Gurion was an enlightened and prudent ruler. Then, suddenly, on 26 July Nasser completely transformed the political situation in the region, and opened a whole new vista of opportunity for Israel. Full of confidence as a result of the final British withdrawal from Egypt, and his new link with Moscow, he nationalised the Suez Canal.

The Canal was owned, as it had been since the 19th Century, by Britain and France. For both,

nationalisation was an affront to their prestige and a threat to their standing in the Middle East. Moreover, the Canal was of great strategic and economic importance to the west in general - in the case of Britain, for example, nearly a quarter of the country's imports passed through the Canal, while a third of the ships using it were British (34). Britain and France immediately decided on mutual consultations to consider responses to Nasser's announcement. The French Defence Ministry immediately asked the Israel Defence Forces (IDF) to provide them with the latest available information on the strength and deployment of the Egyptian armed forces, informing the Israelis that the French delegation would be accompanied by military experts, which suggested the possibility of military action.

Against the background of this new situation, Dayan recommended to Ben Gurion that Israel commence military operations against Egypt, and proposed three alternatives: either to seize the Sinai Peninsula up to the Canal, and establish international control of the waterway; or seize Sharm el-Sheikh and open the Straits of Tiran; or capture the Gaza strip. Ben Gurion, however, remained prudent, arguing that Israel had not yet received the heavy weapons and equipment necessary to fight a war, and that to initiate combat before these had arrived and

been absorbed into the IDF would result in unnecessary Israeli casualties. Ben Gurion strongly felt that it would be better to wait until the IDF had been strengthened, so as to be in a position to wage a decisive, short, war and suffer as little loss as possible. Ben Gurion's thinking echoes that of Sun Tzu, who argued that "there has never been a protracted war from which a country was benefitted" (35).

Moreover, there was now the possibility of fighting with allies. Indeed, as early as 29 July, French and Israeli defence officials had begun formal contingency planning for joint operations. These meetings were highly secret - neither country's foreign ministry was informed, nor were the British - and, on the French side, involved only the Prime Minister, the Ministers of Defence and Foreign Affairs, and about 10 French officers (36). Initial French interest focussed on the possibility of securing bases in Israel for operations against Nasser. Israel, of course, sought arms and, from August on, existing arms deliveries were accelerated, while secret new arms deals were apparently entered into. Extremely close co-operation developed between the various branches of the French and Israel armed forces, while Israeli pilots received intensified training on French aircraft.

These French-Israeli discussions, agreements and actions were kept, by Paris, quite separate from the simultaneous Anglo-French preparations - though Israel was informed of London's hesitations about actually using force against Nasser (37).

By September at the latest, Ben Gurion had decided, and had informed Paris, that in principle Israel was willing to co-operate with France against Egypt. However, at Dayan's suggestion, Israel laid down three conditions for this co-operation: Firstly, in order to emphasise Israel's status as a sovereign independent state and an equal, France should formally invite Israel for discussions on the proposed co-operation. Second, France had to ensure that Israel and Britain were not drawn into conflict with each other, which was by no means impossible given the latter's defence treaty with Jordan, a country which had become a major base for Egyptian backed fedayeen raids. And third, should war occur, Israel should be free to rectify its border with the Sinai to include such strategically important, but largely uninhabited areas such as Sharm el-Sheikh, Nakhl, Abu Ageila, and Rafah, in order to ensure the freedom of navigation of the Straits of Tiran and to guarantee Israeil security vis-a-vis Egypt (38).

However, at the beginning of September and after a

period of uncertainty, President Eisenhower's administration in Washington came out in opposition to any Anglo-French military operations against Egypt. United States Secretary of State Dulles proposed the creation of a Suez Canal Users Association which would 'partially manage' the waterway. This concept was by no means unacceptable to Britain and France. However, the United States made no serious attempt to get Egypt to agree to the idea, and this convinced both London and Paris that the whole proposal had never been serious, being intended only to disrupt their plans. As a result, they agreed in late September, to launch 'Musketeer', as the operation was code-named, in October.

France thereupon approached Israel on the possibility of the latter joining the war. On 23 September, Ben Gurion gave a cautious, but affirmative reply - provided Israel received immediate extra arms shipments. These being listed, Ben Gurion also laid down four other conditions for Israeli co-operation, namely:

> "* Israel would not launch war on its own. If our friends started, we would join. If we were asked to a make a parallel start, we would consider it sympathetically.
> "* The United States should be apprised of the impending war and offer no objection (or at least express no specific opposition). We should be ensured that the United States would not impose sanctions or an embargo against Israel.

"* Britain should be informed, should agree, and should undertake not to go to the assistance of the Arab states if they should join Egypt.
** It was our aim to gain control of the western shore of the Gulf of Aqaba so as to guarantee freedom of Israeli shipping throughout that waterway. Consideration might perhaps be given to the demilitarization of the Sinai Peninsula, even under the supervision of an international force" (39).

To these political conditions, General Dayan added three military ones:

"** The forces of each country would operate in separate sectors - ours in our sector, the French in theirs - even if there was a single overall headquarters. This affected primarily the land forces, less so the air forces.
** If we received aid in equipment, and if the French forces entered Egypt, Israel could take it upon herself to capture the eastern sector of the Suez Canal Zone (meaning the Sinai Peninsula).
** We should ask the French for equipment but not make their affirmative reply a condition of our participation in the operation" (40).

Ben Gurion was especially apprehensive about Washington, fearing that the Americans might impose sanctions on Israel once war began, and particularly suspicious about London, given Britain's complex relationship with the Arab world.

The French sought to reassure Ben Gurion. They believed, as a result of contacts with Washington, that the United States would take no action but they recommended that no approach be made to Washington for confirmation. France doubted that Britain would

take action against Israel unless Israel attacked Jordan. Ben Gurion was also anxious over the possibility of Soviet intervention in the war. The French argued that the shorter the war, the less likely was Soviet intervention. However, Soviet bloc instructors already in Egypt might very well partake in combat.

Further dicussion revealed that France did not possess the types of bomber aircraft needed to knock out Egypt's airfields, so that if Britain did participate in the proposed war, there would be no way to prevent the Eastern bloc flying fresh aircraft to replace any the Egyptians lost in combat. Because of this (among other reasons), the French wanted Israel to start the war on her own, for Paris felt that such an approach would greatly increase the chances of British participation, albeit at a later date. France expected a final reply from Britain in the middle of October, and could not finalise her campaign plans until then (41).

Israel's major concern was to avoid being maneouvred, by Britain, into the role of villain and scapegoat. The Israelis were convinced that, in Dayan's words,

> "Britain hated the very idea that her name might possibly be smeared as partners with Israel in military action against Arabs, but, at the same time, she could welcome

> the chance of exploiting Israel's conflict with the Arabs to justify her action against Egypt. The most desirable development for Britain would be an Israeli attack on Egypt. She could then rush to Egypt's defence and drive out Israel's forces, and since British troops would then find themselves in the Suez area, they would $automatically stay to control the Canal. The Foreign Office was convinced that under such circumstances, no one could accuse Britain of being either anti-Arab or the aggressor" (42).

It was just such a situation that the Israelis were determined to avoid. In subsequent, more technical discussion, it was more-or-less agreed with France that the Israeli Army and Air Force would operate in and over Sinai, east of Suez, while the small and weak Israeli Navy would confine itself to the defence of Israel's coast and to support for the Army. Operations in the Canal Zone, and air strikes in Egypt proper, would be the responsibility of the French and (hopefully) the British.

Nevertheless, the possibility of Britain not joining the campaign greatly worried Ben Gurion - specifically, the absence of British air power, with its ability to 'knock out' Egypt's airfields, alarmed him. He feared heavy Egyptian air attacks on Israel. Despite reassurance from Dayan, Ben Gurion remained apprehensive about the risks of going to war - should anything go wrong, the consequences for the still infant state of Israel could be catastrophic.

Nevertheless, Israel's preparations went ahead - on 2 October Dayan had informed the General Staff that 20 October was the provisional start date; on 8 October the campaign received its official code-name: Operation Kadesh (43). Dayan also outlined his military directives for the war:

> "... our task was not to kill a maximum of the enemy's forces but to bring about their collapse and capture what we could of their weapons and equipment. We would do this by seizing at the outset the principal targets deep inside enemy territory through landings or paratroop drops, while our infantry and armoured units embarked on a speedy advance. They would bypass enemy positions where possible, leave them cut off in isolated pockets in the rear, and resort to frontal attack only when this action is unavoidable. I also stressed the need to organise our forces so that the advance of one formation would not be dependent on the rate of progress of another" (44).

