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**THE POST-1970 POLITICAL GEOGRAPHY OF THE RED SEA REGION
WITH SPECIAL REFERENCE TO UNITED STATES INTERESTS**

Elsadig Yagoub A. Abunafeesa

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Thesis submitted for the Degree of Doctor of Philosophy,
Department of Geography, University of Durham

September 1985



28. JAN. 1986

Dedication

To those Sudanese who fought courageously and gave their souls unreservedly in defence of their Islamic faith and independence: from 1881, under the leadership of the great Muslim leader and reformer Al Imam Muhammed Ahmed Al Mahdi, to 1970, under the leadership of the martyr of Islam al Imam al Hadi al Mahdi.

THE POST-1970 POLITICAL GEOGRAPHY OF THE RED SEA REGION,
WITH SPECIAL REFERENCE TO UNITED STATES INTERESTS

Elsadig Yagoub A. Abunafeesa

ABSTRACT

This is a pioneer and comprehensive study of the political geography of the Red Sea region. Background studies on geopolitics, physical environment, and resources are offered.

The thesis is especially concerned with three basic American interests in the Red Sea. Firstly, energy interest: United States deep concern about uninterrupted flow of oil supplies from the Gulf to the former as well as to its Western allies creates an increasing American interest in the Red Sea route, particularly since the Gulf tanker war in 1982. Such interest is clearly seen in United States political, technical, and financial involvement in the Suez Canal (1975) and in the current laying of pipelines from the Gulf to the Red Sea. Disruption of those supplies to the US or its allies may result in American use of force.

Secondly, shipping interest: such concern is clearly shown in United States involvement in matters relating to the Suez Canal, the Straits of Bab al Mandeb and Tiran. Freedom of navigation through the Red Sea, especially for Israeli ships, is a major American interest in this respect. United States refusal to sign the 1982 UN Convention on the Law of the Sea may involve the former into conflict with some Red Sea States, particularly when American nuclear-powered vessels sail from the Mediterranean to the Indian Ocean or vice versa.

Thirdly, Soviet involvement in Afghanistan, the Gulf war and the resurgence of Islam are becoming increasingly worrying to the US, because such developments are feared as a destabilizing factor to the stability of the oil producing states of the Arabian peninsula, with particular reference to Saudi Arabia, the most important Red Sea state.

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ABBREVIATIONS USED

AFESD	Arab Fund for Economic and Social Development.
ALESCO	Arab League Educational Scientific and Cultural Organization.
AMOCO	American Oil Company.
AR	Arab Republic.
AWACS	Airborne Warning and Air Control System.
BP	British Petroleum.
CFP	Compagnie Francaise des Petroles.
EEC	European Economic Community.
EEZ	Exclusive Economic Zone.
Est. Def Exp	Estimated Defence Expenditure.
Est. FMA	Estimated Foreign Military Assistance.
fig.	Figure.
GCC	Gulf Co-operation Council.
IBG	Institute of British Geographers.
IDA	International Development Association.
IEA	International Energy Agency.
IFAD	International Fund for Agricultural Development.
IFPA	Institute for Foreign Policy Analysis.
IISS	International Institute for Strategic Studies.
IMCO	Inter-Governmental Maritime Consultative Organization.
IPE	International Petroleum Encyclopedia.
IPG	Independent Petroleum Group.
LAJ	Libyan Arab Jamhiriya.

MEED	Middle East Economic Digest.
MEES	Middle East Economic Survey.
MFO	Multinational Force and Observer.
MIDEASTFOR	Middle East Force.
MILTECH	Military Technology.
NATO	North Atlantic Treaty Organization.
NDF	National Democratic Front.
NGL	Natural Gas Liquid.
NLF	National Liberation Front.
n.m.	Nautical Mile.
NSC	National Security Council.
OAPEC	The Organization of the Arab Petroleum Exporting Countries.
OECD	Organization for Economic Co-operation and Development.
OPEC	Oil Producing and Exporting Counties
PDR	People's Democratic Republic.
PFL0	Popular Front for the Liberation of Oman.
RDF	Rapid Deploying Force.
RDJTF	Rapid Deployment Joint Task Force.
RO/RO	Roll-on Roll-off.
RIIA	Royal Institute for International Affairs.
RN	Royal Navy.
RSC	Red Sea Commission.
RS GAESCO	Red Sea and the Gulf of Aden Environmental, Scientific and Cultural Organization.
RSP	Regional Seas Programme.

SUMED	Suez Mediterranean (Pipeline).
SWB	Summary of World Broadcast.
SWCC	Saline Water Conservative Corporation.
TAPCO	Tapline Company.
UAE	United Arab Emirates.
ULCC	Ultra Large Crude Carrier.
UNCLOS	United Nations Conference on the Law of the Sea.
UNEP	United Nations Environmental Programme.
USCENTCOM	United States Central Command.
VLCC	Very Large Crude Carrier.
YOMINCO	Yemen's Oil and Minerals Corporation.

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PREFACE

The influence of geography on politics can be conspicuously seen in the Red Sea region. The location of the latter at the crossroad of Africa, Asia and Europe has enabled it to be an important highway between these land-masses for centuries. Throughout time there has been a correlation between development of trade through the Red Sea and the stability of its coastal states.

The emergence of Islam in Arabia and the existence of the most two important Muslim shrines on the Eastern Coast of the Red Sea have further enhanced the significance of the latter which played a vital role, especially before the advent of air navigation, as a means of communication through which Muslims used to travel to Makka to perform their Annual Hajj (Pilgimage).

By the close of the 19th century the Red Sea became a contested battleground between the colonial powers of Great Britain, France and Italy. The emergence of the superpowers of the United States and the Soviet Union and their supplanting of those traditional powers bestowed a new dimension on the Red Sea, since the 1960s when it has become an arena for competition between the original land-power of the Soviet Union and the sea-power of the United States. The discovery of oil in the 1930s in the Gulf and the increasing

dependence of the industrial West on those resources have added to the strategic significance of the Red Sea, which until 1966 was the chief artery of oil transportation to the West.

Following the closure of the canal in 1967, after the 2nd Israeli-Arab war, the Red Sea lost its significance, because oil transportation was shifted to the Cape route. Since the re-opening of the Suez Canal and the increasing involvement of the United States in the Middle East, the Red Sea has begun to regain its importance.

The preoccupation of the United States with the Soviet Union and other radical States in the Middle East as sources of threat to United States interests there, has also added a strategic and geopolitical importance to the Red Sea, hence throughout the 1970s the Red Sea region has attracted American interest. Such American concern about the region must concern its people because of the repercussions of such foreign interference on their interests, not least their national security and sovereignty. Therefore, this issue has constituted the substance of this thesis.

Chapter one discusses various definitions of geopolitics, regional and global geopolitical perspectives, and the position of the Red Sea with regard to these views. Also Red Sea social and political diversities as well as its global location are underlined by the former's geographical linkages with other regions; all these issues have been

investigated.

Chapter two deals with the environmental features of the region; these include the formation of the Red Sea, coasts, islands, climate, and pollution. Most important here is the strategic significance of those physical assets with regard to American interests.

Chapter three handles the issue of Red Sea resources and assesses their importance regionally and in relation to United States interests.

In Chapter four United States shipping interests in the Red Sea have been investigated extensively through American concern about, and involvement in matters relating to the Suez Canal, Red Sea waterways, and major ports. In this chapter, the United States' particular concern about Israel's right to navigate the Red Sea is highlighted.

Chapter five discusses the issue of the United States energy supply and transportation, which is the central subject of the thesis. It has been intensively researched. This part of the thesis discusses United States strategy of occupying the Gulf oilfields if oil supplies are denied to them. Here, the creation of the former RDF and its replacement by the USCENTCOM is assessed.

Chapter six deals with the security of shipping which includes physical and legal threats to the United States' shipping interests in the Red Sea. Here, United States' refusal to sign the 1982 UN Convention on the Law of the Sea

and the possible repercussions on such a position are shown to be most important.

United States' concern about the stability of the oil states of the Arabian peninsula, with special reference to Saudi Arabia, is the subject of Chapter seven. This issue is expansively investigated. Political and military threats to the peninsula states, as perceived by the US, are also examined. Differences between Saudi Arabia and the US over the actual threat to the security of the peninsula is an important theme in this chapter.

Chapter eight concludes the thesis by discussing United States' geopolitical behaviour in the region. Prospects for geopolitical development in the region and their impact in the United States receive attention. Finally, the author concludes with recommendations he sees as worthy of consideration.

PART I:

THE RED SEA REGION

CHAPTER 1
GEOPOLITICAL SIGNIFICANCE AND REGIONAL LINKAGES
OF THE RED SEA REGION

1.1 Definitions

1.1.1 Geopolitics

Since its inception, the term 'geopolitics' has undergone many interpretations, some of which are clearly in conflict. The historical development of these changes has been adequately presented elsewhere, and will not be discussed here.⁽¹⁾ The term 'geopolitics' was probably first coined in 1899 by Kjellen to mean "the science of the state as a realm in space".⁽²⁾ According to Muir (1975) the German Journal The Mouthpiece depicted the word as

"... the science which deals with the dependence of political events upon soil (i.e. the physical setting)." (3)

Pound (1972) insists that 'geopolitics' must be the "geographical conscience of the state" involving the "geographically oriented study of politics".⁽⁴⁾ Muir (1975) states that the term includes "studies of dynamic political processes" acting at levels "broader than that of the individual state and within global perspectives".⁽⁵⁾ To Cohen (1973) the essence of geopolitics is "the relation of international political power to the geographical



setting".⁽⁶⁾ Gray (1977) is in agreement with Cohen's perspective.⁽⁷⁾ In a United States Senate report, Geopolitics of Energy, Conant (1977) maintains that in relation to the study of international affairs

"geopolitics ... stresses the importance of locational factors in influencing the relations among nations." (8)

Boyce (1982) states that geopolitics concerns the political situation of a nation in relation to geographical conditions, with the

"underlying geographical features of each nation or group of nations, as these are reflected in the political character and policies of the area." (9)

In the United States today 'geopolitics' is widely used to denote "the geographical facts regarded in terms of their political relevance in a global context."⁽¹⁰⁾ To the Russians, however, the subject is a

"bourgeois reactionary conception, which uses selectively interpreted facts of physical and economic geography for the formation and propagation of the aggressive policies of imperialist states." (11)

For our purposes a useful definition of geopolitics is the influence of geographical factors, whether real or perceived, in shaping international relations at the regional, continental and global scales.