Also strongly stressed was the need for secrecy, in order to preserve the element of surprise. Dayan's operational plan can be summed up in one word: blitzkrieg. All the elements of this form of warfare were present - mobility, deep penetration, bypassing strongpoints, collapsing positions by maneouvre and so on.

In order to ensure secrecy, given that they could not hide their mobilisation of the IDF, the Israelis sought to lure the Egyptians into a false sense of security, by giving the impression that it was Jordan that was to be attacked. To this end, and in

response to a series of terrorist attacks from that country, in early October the Israelis launched a major raid on Jordanian positions at Kalkilia.

So fierce was the fighting that Amman afterwards asked for assistance from both Britain and Iraq. Consequently London informed the Israelis that an Iraqi division was about to enter Jordan, and that if Israel responded militarily, Britain would assist Jordan! Ben Gurion was, in the circumstances, understandably angry. He replied that Israel would reserve her freedom of action. Not until 16 October did Britain finally agree to Israeli involvement in the campaign.

This resulted in French Premier Mollet inviting Ben Gurion to Paris. Ben Gurion arrived, determined to avoid Israel being made the scapegoat for any action and also eager to minimize the risk of heavy air attack on Israel's cities. For these reasons, he steadfastly rejected the Anglo-French idea that Israel start the war on her own, the others only joining in later, under the pretext of separating the combatants.

Dayan, however, felt that Israel could not pass up an opportunity to fight with allies, and benefit from the accompanying military aid. Moreover,

London and Paris did not need Israeli military help to defeat Egypt. What they needed from Israel was a pretext for their operation. So it was that Dayan came up with a compromise proposal: Israel would not launch a full scale invasion of Sinai, but would rather carry out a deep penetration raid, near the Suez Canal, apparently in reprisal to fedayeen activities. This would provide London and Paris with their pretext, while, on the Israeli side, the force could either be reinforced or withdrawn, depending on circumstances. Such an approach also minimised the danger of an immediate, massive, Egyptian retaliatory air strike on Israeli cities. The French, in turn, offered to ensure Israel's security by sending aircraft and warships to Israel, in addition to the equipment they would deliver for use by the IDF.

On this compromise the British, French and Israelis were able to agree. Thus it was, after hard negotiations on 24 October, that the three countries signed the secret 'Treaty of Sevres', which laid out the political and military agreements which had been reached. Basically, the scenario was that Israel would commence operations at 17h00, local time, Monday 29 October; Britain and France would subsequently present a joint ultimatum to Israel and Egypt, demanding that they withdraw from the Canal

Zone; Israel would comply, Egypt could be relied upon not to. As a result, Anglo-French air strikes on Egypt would commence at dawn on Wednesday 31 October, followed by an amphibious landing on 2 November. Britain would not countenance an Israeli attack on Jordan, but would stay neutral if Jordan attacked Israel. France would defend Israeli intersts at the UN. France had already begun to pour military aid into Israel. In addition, France despatched the destroyers Surcouf, Kersaint and Bouvet to Israeli waters, and three fighter squadrons were sent to protect Israel's cities (46).

Israel's political objectives for Operation Kadesh could be divided into two categories: maximum and minimum. The maximum aims included the overthrow of Nasser, the achievement of peace between the Arabs and Israelis, the internationalisation of the Canal, and the demilitarisation of Sinai. These ambitions, or aspirations, were largely confined to Ben Gurion himself, and would hopefully flow from a successful campaign. However, it was the minimum objectives that the Israelis, in practice, concentrated upon - both General Dayan and Shimon Peres, for example, did not believe that Israel should get involved in the legal dispute over the status of the Canal: Israel had her own legitimate motives for war. The minimum objectives were more limited, more concrete,

more realistic. Basically, they were to: clear the Straits of Tiran; end fedayeen terrorism; and break the Egypt-Syria-Jordan military alliance, so ending the combined Arab threat, by destroying its strongest element, the Egyptian Army in Sinai (47). To fulfil these political objectives, the IDF would have to occupy the Gaza Strip (centre of fedayeen activity) and Sharm el-Sheikh (key to the Straits), and destroy the Egyptian Army and its positions in the Sinai.

Thanks to the potential threat from Britain and France, Egypt had concentrated considerable forces in the Nile Delta, in the process of reducing her garrison in the Sinai by half, to a total of 30,000 men. Most of them were concentrated in static defence positions in the north-eastern El Arish-Rafah-Abu Ageila triangle (see Map 1). In this region was the 3rd Infantry division, with one brigade each at El Arish (the 4th), Rafah (the 5th) and Abu Ageila (the 6th); in the Gaza Strip was deployed the 8th Palestinian Division (86th and 87th Palestinian Brigades and 26th Egyptian National Guard Brigade), a lightly armed and poorly trained unit. In addition, there was a squadron of Sherman tanks at Rafah and two more at El Arish. Available in support was an Armoured Brigade based at Bir Gafgafa with elements at Bir El-Hama. In reserve,

west of the Canal, were two infantry and one armoured divisions. All these forces came under Major-General Ali Amer's Eastern Command. Based around Sharm el-Sheikh, and directly under the command of General Headquarters, Cairo, was an Infantry Battalion, a National Guard Battalion, elements of the paramilitary Border Patrol, and two batteries each of coastal and antiaircraft guns. Responsibility for the border southeast of Abu Ageila was in the hands of Border Patrol (48).

To deal with these forces, and to guard her borders against possible intervention by other Arab states, Israel mobilised all of the IDF's 18 Brigades. Of these, ten were assigned to Operation Kadesh - the 1st, 4th, 9th, 11th and 12th Infantry Brigades, the 27th and 37th Mechanised Brigades, the 202nd Parachute and 7th Armoured Brigades.

Israeli deployment, and operative plan, were dictated by the Egyptian deployments, the geography of the Sinai and, of course, political considerations. The forces assigned to Operation Kadesh were subordinated to the IDF's Southern Command (Major-General Assaf Simhoni) and organised into two Divisional Task Forces (DTFs) and two Brigades - or, in other words, one formation for each of the main axes of the Sinai. In the north, opposite Rafah,

was Brigadier-General Haim Laskov's 77th DTF (1st 'Golani' Infantry and 27th Mechanised Brigades, with support available from the 11th Infantry Brigade). In the centre, across from Abu Ageila, was Colonel Yehuda Wallach's 38th DTF (4th and 10th Infantry, and 7th Armoured Brigades, with support available from the 37th Mechanised Brigade, in GHQ reserve, if needed). Assigned to the southern trans-Sinai axis was Colonel Ariel Sharon's 202nd Parachute Brigade. In the far south, detailed to occupy Sharm el-Sheikh, was Colonel Avraham Yoffe's 9th Infantry Brigade. Finally, the 11th Infantry Brigade was assigned to occupy the Gaza Strip, while the 12th Infantry Brigade was in reserve (49).

The Israeli plan of operations was divided into several phases. Phase One would begin on 29 October and involved the dropping of a Parachute Battalion only some 30 km from the canal; simultaneously, the rest of the Parachute Brigade would move overland from Israel through the Sinai via Kuntilla, Thamad and Nakhle, to link up with the isolated battalion. Before dawn on D+1 elements of the 38th DTF would cross the border and seize the road junction to Kusseima. This would allow the swift despatch of reinforcements (either via Nakhle or Bir El-Hassne) should anything go wrong with the Paratroopers; otherwise, Wallach's force would proceed against

their own objectives, although not immediately. Instead, there would be a delay until the evening of that day (30 October). This was intended to ensure that Britain and France would enter the war as agreed; if they did not then the whole Israeli force would withdraw and the action passed off as a reprisal raid. In order to add to the impression that a raid, not a full-scale invasion, was in progress, the activities of the Israeli Air Force (IAF) would be very restricted for the first 24 hours of the Operation.

Should all go well, full-scale operations would commence. The 38th DTF would attack Abu Ageila and then exploit into Central Sinai. Starting on the evening of D+2 (31 October) the 77th DTF would commence operations against Rafah; once this area had been cleard, Laskov's troops would drive on El Arish and thence towards the Canal. Thereafter the 11th Brigade would start to mop up the Gaza Strip. Meanwhile, the 202nd Brigade would have regrouped, and commenced to drive down the west coast of the Sinai towards Sharm el-Sheikh. This would be in support of the 9th Brigade, which would have begun to advance down Sinai's south-east coast from Israel to seize Sharm el-Sheikh, and open the Straits of Tiran (50). This, then, was the plan; and despite the near parity of strength between the combatants

(40,000 Egyptian, 45,000 Israeli), Dayan was confident it would work. The Operation was thus one in which "policy ... permeate[d] all military operations" (51), as Clausewitz said - that is, all the military objectives were intended to fulfill political ends.

Initially, all went according to plan - at 17h00, 29 October, C-47 Dakota transports of the IAF dropped Lt-Col Eitan's First Battalion, 202nd Parachute Brigade, at the Parker Memorial near the eastern entrance of the strategicaly important Mitla Pass (52). In addition to serving the political purpose of providing a pretext for Anglo-French intervention, this operation also served the military functions of isolating northern Sinai from the south, and blocking one of the main access routes from Egypt proper into Sinai.

Meanwhile, the rest of the Parachute Brigade, which had been concentrated on the Jordanian border as part of the Israeli deception plan, and which possessed a total strength of around 3,000 men, equipped with half-track APCs, a company of light tanks, and mortar and artillery batteries, had commenced its march some ten hours before, in order that it could cross the Egyptian-Israeli frontier at the same time Eitan's Battalion landed at the

Memorial (53). Despite some severe problems - including an acute shortage of suitable cross-country transport and rough terrain, Sharon reached the border only 18 minutes behind schedule and, though his force had been weakened by mechanical failures, he immediately assaulted the fortified border post of Kuntilla, which was rapidly captured by an assault from the West (i.e. the Egyptians' rear) covered by the setting sun. The defending Border Guard platoon abandoned its positions; most were captured.

Sharon then regrouped his widely spread Brigade. By 22h00, five hours after the capture of Kuntilla, most of the Brigade's 2nd Battalion had been concentrated. Sharon thereupon ordered all available forces to drive on to the next objective, Themed.

Meanwhile, the Egyptian Command first began to receive reports of Israeli military operations at both Mitla and Kuntilla at approximately 19h00. At 20h00 the Egyptian Eastern Command ordered the 5th and 6th Battalions, 2nd Infantry Brigade to cross the Canal and advance against the Israelis at Mitla. Further reinforcements, including the 2nd Light Reconaissance Regiment and the 1st and 2nd Armoured Brigades, 4th Armoured Division, were also ordered

to cross into Sinai and concentrate for a counter-attack.

In contrast to Kuntilla, Themed was a strongly fortified position, surrounded by minefields and barbed wire, and located on cliffs on both sides of the track; it was held by two companies of motorized border troops. Again, mechanical troubles and soft terrain had taken their toll of the Israeli force; only two tanks now remained. Nevertheless, at dawn (06h00 on 30th) the Brigade reconaissance unit, spearheaded by the remaining tanks, launched a frontal assault (the only kind possible) on the Egyptian positions; after a 40 minute battle they fell. The only enemy obstacle left was Nakhle, Headquarters of the Egyptian 2nd Motorized Border Battalion, and a fedayeen training base. Again Sharon regrouped his forces, received an airdrop of supplies, and suffered a strafing attack by four Egyptian MiG-15s, which had also strafed Eitan's force a little while before.

Eitan's men had meanwhile detected the vanguard of the advancing Egyptian 5th Infantry Battalion, and engaged it, simultaneously calling for air support. This swiftly arrived, and subjected the Egyptians to heavy attack, especially concentrated on the main body of their force, which had begun to enter the

Pass. Repeated air strikes destroyed many of their vehicles and, by sunset, the IAF was convinced the Egyptians no longer constituted a cohesive fighting force.

Meanwhile, Sharon had driven on towards Nakhle, arriving there around 17h00; an artillery barrage proved sufficient to cause the defenders to abandon their positions and retreat. Sharon was thus able to leave his 3rd Battalion at Nakhle and drive on to link up with Eitan at 22h30 on 30 October; since crossing the border, he had advanced 250 km across difficult terrain in less than 30 hours, a most impressive achievement.

Unfortunately Sharon now allowed his success to go to his head. The Brigade Commander felt that Eitan's position was too open and exposed especially with regard to increasing air attacks. So, on 31 October he requested permission to occupy the eastern end of the pass. This was denied, Israeli General Headquarters (GHQ) not wishing to trigger a major battle in what was now a quiet sector, for it would only increase Egyptian pressure on Sharon (who was only 30 km from a major concentration of Egyptian armour at Bir Gafgafa) and divert IAF support from the 38th DTF's crucial battle at Abu Ageila. Sharon, convinced that the IAF had

destroyed most of the Egyptian troops in the Mitla Pass, then requested permission to send a patrol into the Pass. This was approved, but he was again warned not to get involved in a major battle. In complete disregard of these instructions, Sharon sent a full battle group into the Pass. And this up, under Major Gur, swiftly and painfully discovered that the Egyptians had not been destroyed. In fact, significant numbers had been able to move into the pass on foot and had taken up positions in specially prepared defences on the tops of the flanking ridges, and in caves in the cliff sides. Gur's force ran straight into the midst of these defences, came under very heavy fire, and was rapidly pinned down, unable to advance or retreat. Sharon was forced to send a full Battalion to help extricate Gur's men; this Battalion had to scramble up the flanking ridges and fight its way from position to position in extremely fierce close-quarters combat. The battle raged in all for some seven and a half hours, finally coming to an end around 20h00. The Israelis then withdrew from the Pass; they had suffered 38 killed and 120 wounded; the Egyptians had lost anything between 100 and 260 dead. It was a totally unnecessary battle with totally unnecessary casualties which achieved no purpose at all. Despite his anger Dayan, however, did not discipline Sharon - he felt that such a step

could dampen the initiative of subordinate officers, and Dayan greatly prized initiative among his subordinates. This Israeli withdrawal marked the end of the fighting along the southern axis (54).

Meanwhile, on the broader stage, it had become clear that the British and French had postponed their attack, instead of commencing it at dawn on the 31st. This news alarmed Ben Gurion, who was ill in bed with influenza; his immediate reaction was to demand the immediate withdrawal of all Israeli forces from Sinai. Dayan however, was, with difficulty, able to dissuade Ben Gurion from taking this step. The Chief of Staff was confident that Israel would succeed even without Britain and France. As it turned out, Britain and France, who had, in accordance with their agreement, delivered their joint ultimatum to Egypt and Israel on the afternoon of 30 October (Israel, as agreed, accepted it; Egypt, as expected, rejected it) commenced operations during the evening of 31 October, with air raids on Egyptian targets.

The second major Israeli attack in the Operation Kadesh schedule was that of the 38th DTF against the Egyptian defences centred on Abu Ageila. This was almost certainly the single most important battle of the war, as the Abu Ageila complex was the linchpin

of the Egyptian defence system in Sinai. Abu Ageila gained its importance by virtue of the fact that it was one of the few road junctions in the Peninsula (see Maps 1 and 2); here, the main east-west road from Ismailia is met by the northwest-southeast road from El Arish and Bir Lahfan. Roughly twelve kilometres east of Abu Ageila was a second, unnamed, road junction where the east-west road was joined by the road from Kusseima. All these roads were paved.

A further three kilometres to the east of this junction, the east-west crossed the northern edge of the Um Katef ridge. To the north of the road, at this point, was an area of sand-dunes which stretched all the way to the coast at Rafah. As for the ridge, it stretched some six kilometres to the south, and possessed by two peaks - Um Shihan, just south of the road, and Um Katef itself, and taller of the two, some three kilometres further south. A dirt track from Auja, which ran parallell to the main road, crossed the ridge between these peaks to join the main road near Abu Ageila. Lying west-south-west of Um Katef was the considerably larger, low hill mass known as Jebel Dalafe. The pass between Um Katef and Jebel Dalafe contained the road from Kusseima. In turn, the Jebel Hilal lay west and south of the Jebel Dalafe, the two being separated by the bed of the Wadi Arish, the gap

being known as Daika Pass. The Wadi itself was dry most of the year, but flows in the spring. To capture these waters, the Ruefa dam had been built some three and a half kilometres south east of Abu Ageila; the dam was surrounded by high hills (56).