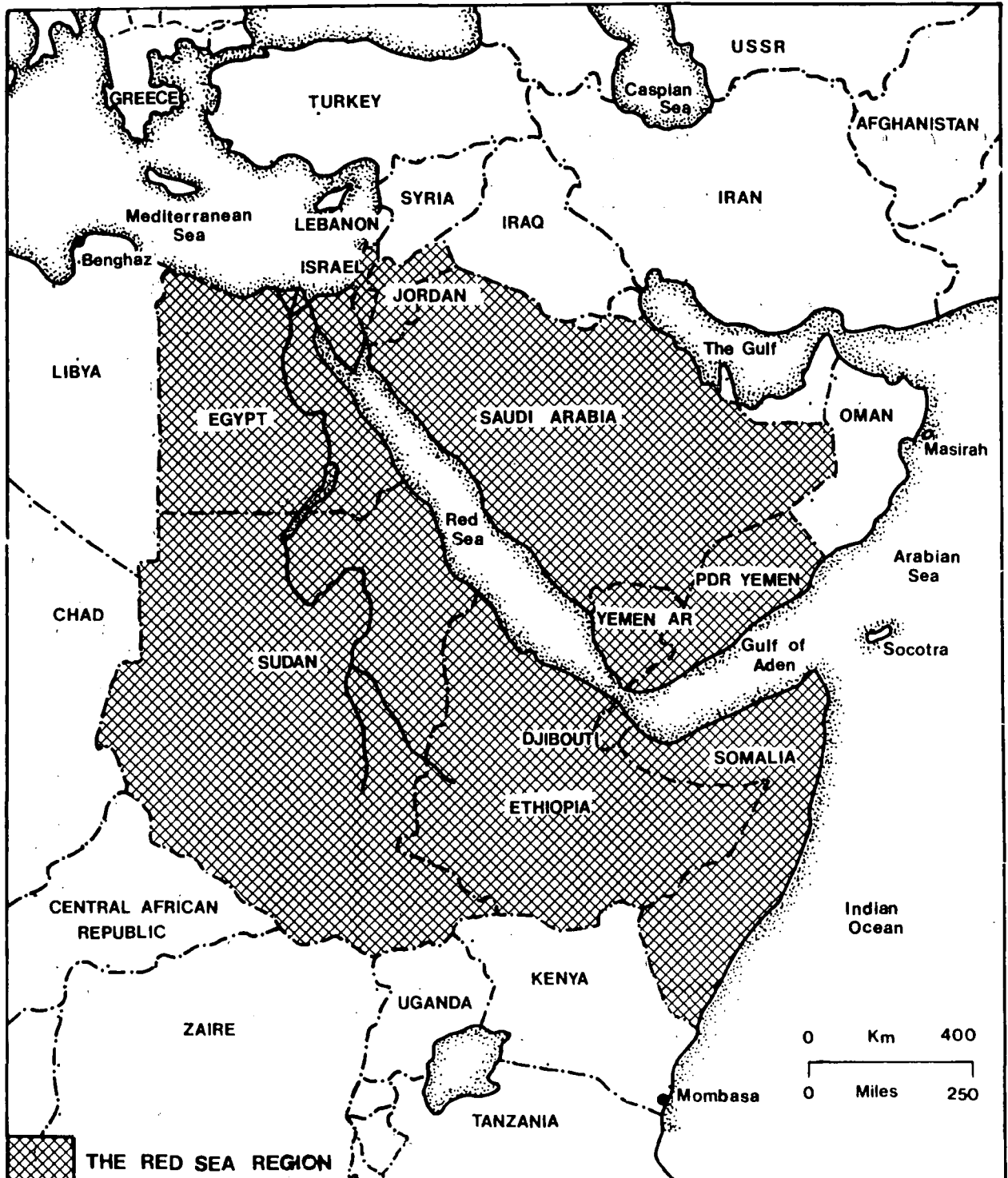


FIG. 1.1 THE RED SEA REGION

1.1.2 The Red Sea Region

For the purpose of this study, the Red Sea region is defined as the Red Sea proper and its ramifications (the Gulf of Suez, the Gulf of Aqaba, and the Suez Canal to the north; and the Gulf of Aden to the south), and the coastal states thereof. This zone embraces ten riparian states, equally divided between eastern and western shores: Somalia, Djibouti, Ethiopia, Sudan and Egypt on the African shore and The People's Democratic Republic of Yemen (PDRY), The Yemen Arab Republic (YAR), the Kingdom of Saudi Arabia, Jordan, and Israel on the Asian shore (figure 1.1). The location of the Horn of Africa on the southern approaches to the Red Sea, Somalia's fronting on the Gulf of Aden and Somalia's involvement in the security affairs of the Red Sea, are all strong reasons for the inclusion of the Horn into the Red Sea geopolitical region. Its inclusion has been both recognized and considered appropriate by various scholars.⁽¹²⁾ The logic of this definition will appear clearer later, and especially when the shipping and energy interests of the United States and its allies are discussed in chapters 4 and 5, and also when threats to these interests are investigated in chapters 6 and 7.

1.2 Geopolitical Perspectives

1.2.1 Global Views

Twentieth century global geopolitical views are many and

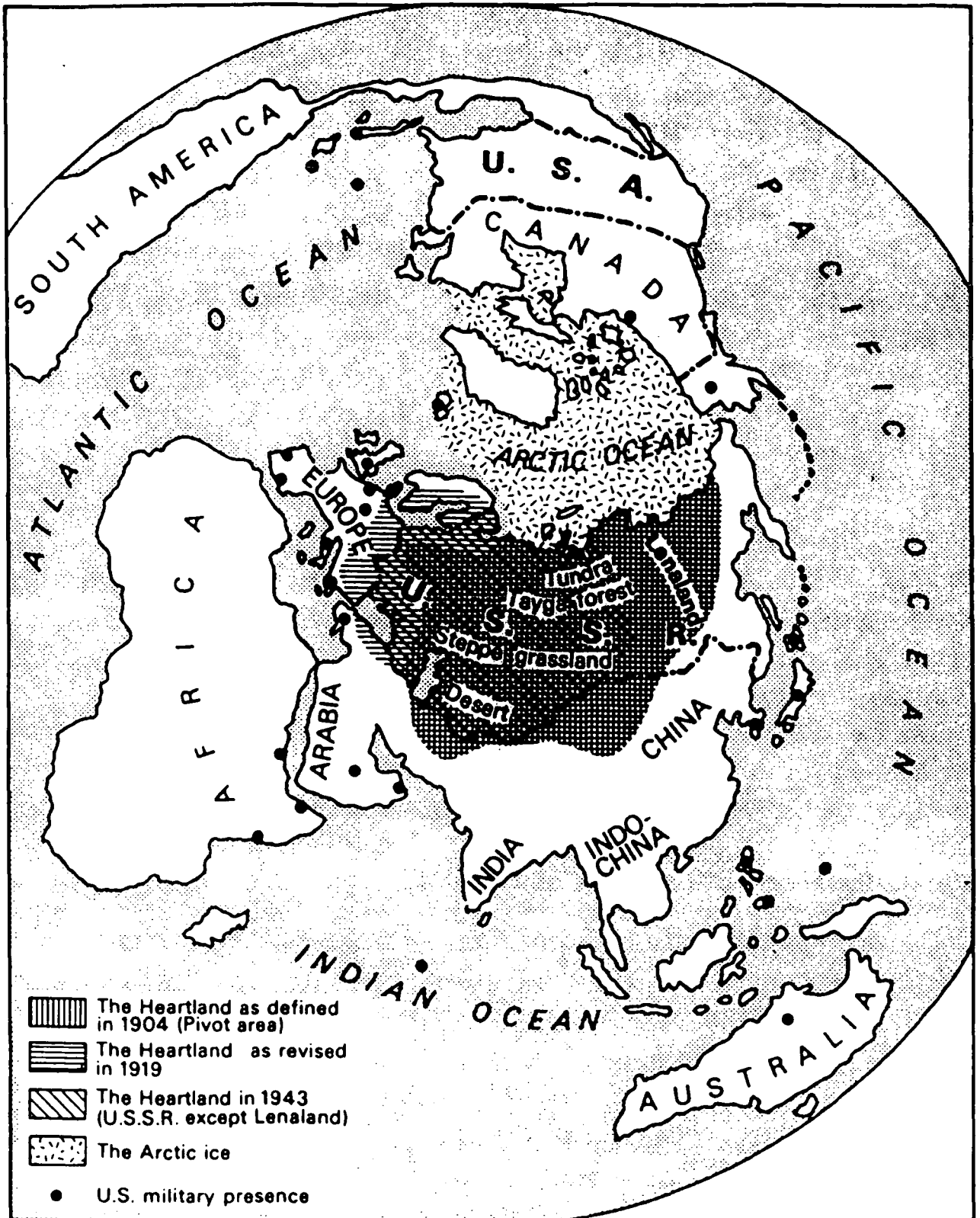


FIG. 1.2 WORLD GEOPOLITICAL VIEWS ACCORDING TO H.J. MACKINDER
(1904, 1919 and 1943)

varied, and naturally enough, contrasting geopolitical perspectives of the world have emerged,⁽¹³⁾ often differing in particular over the relative significance of land and sea. There are perhaps four dominant views regarding the earth's political-patterns, advocated by Mahan (1900), Mackinder (1904, 1919 and 1943), Spykman (1944) and Cohen (1964, 1973 and 1982).⁽¹⁴⁾ The American Admiral Alfred Mahan (1900), who became one of the most influential proponents of sea-power, predicted that world dominance could be achieved by an Anglo-American alliance from key land bases surrounding Eurasia, because of the "inherent advantage of sea-movement over land movement".⁽¹⁵⁾ Mahan's thesis of sea-power as the key to world mastery convinced him that an alliance of maritime powers could contain the land-power based on the Eurasian land-based.⁽¹⁶⁾

The views of the British political geographer, Sir Halford Mackinder (1904, 1919, 1943) are probably still among the most influential ideas in the field of geopolitics⁽¹⁷⁾ (figure 1.2). Contrary to Mahan, and in reaction to his ideas, Mackinder emphasized the advantages of land-power over sea-power.⁽¹⁸⁾ After World War One his thesis was summarized as:

"Who rules East Europe commands the Heartland:
Who rules the Heartland commands the World-Island:
Who rules the World-Island commands the World." (19)

Nicholas Spykman (1944) largely agreed with Mackinder's

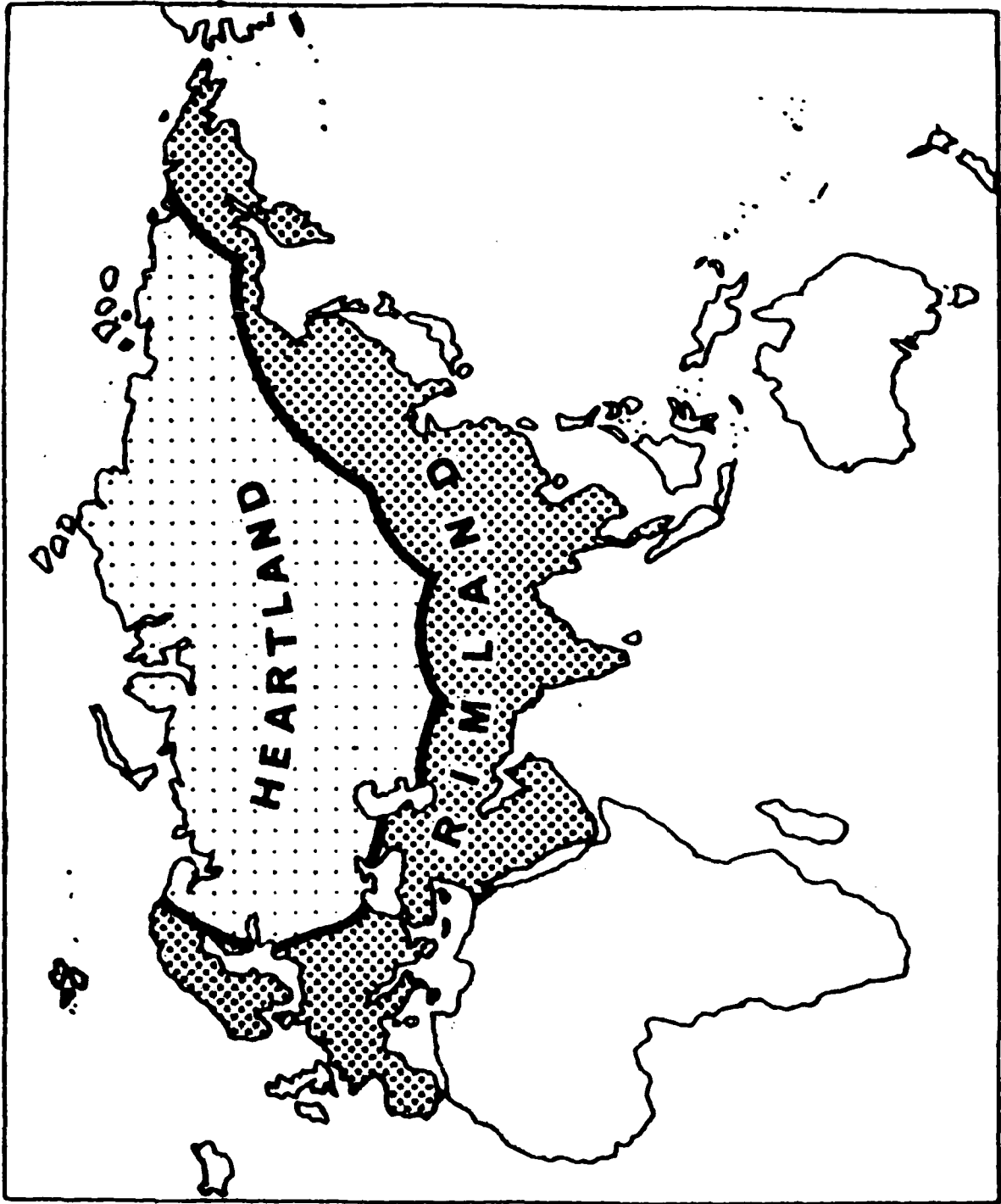


FIG. 1.3 N.J. SPYKMAN'S RIMLAND CONCEPT (1944)

view of potential competition between Russian land-power based on the Heartland and sea-power, but he put more emphasis on the role of the "tier of states which encircled the Heartland". He called this tier the 'Rimland' (figure 1.3), which corresponds very closely to Mackinder's "Inner or Marginal Crescent".⁽²⁰⁾ Spykman suggested that the rimland states have certain important features that make them the key to world domination, including large populations, rich resources, for instance oil, and the use of maritime communications. He argued that control of the rimland states was the major objective of the contest between USSR and Great Britain before World War One when the latter was the enveloping power.⁽²¹⁾

Spykman strongly advocated that the United States should attempt to influence the rimland states and the prevention of their control by the Soviet Union should be the foremost task.⁽²²⁾ He believed that:

"Who controls the Rimland rules Eurasia;
Who rules Eurasia controls the destinies of the
World." (23)

Parker (1982) indicates that Spykman was influenced by Mackinder's 'Heartland' and 'World Island' thesis concluding that the United States should "organize and reinforce the 'rimland' in order to imprison the 'heartland' within its bounds ..."⁽²⁴⁾ Parker has no doubt that the entrenchment of geopolitics in the United States has contributed to the rapid

rise of the latter to superpower status. He maintains that after World War Two opposition between the continental powers of Britain and Germany had been replaced by a global confrontation between the US - the biggest and strongest 'island' state in the 'marginal crescent' - and the Soviet Union - the first power to command the 'Heartland' of the 'World Island'.⁽²⁵⁾ This development seemed to confirm Mackinder's prophecy of an age land-power versus sea-power, in which the former struggles to break out and challenge its opponent while the latter makes every effort to "keep it out of the oceanic border lands", as seen by Cochram (1972).⁽²⁶⁾

Frank Barnett (1977), President of the US National Strategy Information Center - indicates that there is an inherent struggle between the 'Heartland' power of the Soviet Union and the maritime alliance - led by the US - for effective defence of the 'Rimlands' of Eurasia and Africa, and "maintenance of relatively free access to the Rimland resources and their adjacent seas".⁽²⁷⁾ He considers those resources and sea lanes as vital security interests of the United States.⁽²⁸⁾ Aligning himself with the previously mentioned generation of geopolitical thinkers, Gray (1977) typifies this view as follows:

- Control of the World-Island of Eurasia - Africa by a single power would, in the long term, mean control of the world.

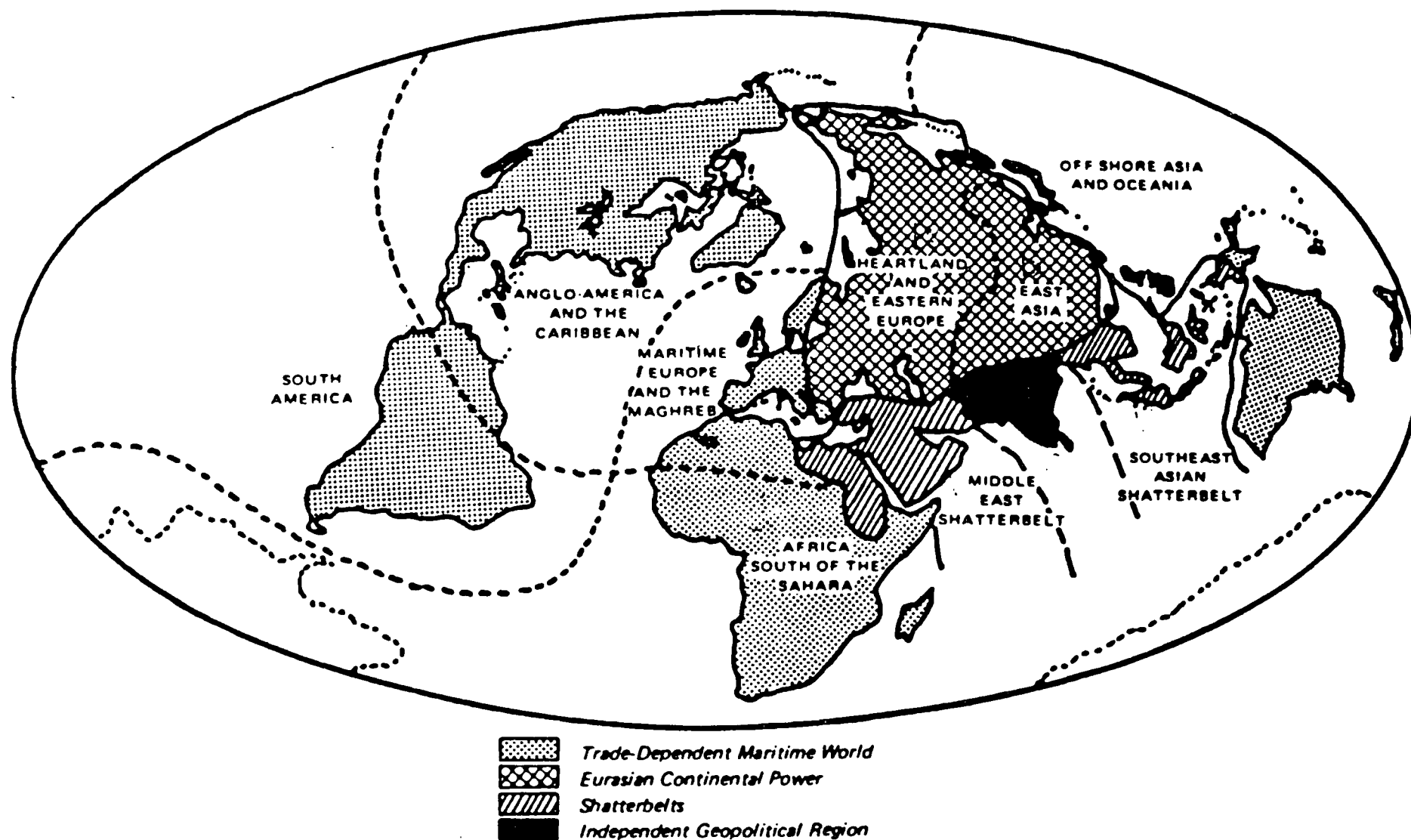
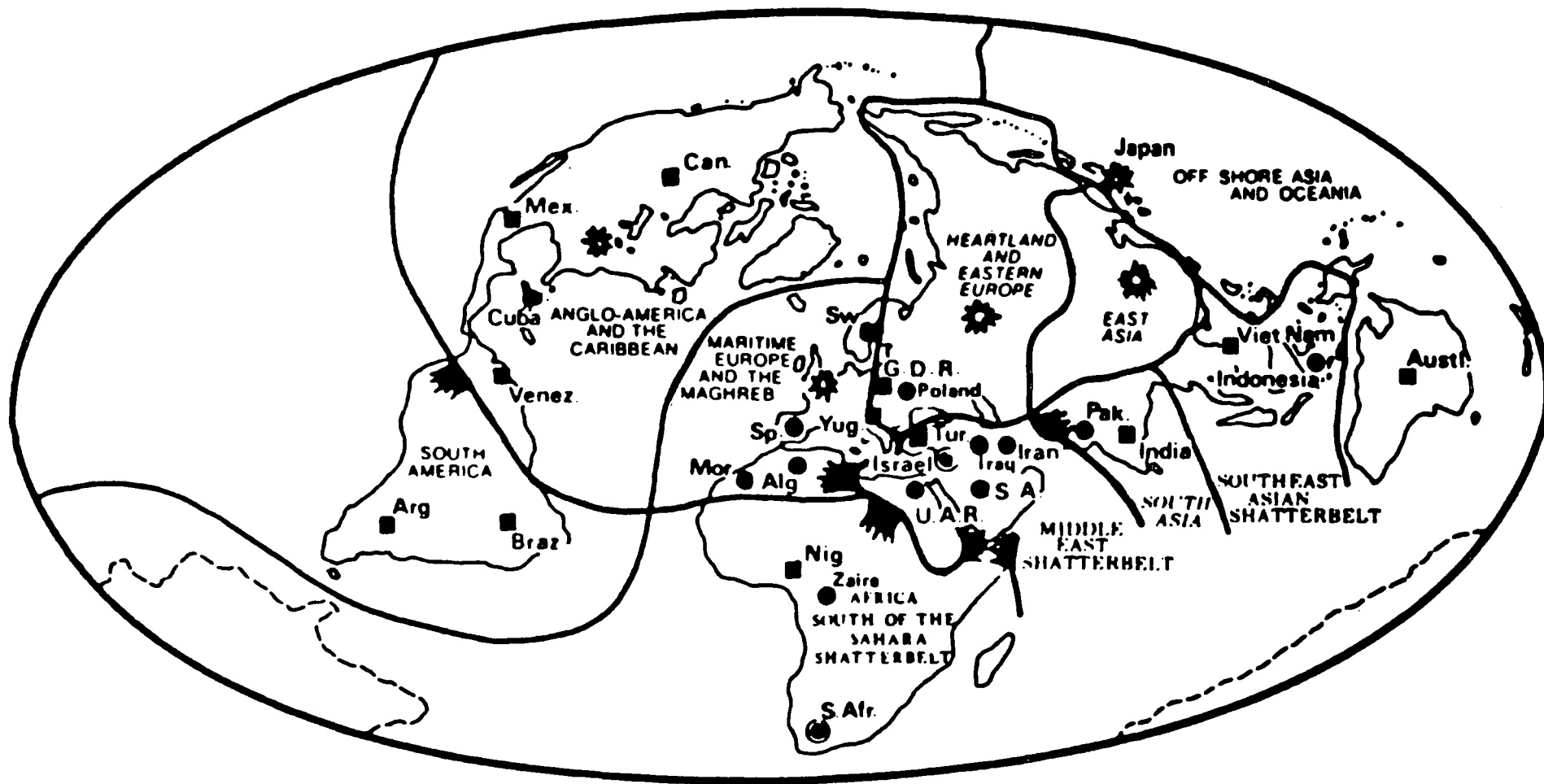


FIG. 1.4

S.B. COHEN'S GEOSTRATEGIC AND GEOPOLITICAL REGIONS (1964)

- Land-power and sea-power confront each other in the Eurasian-African Rimlands and marginal seas.
- Control of those Rimlands and marginal seas by an insular power is not synonymous with the control of the World-Island, but it does mean the denial of eventual global hegemony to the Heartland power - that is the Soviet Union. (29)

After World War Two, the most important global geopolitical ideas to have appeared are probably those of Saul Cohen (1964, 1973 and 1982). Before 1982, Cohen argued that the rise of the European Imperial powers and their struggle for acquisition of "key islands and coastal enclaves" as a means for uniting ocean basins, led to the emergence of the concepts of 'geostrategic and geopolitical' regions. (30) However, Parker (1982) views Cohen's thesis of geostrategic regions as a "modern form to Mackinder's hypothesis". (31) Cohen divided the world into two major geostrategic regions: the Trade-Dependent Maritime World and the Eurasian Continental World (figure 1.4). Then he broke these into geopolitical regions; and saw the areas that lie between the two geostrategic regions, the Middle East and Southeast Asia as "shatterbelts". (32) For two reasons the 'shatterbelts' have been considered crucial to the interests of both geostrategic regions. To the Western maritime powers, their importance is derived from their control of "strategic narrow seas" and in their specialization in the production of



TRADE-DEPENDENT MARITIME WORLD
 EURASIAN CONTINENTAL POWER
 SHATTERBELTS
 INDEPENDENT GEOPOLITICAL REGION

- Current Second-Order Power Contender
- Long-Term Second-Order Power Prospects
- ⊙ Non-Regional Focus
- ⚡ Changing Geopolitical Regional Boundaries
- ★ First-Order Power

FIG. 1.5 THE CURRENT GEOPOLITICAL STATUS OF MAJOR WORLD REGIONS. (S.B. COHEN, 1982)

certain agricultural and mineral products. The significance of shatterbelts to the Eurasian Continental powers emanates from the fact that the land avenues of the former protrude toward significant parts of the latter,⁽³³⁾ representing an endemic security concern (chapters 5 and 7).