Defence of this key area was entrusted to Colonel Sami Yassa's 6th Brigade with a total of some 3,000 men. As the sand dunes north of the road were assumed to be impassable, they were not defended or even patrolled. The core of the Egyptians' defence was located on the twin peaks of Um Katef and Um Shihan. Both these positions consisted of networks of sandbagged trenches and bunkers, with emplaced anti-tank guns. Each was garrisoned by an Infantry Battallion, reinforced by a company of tank destroyers. The Um Shihan position actually extended across the road and into the sand dunes. In support, the Brigade artillery was located just to the west of the northern tip of Jebel Dalafe, *from whence it could give all round supporting fire.* Concentrated at the Ruefa dam were two companies of infantry, both to act as a Brigade reserve and to guard the defence complex' rear. At Abu Ageila itself was concentrated the Brigade's support units, including kitchens, vehicles, etc. protected by a strong security detachment; Brigade HQ was located just behind the Um Katef position. Finally, the

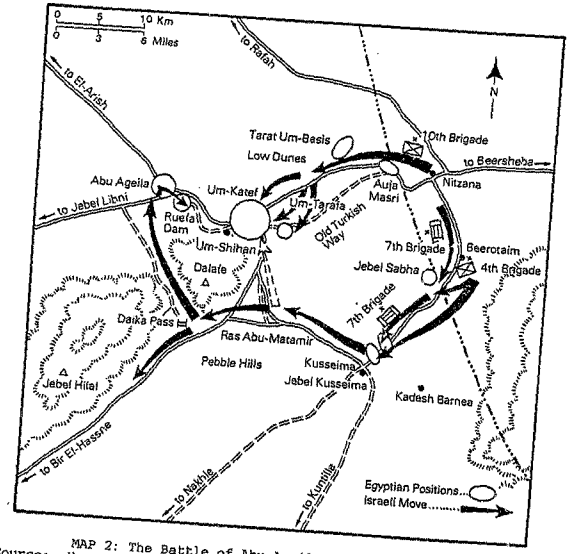
complex also possessed four principal outposts, each normally manned by a squad or platoon; two were to the east, on the border and at Tarat Um-Basis; one to the southeast at the Abu Matamir defile overlooking the Kusseima road; and the last to the south, in the Daika Pass. Kusseima itself, some 20 km south east of Um Katef, was held by an understrength National Guard Battalion, and an army independent jeep company; these units were not part of Yassa's Brigade; however, an army company, reinforced with a bazooka antitank unit, and deployed to cover the road between Kusseima and Um Katef, belonged to the 6th Brigade (see Map 2).

All in all, the Abu Ageila complex was a most formidable one, making good use of the local terrain and possessing the capability for all round defence; any three of the five main positions (Um Katef, Um Shihan, artillery base, Ruefa dam, Abu Ageila) were mutually supporting. Little wonder it has been described as a 'hedgehog'.

As previously indicated, responsibility for penetrating this hedgehog lay with Colonel Yehuda Wallach's 38th DTF. Unfortunately, under the Israeli operational plan, Wallach's best brigade, the crack, regular 7th Armoured (Col. Uri Ben Ari) was not to cross the border until late on 31

October, by which time it would be clear whether Britain and France were abiding by the Treaty of Sevres. Thus, for a full day and a half, Wallach could count only on his two reserve infantry brigades, the 4th and 10th. His initial tactical plan was thus simple: the 4th (Col. Joseph Harpaz) would advance on Kusseima, and take it early on 30 October; the next day, the 10th Brigade would launch a full-scale attack on Um Katef. It was necessary to swiftly take Kusseima for three reasons: to open another line of communications to the 202nd Parachute Brigade, via Nakhle; to open the road to Bir El-Hassne; and to unhinge the Abu Ageila hedgehog on its southern flank, so opening the way for an envelopment, should the frontal attack fail.

Thus it was on the evening of 29 October that the 4th Brigade began its advance on Kusseima, even though it was hampered by equipment shortages resulting from the rapid mobilisation. Like *Sharon's force, it soon found itself delayed by soft* sand. The Brigade's 3rd Battalion advanced on the forward Egyptian fortified outpost on Jebel Sabha, only to find it unoccupied; the 2nd Battalion advanced directly at Kusseima. At dawn (06h00) the Israeli Brigade took the defenders of Kusseima completely by surprise, the two Israeli Battalions attacking from the northeast and east respectively.



MAP 2: The Battle of Abu Ageila
(Source: Herzog, C: The Arab-Israeli Wars: War and Peace in the Middle East, Arms and Armour Press, London, 1982.)

The Egyptians were swiftly overcome, and retreated toward Bir El-Hassne or Abu Ageila. Harpaz immediately secured Kusseima, and sent patrols along the roads and tracks towards Kuntilla, Nakhle and Bir El-Hassne; all were soon reported clear. A patrol sent northward, however, reported that the Egyptians were holding the Abu-Matamir defile, on the road to Um Katef.

In the meantime, however, the Commander of the Southern Front, Major-General Assaf Simchoni worried at Harpaz' slow progress, had decided to disobey Dayan's strict instructions, and at midnight, 29/30 October, committed the 7th Armoured Brigade, ordering Col. Ben Ari to send forward a battle group of his Brigade. It must be pointed out that Simchoni had no idea of the political reasons underlying Dayan's interdict (so secret was the Sevres agreement), and thus could not see the sense in keeping his most powerful and mobile formation out of the battle for a key position. By the time the tanks arrived at Kusseima, the Egyptians were already in retreat; the Israeli armour was merely able to hasten them along. But by doing so, it inescapably revealed its presence in the Sinai. Because of this, Simchoni concluded that it would be nonsensical to try and maintain secrecy about the commitment of the armour, so he ordered the rest of

the Brigade to Kusseima. This, in turn, demolished the planned timetable for the attack on Abu Ageila - originally scheduled for 31 October. Instead, Simchoni ordered Wallach to move the 10th Brigade immediately, in order to attack Um Katef shortly after nightfall.

Meanwhile, Ben Ari pushed his forces on from Kusseima and approached Um Katef from the south, the Egyptians abandoning Abu-Matamir without a fight. The Israelis probed forward twice, on both occasions encountering very accurate defensive fire and taking casualties; it was obvious that Um Katef could not be stormed in a frontal attack by armour. Nevertheless, these brief exchanges were enough to deprive the Egyptian Brigade of its commander. Realising the situation, Ben Ari sent a Task Group further west to probe for alternative approaches, especially the Daika Pass. As the Task Group, commanded by Lt.Col. Avraham Adan, approached the Pass, the Egyptians guarding it destroyed the bridge over the Wadi and retreated. However, while this halted Adan's wheeled supply vehicles, it did not stop the tanks, and Adan pressed on and cut the main road. Given that he was totally without logistics support until the Brigade's engineers could drive a motorable route through the Pass, this was a very daring move on Adan's part. It also meant that not

only could the Abu Ageila complex now be attacked from the rear, but that the whole position had been bypassed; the Israelis no longer needed to take it, merely to neutralise those sections which could interdict their bypass route. At this point, Abu Ageila ceased to serve the primary purpose for which it had been designed. In a daring application of the indirect approach, Egypt's considerable investment of men and material in the complex had been rendered worthless.

Meanwhile, at 11h00, Dayan arrived with Simchoni at Kusseima. Sizing up the situation, Dayan ordered Harpaz to link up with Sharon's men at Nakhle, Wallach to take Um Katef by infantry assault, and Ben Ari to drive westwards across Sinai, either via Jebel Libni or Bir El-Hassne. Though tactically the Egyptians of the 6th Brigade were still very much existence and full of fight, strategically and operatively they had already been totally defeated. Ben Ari proposed to leave Adan's Task Group which would then attack Abu Ageila from the rear. Wallach agreed, but specified that such an attack be co-ordinated with the planned assaults by the 4th and 10th Brigades on Um Katef. In the meantime, Egyptian reinforcements were rushing to Abu Ageila from El Arish; arriving at Abu Ageila around midnight on 30/31 October. The 6th Brigade's reserves,

hitherto based at Ruefa dam, were thereupon moved forward to reinforce Um Katef and Um Shihan.