In the early 1980s Cohen reflected that the 1960s and 1970s shaped a geopolitical world fundamentally different to that of Mackinder and Spykman. Most important of these changes were the transformation of the USSR into a major maritime power and the emergence of new states after the liquidation of the European Imperial domains and the drastic sweeping away of traditional rule in some pro-Western epicentres of the world, as in the Middle East and Africa. Also, among these important changes, Cohen mentioned the ascendancy of the power of the oil states of the Middle East⁽³⁴⁾ especially Saudi Arabia (chapter 7). Moreover, he identified a third 'shatterbelt' when he added sub-Saharan Africa to the Middle East and Southeast Asia, the former "shifting from the role of a component of the Maritime World to that of a shatterbelt"⁽³⁵⁾ (figure 1.5).

By all measures, the political, economic and security fate of all three shatterbelts have become of vital concern to the Trade-Dependent Maritime World in modern geopolitical thinking. It will be noted that the Red Sea region is located in a key position in relation to such global geopolitical perspectives. This will become clearer when we discuss later

in this chapter such issues as the definition of the Red Sea region, its social and political diversities, its global location, and the growing American contest with the Soviet Union there. Meanwhile, it will be clear that all the preceding global geopolitical perceptions have embraced the Red Sea region. Whether in Mackinder's 'Inner' or 'Marginal Crescent' view, Spykman's 'Rimland' concept or Cohen's 'shatterbelts', the Red Sea region clearly occupies a crucial position. Regarding Cohen's 'shatterbelt' concept, the region comprises most of the characteristics of a 'shatterbelt' and it may not be an exaggeration to argue that the Red Sea region is the only Middle Eastern sub-region that displays the characteristics of the Middle East 'shatterbelt' as being "fragmentized and caught up in major power conflicts".⁽³⁶⁾

The Red Sea region is, in fact, a crucial part of the most sensitive area of superpower contest for strategic and geopolitical gains. The geopolitical importance of this region resides in its being part of both Eurasian and African 'Rimlands', and one of the marginal seas which penetrate into the 'Rimland', together with the Mediterranean, Gulf and Black Sea. According to Gray (1977) those 'rimlands' and their marginal seas constitute the interface between the power of the 'Heartland' and the Maritime imperium of North America.⁽³⁷⁾ Therefore, as one of the strategically located marginal seas, as a crucial part of the Middle East and

Sub-Saharan 'shatterbelts' the Red Sea must be highly significant to the superpowers, especially to American economic and politico-military interests. Thus, since the late 1960s the undeniable Soviet-American struggle for control over the Red Sea region may reflect their wider geopolitical contest for hegemony over the Middle East and Africa. This may be especially true since neighbouring sub-Saharan Africa has assumed 'shatterbelt' status. An important part of the greater Red Sea region, the Horn of Africa, is strategically situated in this new 'shatterbelt' (figure 4).

1.2.2. Regional Perspectives

(i) Arabization of the Red Sea

Since the early 1950s contemporary Arab geopolitical interests in the Red Sea have begun with manoeuvres for the 'Arabization' of the Red Sea. The concept was initiated and promoted by President Nasser until 1970 when he died. It was then revived by the Saudis in the early 1970s. Since the Israeli-Arab war of 1973, Arab geopolitical concern about the Red Sea has increased considerably, especially from the security point of view. Superpower presence, noticeably Russian, has enhanced the manoeuvres of the conservative Arab leaders, such as the Saudis, towards the idea of the Arabization of the Red Sea.

As a recognition of the strategic role of the Red Sea in

the Israeli-Arab war of 1973 Haykal (then editor of Al Ahram) indicated the "urgent need for a common Arab Red Sea strategy".⁽³⁸⁾ Since then, coordination and conferences between several Red Sea riparians have taken place. Some non-Red Sea states have also participated in these conferences, such as Syria in the Khartoum conference 1976. At such conferences, issues of Arabizing the Red Sea or its transference into an 'Arab Lake' or 'Lake of Peace' were discussed. Legum (1978) does not attribute the Saudi call for an Arab Red Sea strategy to an established Arab policy; he argues that the Saudis adopted the issue of converting the Red Sea into an 'Arab Sea' only in reaction to the Russian establishment of naval facilities in Berbera (Somalia) during the 1970s.⁽³⁹⁾ He adds that Arab support to Somalia, especially after the eviction of the Soviets from Egypt in 1972 - and to the Eritreans as well, has been part of an Arab effort to support the forces controlling all of Ethiopia's corridors to the Sea.⁽⁴⁰⁾ Thus, Legum sees Arab attitudes toward the Horn disputes as an extension of threat to both Israeli and Ethiopian national interests in the Red Sea; a threat which originally emanated from Arab aspirations of Arabizing the Red Sea.

Interestingly, the call for Arabizing the Red Sea has been linked by some Arab leaders to the common Arab interest of preserving the Arab character of the Gulf. Those leaders believe that it was this interest which made Red Sea security

"a comprehensive pan-Arab responsibility".⁽⁴¹⁾ In this wider Arab perspective, we find non-Red Sea states involved in the Red Sea issue. The Iraqis also view the Red Sea as Arab territory; Berzan Al-Tikriti, for example, considers the Red Sea "a vital part of Arab territory".⁽⁴²⁾ Both the Iraqi Deputy Premier, Na'im Haddad and Al-Thawra (the Ba'ath Party Newspaper) have denounced American manoeuvres and activities in the Red Sea area.⁽⁴³⁾

To sum up, Arab jockeying for influence over the Red Sea could be considered as an attempt to prevent its internationalization, which might increase the Red Sea's potential as a threat to Arab security. This security might equally be jeopardized by superpower confrontation in the region, or by Israel's perennial hostility towards the Arabs. In view of these diverse and conflicting interests over the Red Sea and its littorals, what would the US do to safeguard its

"strategic interests in keeping Bab el Mandeb ... and the Red Sea open to free flow of international shipping, especially to Israel, Western Europe and North America?".⁽⁴⁴⁾

Various counter measures (chapter 6) have been considered by the United States to guarantee this and other interests (chapters 3 and 4).

(ii) The Red Sea and Muslim Shrines

Apart from trade, oil and military interests, the internationality of the Red Sea region was established 1400 years

ago by the existence of the Muslim Holy Shrines in Makka and Madina located some 40km northeast of the former. The global location of the region is associated with the annual Islamic pilgrimage (the Hajj) to Makka and Madina, which are the two most Holy places for over 800 million Muslims.⁽⁴⁵⁾ Muslims turn daily in prayer towards the Ka'aba in Makka. In fact, before the discovery of oil in the 1930s, the Hajj provided the Saudi Kingdom with most of its revenue. In 1983, the number of pilgrims to Makka was over one million; of this number 62,483 pilgrims came by sea via the Red Sea.⁽⁴⁶⁾

Since the 12th century Muslim leaders have used the Red Sea militarily to defend their sacred shrines. For example, hearing that Crusader Prince Arnold threatened to invade the two holy cities, Salahuddin the Ayyubid (1138-93), the Muslim ruler of Egypt and Syria, built a fleet in the Red Sea, and was able to defeat and kill Arnold, and save the Muslim holy shrines.⁽⁴⁷⁾ Until 1860, the Turkish empire was the only authority that ruled the Red Sea region south of Sawakin as far as the Abyssinian coastal borders. According to Marston (1939) the Egyptian officers who administered those parts on behalf of the Turkish Sultan were religiously inspired because their antagonists were Christian. The officers were instructed to make all possible difficulties for Christians in the Red Sea district to protect the Holy cities from their influence.⁽⁴⁸⁾ Here, it may be interesting to refer to Colonel Qaddafi's denunciation of the deployment of the

American AWACS aircraft in Saudi Arabia in 1980, the event which he saw as an "occupation" and desecration of the Holy cities, and consequently called upon the two million Muslim pilgrims to launch a holy war to "free" the cities. (49)

(iii) Socio-political Diversity of the Red Sea Region

Although not vast as a body of water, the Red Sea is surrounded by a geopolitical region of great diversity. Ethnically, the region includes Asians, Africans, Arabs and Jews. However, Arabs clearly dominate the region. Culturally, it is mostly Muslim with minority groups of Christians, Jews, animists and pagans. Arabic is the most widely spoken language. Apart from Saudi Arabia, and to some extent Israel, the current economic outlook of the region seems bleak. Political diversity appears in the different types of political regimes in the region as well as in the external orientations of the littoral states (chapter 7 and figure 5). Here the regimes are either pro-East or pro-West. Conservative systems of government are represented in monarchical Saudi Arabia and Jordan. Marxist/Socialist systems are represented in Ethiopia, PDR Yemen, Somalia and Yemen AR. There are authoritarian governments in Egypt and Sudan and a multi-party ^{system} democracy in Israel. Generally speaking, rapid population growth, economic underdevelopment, cultural and political diversities, territorial claims

and large numbers of refugees, have aggravated local instability in the region and contributed to the escalation of bilateral and regional disputes (chapter 7). No state in the Red Sea region can be considered free of some of these pressures. Moreover, the superpowers cannot easily remain neutral in local conflicts which often induce them to become involved. Consequently, superpower rivalry in the region and their presence in the littoral states since the late 1960s have intensified hostility among some riparian states (chapter 7). Indeed, ^{four}~~five~~ conflicting interests can be said to be operating in the Red Sea region. These are Arab, Israeli, ~~African~~, Soviet, and Western, especially American, interests. The interplay of these conflicts has undisputedly intensified the fragmented character of the region. This fragmentation and the alignment of its states into pro-East and pro-West (figure 5.1) bear considerably upon US economic strategy and military interests. On the other hand, American pursuit of these interests could have a serious impact on the region, as well as on US-Soviet relations (chapter 8).

Since the early 1970s, two important factors have contributed to the increasing significance of the Red Sea: first, the Arab concern about the security of the Sea and the economic interest of the littorals, and secondly, Soviet-American rivalry over the Sea and its riparian states. The first issue has been clearly demonstrated in the call by most

Red Sea Arab littorals for the transforamtion of the Red Sea into an 'Arab Lake', because the sea is claimed to be Arab territory (chapter 7). The other issue can be seen most obviously in the superpower struggle over the Red Sea region in search of naval facilities and bases (chapter 5 and figure 5.1).

1.3 Global Location of the Red Sea Region

1.3.1 Introduction

Several geopoliticians have greatly emphasized the crucial significance of 'position'. In this respect, the Red Sea region enjoys a significant strategic location which is widely acknowledged. It is the only Middle Eastern sub-region endowed with geographical contiguity with four world geopolitical areas, Africa, Asia, the Indian Ocean and the Mediterranean. Its northern approaches are in clear control of routes to Jordan, Israel and, most important, to the Suez Canal, the key to the Mediterranean. Its southern approaches govern access to the Indian Ocean. It also controls certain peripheral regions of Africa and Asia regarded as politically vital to the future of large parts of the Middle East and North Africa.

Situated at the crossroads of the old world, between Africa, Asia and Europe, the Red Sea constitutes a water-bridge between East and West; or as Boyce (1982) puts it, the Red Sea will remain "a strategic crossroads of

east-west connections", at "the heart of the earth". The Red Sea region occupies a central position in a central region which extends from the northern rim of Africa to the southwest corner of Asia. Viewed as the sensitive world centre, the Middle East is also described as "the critical nexus of the globe".⁽⁵⁰⁾ Africa is just 20km from the Arabian peninsula at the narrowest point at Bab al-Mandeb, and 380km at the widest point, between Massawa and Jizan (figure 2.1). Owing to its location at the interface between Africa and Asia, the Red Sea overlooks the northwest quadrant of the Indian Ocean and the Arabian Sea and therefore commands vital sea lanes.

Throughout its history, the Red Sea served as an essential link between East and West. Its geographic location astride trade routes between Europe, East Africa and the Far East have ensured its commercial, as well as its strategic significance. Although its importance declined somewhat after the discovery of the direct sea route to India round the Cape of Good Hope, by Vasco da Gama in 1498, still the Red Sea retained its importance as a significant focus for transit trade and continued to yield large commercial benefits.⁽⁵¹⁾

European competition in the 18th and 19th centuries highlighted the significance of the Red Sea as a crucial commercial and military link between East and West. European, especially British, interests in the Red Sea have increased

considerably since the early 19th century and particularly after the breaching of the Suez Canal in 1860.⁽⁵²⁾ In pursuit of their commercial and cultural interests, European powers have fully realized the importance of the global location of the Red Sea. Being a leading maritime power between the 19th and early 20th centuries, Great Britain was aware of its need for overseas naval bases to protect its commercial interests in the East.⁽⁵³⁾ It was attracted by the location of the Red Sea with special reference to such important passages as Bab al-Mandeb. The Napoleonic conquest of Egypt in 1798 was seen by Great Britain as a serious threat to British communication with India. From then on, British policy toward southern Arabia began to change, for example in 1799 the British occupied Perim Island (chapter 2) for a short time. In 1839 they occupied Aden, whose important location had already been officially reported.⁽⁵⁴⁾ This report claimed that possession of Aden would give power and consequent commercial advantages in Arabia, Abyssinia, and northeast Africa - apart from its connection with India. It would also be a key means of extending British knowledge and religion over other countries and amongst supposedly ignorant peoples. Thus the area's significance was clear a generation before the cutting of the Suez Canal completed in November 1869.⁽⁵⁴⁾ The importance of the location of the Red Sea did not escape the attention of either France or Italy. The French established themselves on

the other side of Bab al Mandeb in 1859, in what was known as French Somaliland until 1976 and the State of Djibouti thereafter. Italy established itself in Ethiopia's Red Sea coastal zone of Eritrea between 1936 and 1941, when it was defeated by Emperor Haile Selassie of Ethiopia, with British help.⁽⁵⁵⁾

The importance of the Red Sea appears to be well recognised in the modern world, and many sources, especially Western, continue to emphasize its global significance. The International Herald Tribune (1984) indicates that the Red Sea's commercial and strategic maritime role renders it one of the world's major waterways and vital passages. It adds that "dozens of ships go through this vital passage" and consequently an "unusually large number of countries share an interest in keeping it open", because it is truly an "international jugular".⁽⁵⁶⁾ A Congressional view stressing the global importance of the Red Sea has been given by Congressman, William Gray (1984) who led a trade mission to Cairo. He declared that the Red Sea is an important artery which concerns the whole world. He emphasized that

"any threat to shipping in the Red Sea is a threat to the security of the region and the world as well." (57)

To The Guardian, (1984) the Red Sea has an international importance as a navigational route attracting the interests of both Western and Eastern blocs.⁽⁵⁸⁾ The clearing of the

Suez Canal ten years ago (1975) by the Western powers as well as by the Soviet Union, reflected the universal significance of the Red Sea. Again, this importance has been recently confirmed (1984) by the quick response of the United States, Britain, France and Italy to the calls by Egypt and Saudi Arabia to give help in mine clearing in the Red Sea. According to the Kuwaiti newspaper, Al-Ray Al-Aam (1984), the Italian Minister of Foreign Affairs indicated to President Reagan that scouring the Red Sea for mines

"should reflect international solidarity through the participation of the largest possible number of countries." (59)

Although the Minister's views reflect his interest in avoiding anti-Western reactions in the region (chapter 6) yet the Western moves are a clear indication of the global role of the region. To the London-based Arabic newspaper Asharq Al-Awsat (1984) the clearing of mines from the Red Sea by those four powers in addition to the Soviet Union, and the Dutch - who joined in later, has dramatized the international status of the waterway. The newspaper concludes that several problems and a number of international strategies and regional interests and sensitivities intersect each other in the region.⁽⁶⁰⁾ However, recognition of the internationality of the Red Sea has also been declared by some Red Sea littorals important to the US, such as Saudi Arabia, Egypt and Sudan, as will be shown later (chapter 6). Such

recognition could be helpful to the West when one considers regional Arab claims to the Red Sea (chapters 1, 3 and 7).

1.3.2 Great Power Access

(i) The United States

Although the foregoing overview has clearly demonstrated the crucial significance of the global location of the Red Sea region, the 12,000 miles distance between the United States and the region creates a geographical reality which could be disadvantageous for the US in case an emergency arises in the region, or in the Gulf when quick response is needed. Such distance precludes an immediate American naval response, particularly if the Soviet Union which is geographically closer to these areas - becomes involved. For this reason Moodie and Cottrell (1981) point out that in time of crisis in these areas, the US navy would find it

"difficult to maintain a presence or conduct a crisis management mission in far corners of the globe." (61)

Consequently, they call for permanent military presence in an area adjacent to the Gulf (chapter 6). Vice-Admiral Crowe (1978) who became Commander in Chief of NATO Forces for Southern Europe (1982)⁽⁶²⁾ emphasizes the US need for such a permanent military presence in a nearby area, especially the northwest Indian Ocean⁽⁶³⁾ which embraces the Red Sea region. Needless to say, this region is a crucial part of an area

where the United States has two strategic problems: the protection of petroleum source areas and the guarding of oil supply routes.⁽⁶⁴⁾

(ii) The Soviet Union

"The further one is away from the sea, the less is one's grief."

"Beyond the sea, there is gaiety, but it is foreign, here we have sorrow, but it is ours."

"Praise the sea, but in a foreign country."

- (Ancient Russian proverbs)

The Russians clearly no longer adhere to such traditional proverbs. Since the late 1960s they have been unable to resist an overriding interest in discovering the 'gaiety' of the sea, despite its remoteness and its being 'in a foreign country'.

It has been argued that one of the factors that brought the Soviet Union into the Middle East was the American "attempt to draw the line of containment just south of Russia's borders".⁽⁶⁵⁾ One of the reasons for Soviet support for 'Liberation' of the Middle East from Western 'domination' or greater 'influence' can legitimately be seen in Moscow's perception of the area as its 'backyard' located just next to its southern flank. Consequently, Russia's strategic and national security would be directly threatened if the Middle East comes into the American political and military orbit. US ballistic submarine missiles in the northwest quadrant of the

Indian Ocean, specifically in the Arabian Sea, can already hit targets in the heart of Eurasian Russia.⁽⁶⁷⁾ For this reason alone the Red Sea must be of interest to the Soviet Union. The Soviet Union started to enter the region in the early 1950s and by the close of the 1970s it had consolidated its presence in several critically strategic spots.

Parker (1982) argues that if the Soviets were to be in need of overseas oil, then the Middle East would be a theatre for a practical test of Mackinder's prophecy of sea-power versus land power.⁽⁶⁸⁾ The Indian Ocean constitutes an essential link between Soviet territories in Europe and the Far East.

If Moscow was ever denied the use of the Red Sea route, the Cape route would substantially lengthen the voyages of Soviet vessels. The distance between a Soviet Black Sea port and the Red Sea, via the Suez Canal is only 2,000nm while circumnavigation of the Cape route takes Russian vessels about 12,000nm, in addition to the nuisance of having to round the Cape under the "electronic surveillance of the South African Republic, an utterly hostile power".⁽⁷¹⁾ Equally, the Soviet-Cuban presence in the southern Red Sea region has greatly alarmed the West which fears a potential Soviet threat across the Red Sea to the oil producing states of the Arabian peninsula.⁽⁷²⁾ Recognition of the crucial global location of the Red Sea also comes from the second Eurasian power, China:

"The Red Sea, together with the Suez Canal, is a vital sea passage leading to the Atlantic, Indian and Pacific oceans, and a strategic point linking Asia and Africa with Europe." (73)

1.3.3 Red Sea - Gulf Connections

Suffice it to say that the major American concern about the Middle East stems from US interest in guaranteed and uninterrupted flow of oil, especially from the Gulf, to Western Europe, Japan and the United States itself. There is clear geographical contiguity of the Red Sea region with the Gulf where over 60 per cent of the world's proven oil reserves exist. The two most obvious indications of Red Sea-Gulf connections are Saudi Arabia, owing to its dual location on the Red Sea and on the Gulf, and the commanding position of the region over vital sea lanes, through which Gulf oil supplies are shipped to the industrial West; for example in 1983 more than 114 million tons of Gulf oil were carried through the Red Sea route to Western Europe and North America.⁽⁷⁴⁾ Therefore, the presence and shipment of Gulf oil must be viewed as an essential dimension of Red Sea-Gulf relations.

By concentrating too much on the influence of the Indian Ocean, the Soviet Union, Iran and Afghanistan on the geopolitics of the Gulf, scholars have tended to overlook pertinent geographical relationships between the Red Sea and Gulf.⁽⁷⁵⁾ This significant interplay between the two areas has had considerable impact upon various Gulf issues that

concern the United States. These include economic (chapter 5) and politico-strategic factors (chapters 5 and 7), as well as issues of superpower rivalry in the Middle East in general.

According to Blake (1981) Red Sea-Gulf connections are basically associated with three fundamental factors: transportation, domestic communication in Saudi Arabia, international oil trade, and superpower military logistics.⁽⁷⁶⁾ However, apart from oil transportation and military concerns, links between the two important geopolitical regions can also be seen in the great number of expatriates from the former to the latter, for example numerous workers from Egypt, Sudan, Yemen AR and Jordan migrate to the oil rich states of the Gulf seeking work (chapter 7).

Strategically speaking, with regard to the five-year old Gulf war, Red Sea geographical assets have been used to help Iraq against Iran. The great quantities of arms and supplies that reached Iraq through the Jordanian Red Sea port of Aqaba,⁽⁷⁷⁾ and the planned oil pipeline from Iraq's oil fields to Aqaba⁽⁷⁸⁾ (chapter 5), establish a clear example of Red Sea-Gulf security interplay. Saudi financial support for Iraq⁽⁷⁹⁾ is an additional important indication of this strategic relation.

A crucial example of Red Sea-Gulf political interaction may be seen through the financial help that some poorer Red Sea states, for example, the Yemens, Somalia and Sudan used to get from the rich states of the Gulf - particularly from

Saudi Arabia - to assist in development programmes and to resist communist influence.⁽⁸⁰⁾ As a crucial part of the Middle East 'shatter-belt' where constant unrest is characteristic, the Red Sea region includes "highly volatile parts of the Horn of Africa at one end, and the Arab-Israeli interface at the other".⁽⁸¹⁾ These features of instability associated with the Red Sea region, must have an important influence upon the transportation of Gulf oil, and the security of the epicentre of American interests in the latter, ie Saudi Arabia. However, the global strategic location of the region, and its being part of the "energy heartland" of the Middle East have increased American concern about it since the early 1970s.⁽⁸²⁾ Strategically speaking, the presence of the Soviet Union, or of any anti-American power strong enough in the region, could bear on Western interests in the Gulf, which is in clear proximity to the main sources of Soviet power. According to Schlesinger (1981) the Gulf is especially "susceptible to political-military pressures from the north ..."⁽⁸³⁾

From the Gulf regional viewpoint, the significance of the Red Sea-Gulf interplay is demonstrated by the reliance of the Gulf states on the Red Sea for exports and imports. This fact has been voiced by the Kuwaiti Minister of Foreign Affairs, Shaikh Sabah Al-Ahmed (1984) when he emphasized that the Gulf states depend on the Red Sea and the Suez Canal as

much as the rest of the world.⁽⁸⁴⁾ As an example of the importance of the Red Sea to the states of the Arabian peninsula, the Kuwaiti newspaper, Al-Watan, has pointed out that fifteen commercial vessels transit the Suez Canal daily en route to Kuwait.⁽⁸⁵⁾ The Saudis view the Red Sea as constituting strategic complementarity to the Gulf and the oil routes.⁽⁸⁶⁾ However, economic and strategic links between the Red Sea and the Gulf were demonstrated well before 1970. While the Israeli-Arab wars of 1967 and 1973 have shown the economic link (chapter 5), the Iraq-Iran war (since September 1980) has indicated the strategic link. The laying of mines in the Red Sea and the Gulf of Suez - in July/August, 1984 - which damaged about 19 ships (chapter 6) has exemplified this strategic connection because one of the various interpretations of the mining is that it is a ramification or regionalization of the Gulf War.⁽⁸⁷⁾ According to Al-Ray Al-Aam (1984) the French Press has agreed that the planting of mines in the Red Sea has demonstrated to the West the extent of relations between the Gulf and the Red Sea with regard to the Iraq-Iran war.⁽⁸⁸⁾ One of the most important Red Sea voices about the link between this war and the mining of the Red Sea comes from Egypt; Mr Abu-Gazala, the Egyptian Defence Minister has indicated that the mining of the Red Sea could be in "retaliation for what is happening in the Gulf".⁽⁸⁹⁾

1.3.4 Red Sea - Indian Ocean Linkage

Twenty years ago, Cohen (1964) anticipated the eventual emergence of the Indian Ocean as a "third geostrategic region", beside the Trade Dependent Maritime World (Western Europe and the United States) and the Eurasian Continental Power (the USSR and China).⁽⁹⁰⁾ When the recent emergence of the Indian Ocean realm as a critical arena of superpower competition⁽⁹¹⁾ is considered, this gives evidence of the materialization of Cohen's prophecy. According to the French Major General, Andre Courie (1984), the importance of the Indian Ocean becomes clear when one considers that 9,000 vessels - apart from warships - transit the ocean annually. Moreover, it includes 37 states comprising one third of the world population, - and its territories embrace the major oil reserves of the world,⁽⁹²⁾ while it shares with the Red Sea the monopoly of the major oil routes to the West.