Wallach's plan was for the 10th Brigade to arrive before Um Katef/Um Shihan shortly after dark on 30 October, deploy and launch a frontal attack; while, simultaneously, units of the 4th Brigade would attack from the south, and Adan's Task Group would advance from the west against Ruefa dam. Hastily planned, the attack proved poorly co-ordinated and, unsurprisingly, a failure. Clausewitzian friction was very much in evidence on the Israeli side. Adan's Task Group, hampered by poor going, was nowhere near Ruefa dam; the 4th Brigade units were not alerted to their intended role, so the 10th Brigade attacked unsupported and was easily repulsed. Adan's Task Group finally attacked Abu Ageila crossroads (as a preliminary to the attack on Ruefa dam) in the early morning of 31 October, despite accurate Egyptian artillery fire. Once the defence perimeter at the Crossroads was penetrated Egyptian resistance collapsed. An attempted counter-attack from Ruefa dam was driven off.

On hearing of the fall of Abu Ageila, the commander of the 3rd Infantry Division, Brigadier al Qadi, ordered an immediate counter-attack from El Arish, and further instructed the 6th Brigade (now led by

Brigadier Mutawally) to launch a simultaneous assault against the cross-roads from Um Katef.

Adan, alerted to the danger from El Arish, and harassed by fire from Um Katef and Jebel Dalafe, deployed his forces north of the junction. However, the northern prong of the counter-attack broke down in the face of an Israeli air raid. The Egyptians thereafter contented themselves with long-range fire. It was at this time that the southern pincer of the Egyptian counter-attack was launched from Um Katef. Adan was thus able to concentrate his forces and defeat it. The Egyptians failed due to their lack of determination.

The Egyptians having abdicated the initiative to Adan, the latter then launched a co-ordinated attack on Ruefa Dam. Fierce resistance led Adan to abandon the attack, regroup and await a resupply convoy, which arrived early on the morning of 1 November. In the interim, another Egyptian counter-attack from Ruefa dam was repulsed.

Also during the course of 31 October, the 10th Brigade had launched a second frontal attack on Um Katef - without armour or artillery support. Unsurprisingly, this too was easily repulsed. Attempts to regroup and prepare yet another attack

took the rest of the day. This necessitated a night attack - only the Israeli Battalions got lost and so in fact, there was no attack at all. This, for Dayan, was the last straw and he relieved the Commander of the 10th Brigade; he also committed the 37th Mechanised Brigade to the battle. This Brigade, minus its (delayed) tank battalion, arrived early on 1 November. Too impatient to wait until his tanks arrived, the Brigade Commander, Col. Golinda, launched another frontal attack on the Egyptian position. This, too, was repulsed with heavy loss, Col. Golinda being among the dead. Dayan, on hearing this, cancelled all further attacks on Um Katef and Um Shihan.

Friction, clearly, had run rampant throughout the Israeli forces in the course of this battle. What is more, none of these abortive assaults were really necessary; the entire Egyptian position had been outflanked by Ben Ari and his 7th Armoured Brigade, and any threat it could have posed to his rear had been eliminated by Adan's Task Group. Nor, thanks to the efforts of the IDF Engineers, who drove a motorable route through the Daika Pass, did Ben Ari have to worry about having secure lines of supply. In fact, the Israeilis could very well have screened Um Katef and Um Shihan (as they were ultimately forced to do, anyway) and left them alone to 'wither

on the vine'. The collapse of the entire Um Katef-Um Shihan complex was inevitable once the Egyptian Army had been defeated throughout the Sinai. The Israelis deviated from the classical blitzkrieg doctrine and paid the price - tactical failure and unnecessary casualties.

Meanwhile, of course, the Anglo-French ultimatum had been delivered. Consequently, at 19h00 on 31 October, Anglo-French aircraft commenced attacks on Egypt. Nasser at once ordered all Egyptian troops in Sinai to withdraw across the Canal, to avoid being cut off by the Anglo-French forces; the only exception was the garrison at Sharm el-Sheikh. So it was that, on the night of 31 October/1 November, the Egyptian garrison of Um Katef-Um Shihan abandoned its positions and heavy equipment and, unknown to the Israelis, slipped away across the sand dunes. Only half made it to safety, most of the rest being taken prisoner, though a number perished in the desert (58).

But what of Ben Ari and the 7th Armoured Brigade in Central Sinai? Driving rapidly westwards, as Egyptian armoured reinforcements (4th Armoured Division) slowly moved eastwards (hampered by Israeli air attack), Ben Ari's forces rapidly seized both Bir El-Hassne and the Jebel Libni crossroads

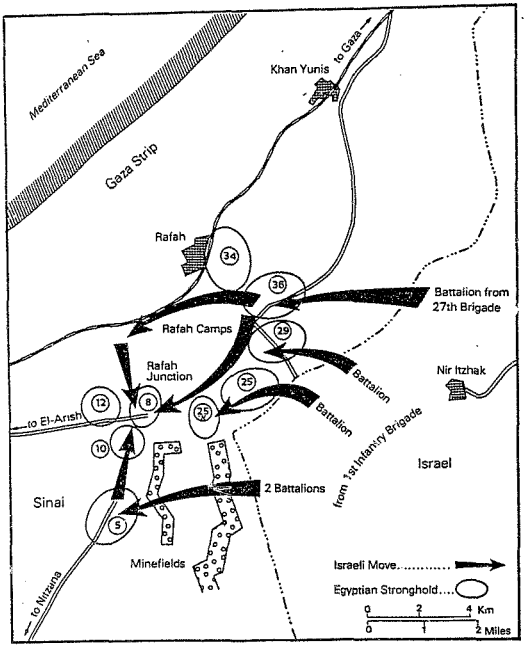
and then advanced on Bir El-Hama, all during 30 October. Just east of Bir El-Hama, Ben Ari awaited the advanced elements of the Egyptian armour.

This was not a matter of choice on Ben Ari´s part: Dayan had ordered all Israeli units except the 9th Brigade, to go over to a posture of mobile defence. Prime Minister Ben Gurion had become convinced, because of his co-belligerent´s unexpected delay in joining the fighting, that Britain intended to renege on the Sevres agreement. As a result, he ordered a general Israeli withdrawal from the Sinai. Dayan, however, was strongly opposed to any such move, and disobeying his Prime Minister, contented himself with ordering a temporary halt to the Israeli advance. This incident provides a confirmation of Sun Tzu´s dictum: "There are occasions when the commands of a sovereign need not be obeyed". Indeed, he argued that "there are three ways in which a ruler can bring misfortune upon his army", the first of [illegible] being "when ignorant that the army should not advance, to order an advance or ignorant that it should not retire, to order a retirement" (59). It also illustrates Clausewitz´ warning that: "Policy ... will permeate all military operations, and insofar as their violent nature will admit, it will have a continuous influence on them (60). Dayan well understood that the ´point of no

return' had passed, that Israel was committed to the war whatever London and Paris did or did not do, and that to accede to Ben Gurion's temporary loss of nerve would only have catastophic military and political repercussions for Israel.

Then, some 12 hours late, came the Anglo-French air attacks, and Nasser's withdrawal orders. So it was that Ben Ari took off in pursuit of the now retreating 4th Armoured Division, mauling its rearguard at Bir Rud Salim, and capturing the main Egyptian supply base for the Sinai that was located there. Recommencing their pursuit at dawn on 2 November, having regrouped and reorganised themselves (for the Egyptian forces were still formidable), Ben Ari's tanks drove through Bir Gafgafa and only met up with the Egyptian rearguard at Katib el Subha (halfway between Ismailia and Bir Gafgafa). The Egyptian force was overwhelmed, the survivors escaping to the Canal. Ben Ari, as instructed, halted his victorious Brigade ten miles from the Canal (61).

The third major battle of the war was that for Rafah (see Map 3). The Rafah defence complex guarded both the northernmost trans-Sinai road (and railway) from Kantara, and the base of the Gaza Strip, and comprised no fewer than 26 mutually supporting



MAP 3: The Battle of Rafah
(Source: Herzog, C: The Arab-Israeli Wars: War and Peace in the Middle East, Arms and Armour Press, London, 1982.)

company and platoon positions, disposed to take advantage of a series of rocky ridges to the south and east of Rafah. Each position was fortified and surrounded by barbed wire and minefields; in addition, south of Rafah, and parallel to the border, were two minefields, each about 5 km long. This whole network was held by the Egyptian 5th Infantry Brigade, reinforced by elements of 87th Palestinian Brigade, all backed by armour and artillery.

Opposing them was Brig-Gen Haim Laskov's 77th DTF, comprising Col. Benjamin Gibli's 1st (Golani) Infantry Brigade, reinforced with additional troops, including armour, and Col Haim Bar-Lev's 27th Mechanized Brigade.