The contiguity of the Red Sea and the Indian Ocean has endowed the former with a strategic significance (chapter 6) since the Red Sea is a major point of entry into the Indian Ocean. In fact, the Red Sea is the only short-cut between the Mediterranean and the Indian Ocean. According to Cottrell and Burrell (1972), access to the Indian Ocean from the Red Sea and the River Nile was the most important historical event; they add that a 16th century Portuguese navigator, Alfonso d'Albuquerque spoke of the Red Sea as one of 'three keys' to the Indian Ocean,⁽⁹³⁾ the other two being the Straits of

Malacca and Singapore in the east, and the Strait of Hormuz. Vali (1976) maintained that the northern part of the Indian Ocean which includes the Red Sea and the Gulf as part of its oceanic system, has been historically and geostrategically important. He points out that after the breaching of the Suez Canal in 1869, the Red Sea ceased to be a cul-de-sac, unlike the Gulf; and since then it has constituted a crucial link between the Indian Ocean and the Mediterranean.⁽⁹⁴⁾ According to him, the Australian Department of Foreign Affairs (1973) has perceived the Indian Ocean as having four divisions: (1) East Africa and the ocean region east of it; (2) the northwest from Somalia around to Iran, including the Red Sea, the Gulf of Aden, and the Gulf; (3) the Asian subcontinent and the sea south of it; and (4) southeast Asia and Australia.⁽⁹⁵⁾ Obviously, the second division is by far the most important in American perspectives, primarily due to the existence of vast Middle Eastern oil resources, sea lines of communications and vitally strategic narrow waterways such as the Straits of Hormuz, Bab al-Mandeb and the Suez Canal.

Several other views of scholars and strategists have emphasized the important interface between the Red Sea and the Indian Ocean Vice-Admiral Crowe (1978) cites Saudi Arabia as an example of this relationship.⁽⁹⁶⁾ House (1984) treats the entire Red Sea area as part of the Indian Ocean realm, particularly in his discussion and maps of Western-Soviet spheres of influence, arms transfer, trade etc.⁽⁹⁷⁾ To Kumar

(1984) - a freelance writer on international affairs - the Red Sea region is also an integral part of the Indian Ocean. He considers the Suez Canal and Bab al-Mandeb as two of the five strategic narrow waters that guard the eastern and western entrances of the ocean. The Cape of Good Hope, Hormuz and Malacca are the other three; he attributes great strategic significance to these water-passages.⁽⁹⁸⁾

Halliday and Molyneux (1981) point out that since 1945 the conjunction of the Red Sea region with the Indian Ocean has been a prime concern among military strategists of both superpowers.⁽⁹⁹⁾ During the decade of the 1970s the Indian Ocean became a battleground of superpower contention. Since early 1970 the United States had begun to realize the critical complementarity of the Red Sea region with the Indian Ocean. The conference on the Indian Ocean region held on March 18-19, 1971 at the Center for Strategic and International Studies, Georgetown University, clearly reflected this realization.⁽¹⁰⁰⁾ US linkage between its military presence on the western shores of the Red Sea - at Kagnew in Ethiopia - from 1953 to 1976, and that on the western coasts of the Indian Ocean in Kenya - clearly demonstrated an American functional strategic link with the Red Sea region and the Indian Ocean realm. In fact, throughout its 24 years service the Kagnew Communication base provided "efficient communication facilities for US forces in the Indian Ocean".⁽¹⁰¹⁾ To Barry Buzan (1978), Soviet-

American military presence in the Red Sea region is evidence of the interests of both superpowers to improve their naval facilities in the Indian Ocean. The obvious and primary objective of both powers in maintaining military build-up there, has been concerned with shipping routes.⁽¹⁰²⁾ Whether commercially or militarily, the Red Sea is clearly seen by the Saudis as crucial to the interests of both Eastern and Western blocs. Both wish to use the Sea and its strategic water-passages to support their Indian Ocean fleets.⁽¹⁰³⁾ The increasing Soviet-American rivalry over the Indian Ocean must have both political and military repercussions on the Red Sea region because of the evident strategic linkages between the two areas.

1.3.5 Red Sea - African Links

The western waters of the Red Sea lap the eastern shores of the African riparians of Egypt, Sudan, Ethiopia, Djibouti and Somalia. The five States represent the interface between Africa and the Red Sea. The location of these Red Sea - African states is politically and strategically significant; they create a strategic springboard into the heart of Africa, as well as into its northern and southern extremities. If an anti-Western power exploits this strategic position, Western interests could be in jeopardy. In fact, according to Legum (1978), the West fears that such a situation could materialize from a Soviet-Cuban stronghold in Ethiopia. This

could endanger Kenya and push further down into East Africa.⁽¹⁰⁴⁾ Also, if the USSR were able to win support in Sudan, it could achieve a breakthrough into Uganda and Zaire (with its mineral riches), and thus create an "international revolutionary front link-up with Angola".⁽¹⁰⁵⁾ The fact that Sudan, Egypt and Ethiopia are also Nile Valley states may significantly count in relation to superpower competition in Africa. The joint Sudanese-Egyptian call in 1981 for a meeting of the Nile-basin countries, has been criticized by radical forces in the area, and depicted as an intention to create a pro-American geopolitical bloc to intercept growing Soviet influence in Africa.⁽¹⁰⁶⁾

In sum, we have seen how geography has especially endowed the Red Sea region with a matchless global position because of the region's economic, political and strategic complementarity with other vital areas. This inter-regional function is reflected in the effect of events in these regions on the Red Sea region. The perennial Israeli-Arab conflict, the Gulf war, the endemic Horn conflicts and superpower rivalry over the Indian Ocean, all demonstrate examples of feed and feed-back situations which involve the previously mentioned areas. This interdependent relationship has made the region integral to superpower strategic concerns over adjacent regions. In other words, one cannot overlook or dismiss the repercussions on neighbouring regions of instability in one region.

Hence, the preceding pages have underlined the geopolitical importance of the Red Sea to US economic, strategic and security interests. Further elaboration on these issues will follow in chapters 5-7. Also, it has been made clear that the Red Sea region enjoys a quadripartite characteristic that connects it economically, politically, and strategically with the Gulf, the Indian Ocean, the Mediterranean and Africa. These significant global linkages have endowed the Red Sea region with an important international position which could bestow on some of the region's environmental features considerable economic and strategic value. Therefore, the following two chapters will deal with such important issues: the environmental characteristics of the Red Sea (chapter 2) and Red Sea resources (chapter 3).

Chapter One

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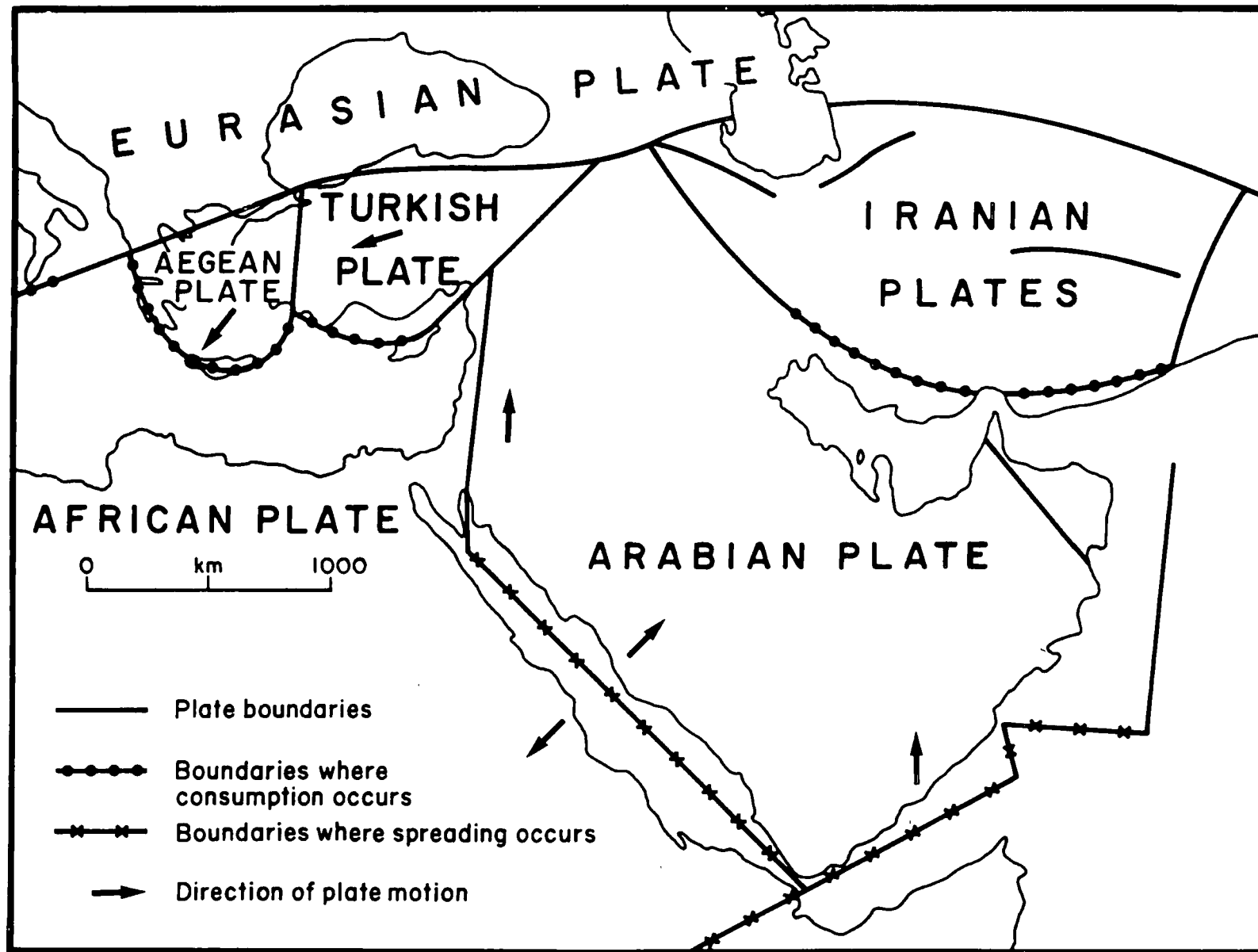


FIG. 2.1 PLATE TECTONICS AND THE FORMATION OF THE RED SEA

CHAPTER 2

ENVIRONMENTAL CHARACTERISTICS

2.1 Geographical Characteristics

2.1.1 Geological Formation

The Red Sea will be taken to include the Gulfs of Suez and Aqaba in the north, and for our purposes, the Gulf of Aden in the south. It is a semi-enclosed sea formed out of the large rift in the continental crust of Africa and Arabia (figure 2.1). This split is part of a complex rift system that includes the East African Rift - which extends southward for about 3,520km, and comprises parts of Ethiopia, Kenya and Tanzania and the Central African Lakes. The rift extends northwards for 448km from the Gulf of Aqaba to form the great Aqaba-Dead Sea-Jordan Rift. From the southern end of the Red Sea, the rift extends eastward for 960km to form the Gulf of Aden. ⁽¹⁾

According to Fisher (1978) before their drift apart, the two major platforms of Arabia and Africa formed a single large continent. Extensive fracturing of the area of the Red Sea, the Gulf of Aden and East Africa, detached Arabia from northeast Africa. It also led to the tilting of the Arabian block, uplifting the western Red Sea coast and downwarping the Gulf. The African side of the Red Sea has buckled and impacted to form the Red Sea hills of Egypt and the Sudan.

With reference to the process of plate tectonics operating in the Middle East, two of these plates were forced westward. They produced, first, the narrow Red Sea through which reached its present size through rapid enlargement by spreading along its seafloor; the second, a more southerly plate, moved southward and westward to form the Gulf of Aden.⁽²⁾ Regarding the age of the Red Sea, marine scientists describe it as an 'embryonic' ocean, compared with the old major ocean basins of the Atlantic, Pacific, Indian and the Arctic. As a relatively new sea, its development is proceeding because the motion which created it is still continuing. The process of drifting apart still continues with the African continent continuing its drift away south and west from Arabia. These movements are estimated as amounting to a yearly 0.59 to 0.62 inches, and its operation has been shown by extensive volcanism, and by the flow of hot brines in the Red Sea's trough. David Ross (1976) argues that

"if the theory of sea floor spreading is valid, it is probable that the Red Sea today resembles the Atlantic Ocean of about 200 million years ago".

Moreover, if the Red Sea

"... continues to spread at its present rate, and there seems to be no reason why it should not, in a couple of hundred million years ... be as wide as the Atlantic Ocean today". (3)

Two principal features dominate the topography of the

Red Sea; first a narrow, smooth continental shelf; second, a deep axial trough split by an even deeper axial trough 10,000ft deep, both of which have implications for offshore jurisdiction. Beneath the continental shelf, records indicate a distinct acoustic reflecting layer, covered by several hundred metres of sediment. In 1972, the drilling of the layer showed it to be a mixture of salt and minerals commonly deposited in shallow waters, characterized by high evaporation rates.⁽⁴⁾

Seabed photographs from oceanographic survey vessels have shown fresh volcanic features, including cracks, fissures and recent lava flows. The entire Red Sea coasts and waters are major earthquake zones, notably the area just southwest of Djibouti, between Ethiopia and Somalia, which witnessed a series of major earthquakes between 1968 and 1977. Such volcanic phenomena are also found near al Wajh on the Saudi Red Sea coast. It is worth noting the recent earthquake that occurred in Sanaa (Yemen AR) in 1983 causing considerable damage.

2.1.2 Dimensions

Since the Gulf of Aden - between Bab al Mandeb and 50°E⁽⁶⁾ - borders the Red Sea states of PDR Yemen, Somalia and Djibouti, and because it constitutes the only natural inlet to the Red Sea from the Indian Ocean one must consider the Gulf of Aden functionally as a branch of the Red Sea

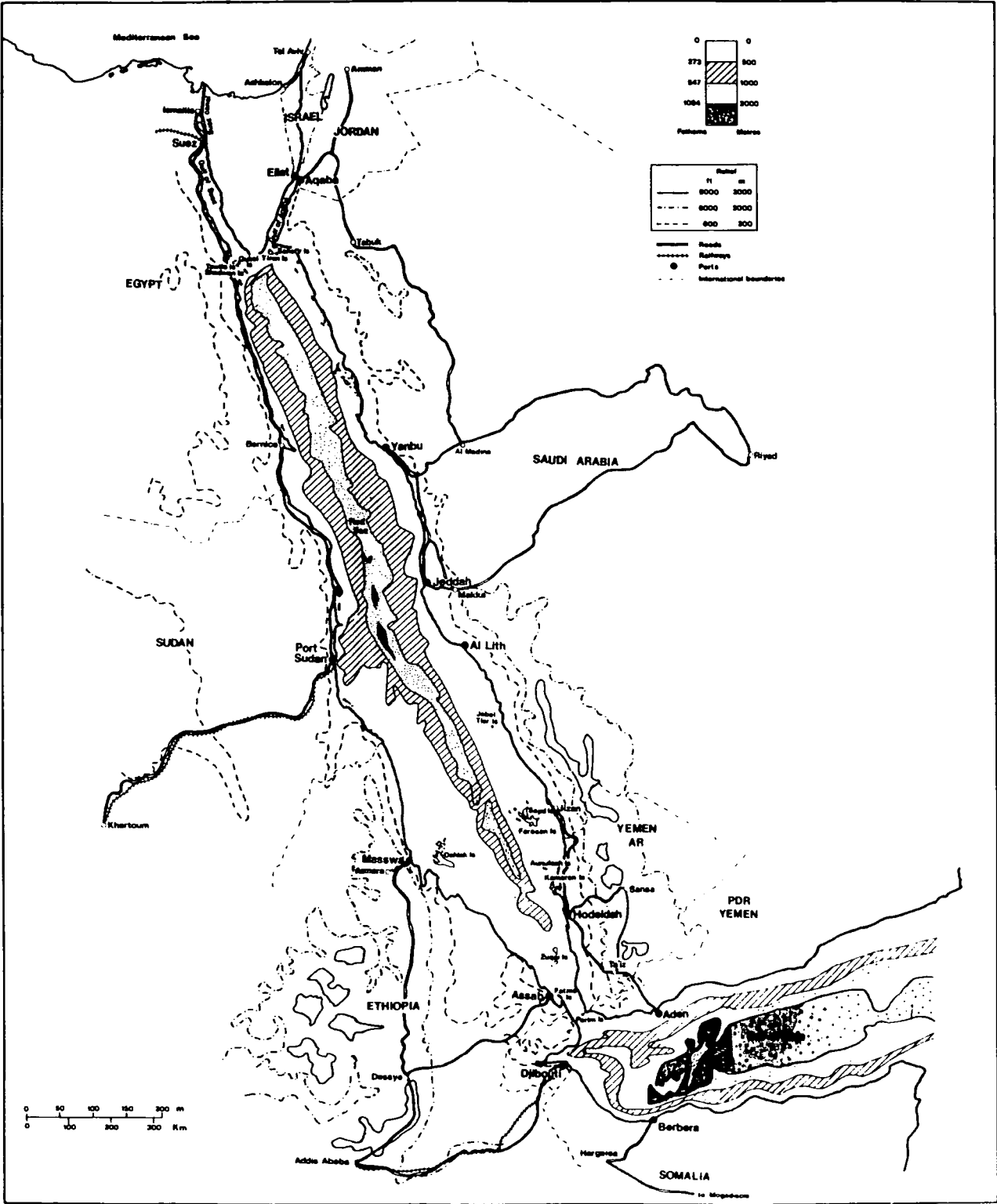


FIG. 2.2 THE RED SEA: PHYSICAL CHARACTERISTICS AND MAJOR PORTS

(figure 2.1). Hence, if measured from Suez to the Gulf of Aden at 50°E the Red Sea is 3200km long. Breadths vary associated with geological formation. In its northern part where it branches into the Gulfs of Suez and Aqaba, the Red Sea is only about 200km wide; and its maximum width is at the southern sector, where it reaches 350km between Massawa on the Eritrean coast and Jizan on the Saudi coast. On average the Red Sea is 272km wide.⁽⁷⁾ Narrowing at both ends is an important feature of the Red Sea. This characteristic lessens the breadth of international waters which affects shipping activity in a water body that has become, especially since the early 1970s, an arena of regional and global rivalry.

In many peripheral waters the average depth is 480m. The innermost central trough, however, which extends nearly the whole length of the Red Sea - has depths of 1,800m, and at some points over 2,000m. The maximum depths - falling between latitudes 26° and 20°N - range from 1,800m to 2,556m. This deepest area is located approximately midway between Port Sudan and Al Lith⁽⁸⁾ (figure 2.2). Some sources state that north of Ras Banas the central trough widens to a shallower and irregular surface where depths rarely exceed 2,000m. But naval authorities indicate greater depths, more than 200nm northeast of Ras Banas; this depth of 2,277m lies about latitude $25^{\circ}25'\text{N}$ - nearly abreast of Sheibara - on the Arabian coast. Depths of more than 1,440m extend south as far as latitude 16°N .⁽⁹⁾ One of the unique physical character-

Table 2.1Area/Coastline Relations of the Red Sea States

Country	Land area (sq.km)	Red Sea coastline km	Number of sq.km. of land per km of Red Sea coastline*
Saudi Arabia	2,150,000	1889	1138
Egypt	1,001,000	1424	703
PDRY	288,000	1211	238
Ethiopia	1,222,000	1011	1209
Somalia	638,000	925	690
Sudan	2,506,000	717	3495
YAR	195,000	452	431
Djibouti	22,000	245	90
Jordan	98,000	28	3500
Israel	21,000	7	3000

Source: 1 - Area: The Geographical Digest, George Philip and Son Ltd, London 1981, pp.9, 11-12, Coastline.

2 - Except for Somalia, the length of coastline is taken from: Bureau of Intelligence and Research: US Department of State Geographical Bulletin No.3, Sovereignty of the Sea, Washington D.C. 1969, p.19-22.

- The length of the Somalia coast (fronting the Gulf of Aden) is calculated.

* Land area divided by the coastline.

istics of the Red Sea is the depth in relation to its breadth. Owing to the growth of coral banks south of 16°N, silt has been accumulated and the depth of water at the Gulf of Aden and Bab el Mandeb is only about 114m. Several sources agree that the area of the Red Sea without the Gulf of Aden is 438,000sq.km, but in other publications it is quoted between 456,000 and 453,000sq.km.⁽¹⁰⁾ The latter figure will be adopted in this work.

2.1.3 Coasts

The total length of the Red Sea, including the Gulfs of Suez, Aqaba, and Aden, is 7,909km, though estimates differ somewhat. The Arab littoral states own some 6,891km, which is over 87 per cent of the total (table 2.1). Figure 2.2 shows the topography of the Red Sea hinterlands and coasts. The 4,322km of coastline on the western side of the Red Sea is shared by Egypt, Sudan, Djibouti, Ethiopia, and Somalia; the Egyptian coast is predominantly a desert area. The Red Sea hills lie between the River Nile and the Red Sea. The highest of these mountains is close to the coast - 16km inland; here the greatest height is 2,184m. The land between the coast and the mountains is low and sandy, and the coast is bordered by reefs, which also exist in great quantity some distance offshore, especially at the mouth of the gulfs of Suez and Aqaba.⁽¹¹⁾ Thus, for long stretches of Egypt's coast there has been little or no penetration inland, and interior-coastal interaction. Wadis dissect the highlands between the

Nile and the Red Sea (Fisher, 1978). The nearest approach of the Nile to the Red Sea is at Qena, only 128km away; Qena is linked by road to Port Safaga on the Red Sea. Also from Suez, first class roads run to the south and close to the shores of the sea until Egypt's frontier with Sudan. There are villages and mining colonies on this shore and an oil industry in the north east uplands of Hurgada ($27^{\circ}15'N$, $33^{\circ}50'E$); production of phosphates in great quantities occurs at El Quseir and Safaga.⁽¹²⁾

Generally, Sudan's coast is bordered by reefs, rocks and barren sands. The Red Sea hills dominate the eastern part of the Sudan, and form a mountainous range that lies 32km west of the coast. This range of mountains is the most elevated part of the Sudan. Their height ranges between 1500 and 2000m; and Jebel Asoteriba - 2,200m - is the greatest peak, while the high edge of the hills drops to a generally narrow coastal plain fronting the Red Sea. West of these mountains the land slopes gradually to the Nile Valley.⁽¹³⁾