The Israeli attack was due to commence at midnight on 31 October/1 November, by which time the war had been raging for a few days. So there was no question of surprise; instead, the planning for the operation was meticulous. Laskov's plan was quite simple: a double envelopment of the Egyptian positions (see Map 3): in the south, the 3rd Golani Battalion would clear a path through the Egyptian minefields, whereupon a motorized battalion (attached from the 12th Infantry Brigade) would pass through and reach the Rafah-Nitzana Road; these units could then swing north, and drive up the road

to the Rafah junction. Meanwhile, in the north, the 1st and 2nd Golani Battalions would clear the fortified hills adjacent to the Rafah-Gaza road, while the 27th Mechanized Brigade would drive through the old British Army complex of the Rafah camps, swing round to the junction, link up with the southern pincer, and then drive southwest along the Kantara road towards El Arish and beyond.

The southern pincer was the first into action, the Golani Battalion successfully negotiating the minefields. The motorized battalion was not so fortunate, however, and became trapped in the minefields after some vehicles detonated mines. Frantic efforts by the engineers, delicate maneouvering by the Battalion (all under fierce and heavy Egyptian fire aided by searchlights and the burning hulks of Israeli vehicles) finally resulted, after five hours, in the Battalion breaking through and reaching the Rafah-Nitzana road. Thereafter, the two Battalions drove north, stormed the Egyptian positions overlooking the Kantara road, and dug in to await the tanks of the 27th Mechanized Brigade. Meanwhile, the 1st and 2nd Golani Battalions, backed by a platoon of tanks borrowed from the Mechanized Brigade, fought their way to, through and beyond the Egyptian positions along the Gaza road, penetrating into and clearing the Rafah Camps complex. As for

the rest of the 27th Mechanized Brigade, it commenced its attack in the north at 04h00 on 1 November, overwhelming two key Egyptian strongpoints after some two hours of hand-to-hand fighting, before swinging around and driving on Rafah junction, linking up with the southern pincer there at 10h00 that morning. The Israeli assault may have been aided by Nasser's withdrawal order - it being unclear when this reached the defenders of Rafah - either before or after the Israeli assault. Whatever the case, the retreating Egyptians found themselves hotly pursued by the Israelis. Any Egyptian rearguards were brushed aside or overwhelmed.

By evening the Israelis were in El Arish. Dayan, who had accompanied the 27th Mechanized Brigade throughout the whole battle, decided to await dawn before entering the town. When the Israelis did so, they found it had been abandoned by the Egyptians. The pursuit was then resumed, but all that was found were destroyed and abandoned Egyptian armour and vehicles, the former victims of the Israeli Air Force. No less than 385 vehicles, including forty T-34 tanks and 60 armoured cars were captured intact by the Israelis. By evening, the Israelis had reached Rumani, some ten miles from the Canal, and halted (62).

All that was left to do was to clear the Gaza Strip, and open the Straits of Tiran. The Gaza Strip, base for the fedayeen terrorists (who, since the outbreak of the war, had stepped up their activities) was held by some 10,000 men of the 8th Palestinian Division, with the Egyptian 26th National Guard Brigade centred on Gaza in the north, and the Palestinian 86th Brigade concentrated on Khan Yunis in the south. Assigned to clearing the strip was Col. Aharon Doron's 11th Infantry Brigade, reinforced by a combat team from the 37th Mechanized Brigade. Doron commenced operations at 06h00 on 2 November with an attack on Gaza; once the outer defences were penetrated resistance collapsed, and by early afternoon not only had the garrisons formally surrendered, but so had the Gaza Strip's Egyptian Governor. Nevertheless, the Palestinian Brigade at Khan Yunis decided to fight on, so, at dawn on 3 November, Doron' men attacked; by early afternoon all resistance had ceased. The Strip, so long a thorn in the side of Israel, was secure (53).

The operation to clear the Straits of Tiran was more an epic of physical end than a combat operation (see Map 1). assigned the task was the 9th Infantry Briga. a reserve formation commanded by Col. Avraham Yoffe, with some 1,800 men (all non-essential personnel were left behind)

carried on 200 vehicles (including 14 half-tracks). In addition, a tank unit would be conveyed down the Gulf by Naval Landing Craft. The prelude to this operation came, on the opening night of the war, when the 9th Brigade's reconnaissance company advanced from Eilat, crossed the border, seized the key road junction just east of Ras El-Naqb (from which roads radiated to Kuntilla, Themed, and Ras El-Naqb itself) and thereafter stormed the latter's Police post. The rest of the Brigade proceeded to concentrate at Ras El-Naqb, coming from its home district in the Jezreel Valley far to the north via Kuntilla, and not via Eilat. This was to confuse the Egyptians as to the Brigades purpose. The concentration was completed by 1 November and, before dawn the next day, Yoffe received clearance from Dayan to commence his advance. The plan, quite simply, was for the 9th Brigade to advance along the Peninsula's Aqaba coast, employing a camel route never intended for motorized transport, through a landscape of steep, saw-tooth ridges, deep sand and ravines and which was frequently strewn with huge boulders. Moreover, it was extremely hot, and largely devoid of water. Given the total absense of room to maneouvre, the 9th would have been very vulnerable to air attack, which is why Dayan delayed his advance until the Egyptian Air Force was no longer a threat. The brigade advanced in widely

spread columns, to reduce dust and prevent traffic jams. Vehicles frequently had to be manipulated by hand to get them through. Despite this, Yoffe's advanceed elements reached Dahab on 3 November, where they brushed aside minor, though unexpected, resistance. The Brigade concentrated at Dahab and received re-supply from the Navy's Landing Craft. At 18h00 on 3 November, Yoffe set out again, encountered unexpectedly weak opposition at the very narrow Wadi Kid defile and, by the following midday, reached the Egyptian fortified complex of Ras Nasrani - only to find it abandoned. The garrison had, strangely, fallen back to Sharm el-Sheikh, which was more of a supply base than a fortress. Meanwhile, on 2 November, elements of the 202nd Parat[illegible]op Brigade, having been relieved at Nakhle by Harpa[illegible] men, dropped at El Tur on the Sinai's west coast and seized the airfield there; while the Brigade's 1st Battalion moved overland to Ras Sudr (going around the mountains, and not, unsurprisingly, via the Mitla Pass) in order to commence opening the Peninsula's Suez coast road to Sharm el-Sheikh. By the afternoon of 3 Nov[illegible], the 1st Battalion had linked up with the air[illegible]ped paratroopers, and they then advanced on Sharm el-Sheikh.

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The whole Operation Kadesh stands as a witness to Clausewitz' argument that "policy ... will permeate all military operations" (65). From the very beginning, each aspect, each thrust, of Operation Kadesh *was designed to, and did, fulfill specific* political objectives. The paradrop at, and subsequent overland advance by the 202nd Brigade to, the Mitla Pass gave Britain and France the pretext they wanted to seize the Canal; it also neatly avoided the risk of immediately entangling Israel in a full-scale war with Egypt. The attacks on the Abu Ageila and Rafah Complexes, and the subsequent

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thrusts deep into Central Sinai, broke the threatening Arab encirclement of Israel by inflicting a severe blow upon its strongest member, Egypt. The clearance of the Gaza Strip brought peace and security to a vulnerable, sensitive yet important area of Israel, making consolidation and development possible. Finally, of course, the seizure of Sharm el-Sheikh opened Israel's route to Africa and the East.

Nor is this all; for each of the elements of the Operation also made eminent military sense: the paradrop isolated southern Sinai from the north, and simultaneously blocked one of the Peninsula's main east-west axes, so helping to prevent the advance of Egyptian reinforcements. The operations around Abu Ageila, Rafah and in the Central Sinai destroyed the Egyptian Field Army facing Israel, allowing the IDF to 'mop up' the Gaza and Sharm el-Sheikh at leisure, without fear of interference. And, of course, these last operations destroyed the fedayeen and opened the Straits of Tiran. Operation Kadesh was a model Clausewitzian campaign.

Israel now, however, had to consolidate her gains politically. The international arena was in uproar as a result of the Anglo-French invasion of Egypt and, as early as 2 November, the United Nations,

spearheaded by the two Superpowers, had demanded the unconditional withdrawal of all foreign forces from Egyptian territory. For Israel, this was intolerable, because it would restore her previous situation of severe insecurity. Yet Israel was faced by economic threats from America and implicit Soviet threats of war, while action by the UN Security Council was averted only by French vetoes. Ben Gurion responded with a simple, but effective, *two-prong diplomatic strategy.* To reduce the immediate pressure on Israel, he announced a policy of a phased withdrawal from Sinai - a withdrawal which, however, would only be completed once certain conditions had been met. Simultaneously, he launched a diplomatic offensive to persuade the world, but especially America, that Israel had had legitimate reasons for going to war, quite separate from those of Britain and France. Initially, Ben Gurion's conditions for complete withdrawal were:

i) guaranteed freedom of passage through the *Straits of Tiran;*

ii) The non-return of Gaza to Egyptian control; and

iii) the demilitarization of the Sinai.

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the Canal by 1 December, 60 miles by 21 December, 75 miles by 28 December, until, by early January, they were back to a line running south from El Arish. And, all the time, Israel's diplomats were busy in international forums and in the United States, slowly gaining support for their country's position. By mid-January, the Israeli government ordered the IDF to vacate all Sinai except Sharm el-Sheikh, the coast road to Eilat, and the Gaza Strip. The military vacuum left behind could not be filled by the Egyptians, given the shattering of their Armed Forces by the wars, and the presence of the United Nations Emergency Force along the Canal. Thus, Israel's withdrawals involved no immediate threat to the country's security.

The Israeli campaign was largely, but not entirely, successful. Israel's point of view achieved wide acceptance in the Western world, but attempts to persuade the United States to provide iron-clad guarantees for Jerusalem's conditions failed, with the result that Ben Gurion had finally to accept a Franco-Canadian compromise. Under this, Israel announced its final withdrawal from the Sinai, simultaneously laying down the conditions upon which this was based (66). The leading Western and maritime states (except the USSR) then publicly endorsed Israel's position. In the event, America

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provided only a half-hearted endorsement (though balancing this by immediately guaranteeing a generous loan from the World Bank). With some misgivings, the IDF handed over Gaza and Sharm el-Sheikh to the United Nations, and withdrew. Operation Kadesh was finally over.

Had the diplomatic campaign succeeded in consolidating the military gains? By and large, the answer is in the affirmative. The UN presence at Sharm el-Sheikh kept the Straits open, allowing shipping to reach Eilat regularly. The resultant increase in trade greatly benefitted the entire country. With regard to Gaza, the Egyptians, in violation of Israel's conditions, reinstated a civilian governor in the Strip only days after the IDF's withdrawal. Jerusalem protested but, as it soon become clear that the Egyptians were not going to re-militarize the Strip, nor permit nor promote further fedayeen raids, no action was taken. Indeed, the presence of the UN Emergency Force gave Nasser a face-saving means of avoiding another confrontation with Israel, with the result that the Peninsula remained, for all practical intents and purposes, demilitarized.

With the southern border peaceful and secure for the first time since independence, with Eilat open to shipping and developing new trade, Israel entered a

period of rapid socio-economic growth. Victory had also greatly boosted Israeli self-confidence, and established Israel internationally as a country to be taken seriously. It is true that, eleven years after Operation Kadesh, Nasser reinstated confrontation with Israel; but it was a far stronger, more confident, Israel; an Israel that proved able to defeat three Arab powers in ten days; an Israel that was the direct result of Operation Kadesh.

NOTES

1. This description of the geography of the Sinai, and its communications axes, is based upon accounts by Dupuy, T.N., Elusive Victory, Macdonald and Jane's, London, 1978, pp. 144-146; Herzog, C., The Arab-Israeli Wars, Arms and Armour Press, London, 1982, pp. 114-116; and Orr, M., "The Israeli Attack in Sinai" in Thompson, R. (ed.), War in Peace, Orbis, London, 1981, pp. 101-102. The railway line from Ismailia to Rafah was ripped up by the Israelis following the 1967 war - they wished to use the rails to reinforce their Bar Lev Line bunkers along the Suez Canal.

2. Eshel, D., "Israel Defence Forces: Transition" in Defence Update International, No. 58, p. 57.

3. Dupuy, op.cit., pp. 129-131.

4. Sachar, H.M., A History of Israel, Alfred A. Knopf, New York, 1979, p. 395.

5. Rothenburg, G.E., The Anatomy of the Israeli Army, Batsford, London, 1979, p.69.

6. Quotes from Lorch, N., One Long War, Keter Books, Jerusalem, 1976, p. 83.

7. See Lorch, N., ibid, p. 84, and Rothenburg, op.cit., pp. 71-84.

8. Herzog, op.cit., p. 115.

9. Quoted in Sachar, op.cit., p.458.

10. Sachar, ibid., p. 455.

11. Ibid., p. 456.

12. Quoted in Ben Gurion, D., Israel: A Personal History, Sabra Books, Tel Aviv, 1972, p. 440.

13. Quoted, ibid.

14. Israeli figures quoted by Brecher, M., Decisions in Israel's Foreign Policy, Oxford University Press, London, 1974, p. 229, and by Dupuy, op.cit., p. 133. Rothenburh, op.cit., p. 88, lists Israeli casualties as: 1950 - 19 killed, 31 wounded; 1951 - 48 killed, 49 wounded; 1952 - 182 killed and wounded; all these casualties were civilians.

15. Sachar, op.cit., p. 475.

16. Rothenburg, op.cit., p. 89; Sachar, ibid., p. 48.

17. Brecher, op.cit., p. 229, reports Israeli casualties for 1955 as 238; Dupuy, op.cit p. 133, gives a figure of 258; Herzog, op.cit., p. 113, states 'some 260".

18. Sachar, op.cit., pp. 448-449.

19. Herzog, op.cit.

20. Brecher, op.cit., p. 230, n.1 gives the balance as follows: Egypt - 200 tanks (40 of them modern Centurions), 100 aircraft (80 of them jets - Meteors, Vampires), 2 destroyers and 4 frigates; Israel - 200 tanks (none modern), 50 jet fighters, and 2 destroyers. Dupuy, op.cit., p. 133 states that each country had "about 200 tanks and about 50 jet aircraft".

21. Sachar, op.cit., p. 473.

22. Rothenburg, op.cit., p. 97. Dupuy, op.cit., p.132 lists "230 tanks, 300 other armoured vehicles, 500 artillery peices, 150 MiG fighter planes, 50 Iluyshin 28 bombers, several submarines and other naval craft, a variety of other wepons, and several hundred trucks and tractors". Dayan, M., Story of my Life, Weidenfeld and Nicolson, London, 1976, p. 146, reports "some 300 medium and heavy tanks of the latest Soviet type, 200 armoured personnel carriers, 100 armoured self-propelled guns, several hundred field howitzer, medium guns and anti-tank guns, 134 anti-aircraft guns, and 200 MiG-15 jet fighters and 50 Iluyshin bombers, in addition to transport planes, radar systems, 2 destroyers, 4 minesweepers, 12 torpedo boats, ammunition, spare parts, ground equipment for aircraft, and hundreds of battle vehicles of various types. All small arms and light weapons were to be replaced by huge quantities of the Russian semi-automatic rifle". Sachar, op.cit., pp. 473-474, states that the deal was worth US$ 320 million, and encompassed "200 tanks, 150 artillery pieces, 120 MiG jet fighters, 50 jet bombers, 20 transport planes, 2 destroyers, 2 submarines, 15 minesweepers, plus hundreds of vehicles and thousands of modern rifles and machine guns". Sachar also notes that Syria concluded a parallel agreement with 'Czechoslovakia' for the delivery of 100 tanks, 100 MiG-15s, and much other heavy weaponry.

23. Quoted in Ben Gurion, op.cit., p. 448.

24. Quoted in Brecher, op.cit., p. 247.

25. Quoted ibid.

26. Dayan, op.cit., pp. 146-147.

27. Crosbie, S.K., A Tacit Alliance, Princetown University Press, Princetown, 1974, pp. 29-34; Finer, S.E., Comparative Government, Penguin, London, 1974, pp. 287-300.

28. Crosbie, ibid., pp. 42-43.

29. Ibid., pp. 46-49.

30. Quoted by Sachar, op.cit., p. 484.

31. Until July 1956 Mystere IV production was paid for with American funds and all aircraft manufactured were earmarked for NATO Air Forces. Thus, no Mysteres could be diverted to non-NATO air arms without prior American permission.

32. Crosbie, op.cit., pp. 64-65; Rothenburg, op.cit., pp. 102-103; Sachar, op.cit., pp. 484-485. Crosbie and Rothenburg both state that 8 aircraft were involved; Sachar and Dayan (who should know), op.cit., p. 149, both state 12. These aircraft appear to have been diverted from the batch allocated to the French Air Force; Israel had ordered 24 Mystere IVs, but the remaining 12 could not, as outlined in note 31 above, be delivered until American permission was achieved. This was forthcoming at the May 1956 Paris NATO Council meeting.

33. Sun Tzu, The Art of War, translated by S.B. Griffith, Oxford University Press, London, 1971; quotes are Ch. 1, verse 1, p. 63; Ch. XII, v. 18, pp. 142-143; and Ch. XII, v. 19, p. 143, respectively.

34. Sachar, op.cit., p. 486.

35. Dayan, op.cit., pp. 149-150; quotation from Sun Tzu, op.cit., Ch. 2, v. 7, p. 73. Sun Tzu, also (in Ch. 2, v. 6, p. 73) argued that "while we have heard of blundering swiftness in war, we have not yet seen a clever operation that was prolonged".

36. Crosbie, op.cit., citing informed French sources. Dayan, op.cit., p. 151, however, claims that "the first intimation" that France

was interested in "coordinated action" came on 1 September. There is still much uncertainty as to what precisely happened, and when, between Israel, France and Britain from July to October 1956.

37. Crosbie, ibid., pp. 70-71.

38. Dayan, op.cit., pp. 151-153.

39. The extra arms Israel requested amounted to: 100 medium tanks, 300 half-track armoured personnel carriers (APCs), 50 tank transporters, 30 cross-country trucks, 1,000 recoilless rifles, and a squadron (approximately 12) of Nord Noratlas transport aircraft. This list was presented to the French, in Paris, on 29 September and was promptly accepted by the French. Sachar, op.cit., p. 490.

40. Both quotations are from Dayan, op.cit., p. 157. Dayan was a member of the Israeli delegation sent to Paris on 29 September for secret talks with the French. Ben Gurion stayed at home.

41. This account is based upon ibid., p. 158-160.

42. Ibid., p. 61.

43. Named after the last site of sojourn in the Sinai Peninsula by the Israelites before they entered the Promised Land.

44. Dayan, op.cit., p. 171.

45. See ibid., pp. 174-190; Crosbie, op.cit., pp. 71-76, Sachar, op.cit., pp. 490-493.

46. Crosbie, ibid., pp. 77-78; Sachar, ibid., p. 493 states two fighter squadrons were involved.

47. Brecher, op.cit., pp. 252-253; Herzog, op.cit., p. 114.

48. Dupuy, op.cit., pp. 146-147; Herzog, ibid.

49. Dupuy, ibid., pp. 147-148; Herzog, ibid.

50. See Dupuy, ibid., pp. 147-149; Lorch, op.cit., pp. 93-94; Sachar, op.cit., p. 495.

51. von Clausewitz, K., On War, translated and edited by Michael Howard and Peter Paret Princeton University Press, Princeton, 1976, pp. 86-87. See also Ch. 2, pp. 42-44, above.

52. For clarity, each element of Operation Kadesh will be dealt with separately, and in full, even if they overlap chronologically. For Eitan's paradrop and Sharon's overland advance, see Map 1, p. 2.

53. Dupuy, ibid., p. 153; Herzog, ibid., p. 119; Westall, T., "Death in the Pass" in The Elite, Vol. 2, p. 278.

54. This account of the 202nd Parachute Brigade's advance and combat is based on Dupuy, ibid., pp. 151-155, 169-174; Herzog, ibid., pp. 117-123; Lorch, op.cit., pp. 94-95; Westwall, ibid., pp. 276-280. Estimates of Egyptian fatalities in the Battle of the Mitla Pass vary widely: Dupuy (p. 174) states "between 100 and 150"; Herzog (p. 123) estimates "some 200"; Westwall (p. 280) suggests "more than 260".

55. Dayan, op.cit., pp. 198-199; Sachar, op.cit., pp. 497-499. The whole complex charade to disguise the alliance between Britain and France on the one hand, and Israel on the other, was gravely, if not fatally, undermined by one basic error: the warplanes of all three countries were painted with similar black and yellow mutual identification markings!

56. Dupuy, op.cit., pp. 156-159.

57. During the second Israeli probe, Col. Yassa was hit by a shell splinter; what consequently ensued provides a classic illustration of Clausewitz' dictum that "war is the realm of chance" and of his concept of friction (see pp. 49-53 above):

> "At first he [Yassa] seamed unhurt, but then his officers saw a red stain *spreading* over his field tunic, and Yassa suddenly collapsed, unconscious. As his subordinates rushed to give him first aid they soon realised that he had not really been wounded. The shell fragment had pierced a red fountain pen in his pocket, and the stain that all of them thought was blood proved only to be ink. The shock of the experience, however, combined with the sharp blow on his heart, was too great for Colonel Yassa, who apparently suffered either a heart attack or a nervous breakdown". Dupuy, ibid., p. 163.

58. This account of the Battle of Abu Ageila - Um Katef is based upon Dupuy, ibid., pp. 157-168, 181-183; Herzog, op.cit., pp.123-129; and Lorch, op.cit., pp. 95-97.

59. Sun Tzu, op.cit., Quotes are from Ch. VIII, v. 8, p. 112, Ch. III, v. 19 and v. 20, p. 81, repectively.

60. Clausewitz, K., op.cit., pp. 86-87, emphasis added. See also p. 43 above.

61. See Dupuy, ibid., pp. 177-179; 192-193.

62. See ibid., pp. 184-191; Herzog, op.cit., pp. 129-133.

63. Dupuy, ibid., pp. 191-192; Herzog, ibid., pp. 133-134; Sachar, op.cit., p. 500 asserts that the fedayeen "were rounded up from prepared lists and shot on the spot". All other sources appear to be silent as to their fate.

64. Dupuy, ibid., pp. 194-196; Herzog, ibid., pp. 134-138; figures from Dupuy, p. 212.

65. See Note 60 above.

66. These were: that UN forces would take over control of the Gaza Strip and Sharma el-Sheikh, administering the former untill a formal peace treaty was concluded, and holding the latter to guarantee the freedom of the Straits of Tiran.

CHAPTER 9: CASE STUDY II:
SEA POWER IN THE FALKLANDS WAR, 1982

The Falklands (see Maps 4 and 5) are a group of just over 200 islands (2 of them major) located some 300 miles off the southern Argentine coast, totalling some 4,700 square miles in area. They lie approximately between 51 and 52 degrees south, and 58 and 61 degrees west, possessing an open terrain dominated by peat-bogs and moorlands, interspersed by low ridges and hills, the highest peak (Mount Adam on West Falkland) being only some 2,100 feet high. The islands are completely exposed and continually windswept, and experience, on average, some 200 days of rain each year. The population (in 1982) numbered some 1,800 (1,300 of whom had been born on the islands), by far the largest settlement being the capital, Port Stanley (population 1,050 in 1980), classified, under the British system of urban designation, as a City because of its possession of a (rather grand) Cathedral. The basis of the economy is sheep-farming, there being some 658,000 sheep before the war (1).

It is unclear when and by whom the Falklands were first discovered, though it is known who was first to actually set foot on them - England's Captain John Strong, in 1690; Strong also charted and named

the Sound separating the two main islands (East and West Falkland). What is clear is that possession of the islands was a matter of dispute from the first. In 1764 a French expedition claimed the islands for France and established a small colony on East Falkland. In 1765 a British expedition (unaware of the French claim or colony) claimed the islands for Britain; the following year a colony was established - and the French discovered. This led to a dispute between Britain and France, and between them both and Spain. For Spain regarded the islands as part of her American territories (though she had never explicitly claimed them nor occupied them) - territories whose integrity has been guaranteed by the 1713 Treaty of Utrecht. Madrid thus saw the British and French actions as violations of this Treaty. The Franco-Spanish dispute was resolved in 1767 by the sale of the colony to Spain. Then, in 1769 the Spanish, with overwhelming force, ejected the small British garrison of Royal Marines from West Falkland. There ensued much diplomacy and frequent threats of war by both sides, but after a year a compromise was achieved, the British being allowed to return to their settlement, while the Spanish reserved their claim to sovereignty. Three years later, the British abandoned the Falklands, but left behind a plaque claiming sovereignty over the islands. The Spanish colony remained until

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