The coasts along the Horn of Africa are part of the mountainous chain extending from the Red Sea coasts to the northern borders of the East African plateau near Lake Rudolf. The narrow coastal strip of Ethiopia's Eritrean province gets wider in the north to include part of the Ethiopian plateau; and it extends west to encompass a western lowland bordering the Sudan. The coast is mostly coral; and the country is mountainous and essentially volcanic, with many peaks attaining an elevation of about 4,200m.⁽¹⁴⁾ The desert steppe lands that surround the Ethiopian plateau

separate the country from its Red Sea coasts. Also, a mountainous hogsback range is interposed between the coast and the Sudan, and the height of this range is just over 3,000m.⁽¹⁵⁾ The coastline of the pocket state of Djibouti is composed of coral and high cliffs. The inland is featured by a desert of broken and dry valleys with scattered thorn scrub. The Somali coast is characterized by desolate beaches with a backdrop of low cliffs of scrub bush; and it lacks natural harbours of the type found in Europe and other countries.⁽¹⁶⁾

The length of the eastern coast of the Red Sea is 3,589km. This coast belongs to Israel, Jordan, Saudi Arabia, AR Yemen and PDR Yemen. Lapidoth (1982) describes the coasts of Israel and Jordan as extremely abrupt and bordered by a narrow plain with steep mountains rising at several places from the water. Whereas on the Israeli side, the coast, and along to the south, is fringed by reefs, on the Jordanian side the coast is encumbered by rocks, and it has sandy beaches.⁽¹⁷⁾

The Kingdom of Saudi Arabia has a coastal belt composed of steppe, with oases here and there. Fisher (1978) points out that from the Gulf of Aqaba and along the Hijaz region (up to 24°N) ranges of steppe-faults slope west rapidly to a very narrow coastal plain which is interrupted at some places by narrow deep inlets from the sea. The Hijaz peaks attain an elevation of 2,000-3,000m, and although coral reefs render access for shipping difficult along much of the coast, some openings are free of such reefs and thus they offer good

harbours. In the Tihama region - between 24° and 27°N - the mountain margin decreases substantially in height, in many places to only 1,000m; in this region the coast reaches its maximum width of 50-100km.⁽¹⁸⁾ Owing to its central position in Arabia, Tihama is viewed by Fisher (1978) as a 'gateway' to Central Arabia; and due to its general lower altitude and its location at the 'waist' of Arabia, Tihama makes the shortest distance between the Gulf and the Red Sea. South of latitude 20°N , lies the region of Asir where the re-emergence of highlands takes place, the greater part of which lies above 1,500m.⁽¹⁹⁾

A high plateau, with volcanic vents, characterizes the topography of AR Yemen. The coast is described as largely regular, low and coralline. It is of different breadths, from about 48km wide in the north, to a few hundred metres in the south. In a long, even slope, the coast rises to a height of about 200m to the base of the coastal range. In a number of places, this coastal range reaches a height of about 2,700m. Interposed uplands between the coastal range and the main range reach an elevation of about 1,200m. The coastal plain of Tihama and Asir continues south between latitudes 18° and 12°N , due to the steep falling of the Yemeni plateau which attains an altitude from 2,000 to 3,000m above sea level with some peaks of almost 4,000m high. The greatest height is represented by Ben Sheiba - 80km west of Sanaa, which stands at a height of 2,200m.⁽²⁰⁾ Fisher (1978) notes the

resemblance between the Yemeni and the Ethiopian plateaux because of the breaking in the fault system of the Red Sea and the Gulf of Aden.⁽²¹⁾

Until the Khaur mountains about 100km east of Aden the coast of PDR Yemen is a continuation of the AR Yemen's coastlands. There is a fall in altitude from the Khaur mountains toward the east, along the western half of PDR Yemen's coast, the land drops away sharply into deep waters. However, the country is mostly mountain and desert, with the Gulf of Aden forming part of the southern borders of the Arabian desert.⁽²²⁾

The Red Sea is surrounded by ten states; eight of these are Arab. Israel, on the most northeastern tip the Gulf of Aqaba, and Ethiopia on the southern sector of the Red Sea, are the only non-Arab littorals. This situation must yield very important consequences with regard to Western and Israeli shipping interests especially when the perennial Israeli-Arab dispute is considered. Essentially, Jordan is the only Red Sea inland state. The boundaries of Israel and Jordan converge at the tip of the Gulf of Aqaba.

Owing to the longitudinal character of the Red Sea, its coasts are long compared with area. According to Mahmoud (1979) for each coastal mile there are 57.9sq.m of surface water. To him, this means potential for coastal mastery and a strong connection between the Red Sea and its littorals with particular reference to states with no other outlet to the

high seas, for example Jordan, Yemen AR, Sudan and Ethiopia, and states with very important economic and religious interests essentially tied with the Red Sea, for example Egypt and Saudi Arabia. However, Mahmoud realizes that the length of coasts is not a sufficient factor to establish control over the sea. He refers to the uneven coastal population density, the few urban centres, lack of roads and especially railways to connect the inland with coast.⁽²³⁾ To Al-Sayed Alewah (1980) these coastal areas are deserted. He thinks that they could solve the problems of those Red Sea states with large populations because such states could carry out urban settlement schemes on these coasts. Although these coasts have some tourist potential, if compared to their counter- parts in the Gulf, Red Sea coasts are less populated and with no matching industrial development.⁽²⁴⁾ However, the industrial and port development taking place at Yanbu and the Islamic port of Jeddah (chapter 4) are significant signs of development on the eastern shore of the Red Sea. In the maritime field, sea coasts are essential for harbours, ports and repair facilities. The lack of coastal development and population is attributed to physical characteristics; because these coasts are faulted and somewhat regular, with few natural harbours that could be developed into major ports. The aridity of the coasts and the range of mountains extending along them, with an elevation of 600-900m on the African shore and 900-2,100m on the Asian side also hinder

development. Such high rocky ranges render the building of inland railways very difficult, but the following three railway lines are exceptional in overcoming such difficulty. First, the Djibouti-Addis line, which is indebted to the African Rift Valley for making it easier for the line to ascend over the Ethiopian plateau.⁽²⁵⁾ This line was first initiated in the agreement signed by Emperor Menlik of Ethiopia in 1896 when he recognized French sovereignty over French Somaliland (now Djibouti). One year later the first rails of this line were laid; and it was finally completed in 1917. Second, the Italian line which extends from Massawa to a height of 2,400m on the Ethiopian plateau. According to Stamp and Morgan (1972), the Italians extended the line as far as Asmara - their colonial capital - and then they stretched it further to Agordat - 128km further west of Asmara; this line is still working.⁽²⁶⁾ Third, the Port Sudan-Atbara line was built by the British after their re-conquest of the Sudan in 1898. However, both Mahmoud and Alewah consider that schemes for developing urban population and communication along the Red Sea coasts are costly undertakings which could not be carried out by most Red Sea states. To populate these long coasts, however, could be important from the security point of view.

The dependence of Jordan, Yemen AR, Ethiopia and the Sudan on the Red Sea as the sole outlet to the sea renders these states vulnerable to such actions as a blockade of

choke-points by a hostile state. However, such vulnerability could also be critical for Egypt because of the Suez Canal's revenues, for Saudi Arabia, because of the presence of Muslim shrines near to the coast, the massive Yanbu industrial complex and the development of pipelines from the Gulf to the Red Sea. For Djibouti, the survival of the city-state virtually depends on its port activity and continuing security. The Eritrean shoreline is obviously significant to Ethiopia since the coast is the country's only maritime outlet to the outside world. Therefore, the independence of Eritrea would leave Ethiopia land-locked, depending solely on Djibouti as an outlet. And if the latter were ever to be annexed by Somalia, Ethiopia would be totally cut off from the sea.

Following the ideas of the American naval historian Alfred Mahan, Pounds (1972) stresses the vulnerability of a long coastline, and that such vulnerability increases a state's need for sea-power.⁽²⁷⁾ Alewah points out that the coastlines of PDR Yemen, Djibouti, AR Yemen and Ethiopia are all strategically suitable for air, artillery and naval operations. Thus, when the Italian Fascists consolidated their hold on their Eritrean colony between 1890 and 1935, Benito Mussolini decided to invade Ethiopia and add it to the Italian Empire. In 1936 the Italians used their bases on the Eritrean coast in their assault against Ethiopia.⁽²⁸⁾ However, all Red Sea coasts could be vulnerable to attack

especially if a fifth Israeli-Arab round takes place or in armed superpower confrontation over the area. Regarding the Israeli threat, the Kingdom of Saudi Arabia has been anxious to improve its anti-air defence against possible Israeli air raids.⁽²⁹⁾ Thus, there have been and still are diverse and competing interests over the Red Sea coasts - ranging from local and regional to global scales. With regard to global concerns, the length of the coasts, port facilities and the political orientation of some Red Sea states towards the US could be of crucial importance in relation to the latter's economic and military interests in the Red Sea region (see chapters 5, 6 and 7).

2.1.4 Reefs and Islands

Reefs

Despite its considerable depth, the Red Sea is encumbered in some places with rocky islets and coral reefs which extend up to the main shipping channel. It contains the northernmost coral reefs in the world. Moreover, almost every known form of coral is represented. Al Rouathy and Al Muhandes (1984) state that many organisms migrated from the Atlantic and the Indian Ocean to the Red Sea through Bab al Mandeb where they found a congenial environment of high temperatures, shallow depths, limpidity of water and relatively high salinity. These reefs are immense and extend in long parallel strips along both shores of the Red Sea. The

barriers formed by these coral reefs are 45 to 90m wide.⁽³⁰⁾ Elevated discontinuous coral beaches are formed along the Red Sea coasts, with the highest reaching about 25m above sea level at Tiran Island, in the northern part of the Sea. South of latitude 16°N, coral banks grow extensively and induce the accumulation of silt which separates the Red Sea and the Gulf of Aden at Bab al Mandeb.⁽³¹⁾

Some sources maintain that greater distribution and density of reefs exist in the southern sector of the Red Sea, where they attain a maximum width of 240m. But to others the most plentiful and luxuriant reefs are apparently in the middle sector. With regard to the northern part, coral reefs are few, and limited to Aqaba Bay, and the Gulf of Suez, where the general depth of the reefs ranges between 0.6m to 0.9m, but in summer when the level of the sea is at its lowest, they occasionally dry out in some parts.⁽³²⁾

Reefs divide the southern Red Sea into three channels. A central channel 72km wide lies between Dahlak bank, 112km off the African coast and Farasan Bank on the Asian shore, and it is the only channel navigable by large vessels.⁽³³⁾ The other two are inshore channels and insecure for navigation. It is notable that reefs, which are more abundant on the Asian coast than on the African side, leave a number of indentations, some of which are very wide, especially in the northern waters. These openings connect the inshore channels with the main channel. In sum, despite the difficulty created

Table 2.2

Ownership of islands in the Red Sea and Gulf of Aden and the most important of these islands

State	Number of islands	Most significant islands
Saudi Arabia	144	Fara San, Tiran and Sanafir
Ethiopia	126	Dahlaḳ, Halib, Fatima, Dumeira
YAR	39	Kamaran, Zuqar
Sudan	36	Sawakin
Egypt	26	Shadwan
Djibouti	6	Seba Mouleleh
PDRY	3	Perim, Socotra,* Great Hanish

Source: Mahmoud (1979) 'The Red Sea in Global Strategy' (Arabic) in Al-Siyasa Al-Duwaliya, No.57, July 1979. published by Al-Ahram Corporation, Cairo, p.30.

* Socotra is added by the author.

by these reefs in approaching the shores, they leave tranquil waters and sandy beaches behind them, where many places are suitable for anchorage.⁽³⁴⁾ However, in spite of the technological advancement in the field of navigation and detection of dangers in seas, it is found that in many parts of the Red Sea, particularly away from major harbours, reefs are not charted, and hence fear of them still exists among sailors.⁽³⁵⁾ Navigational hazards caused by these reefs will be discussed later.

Islands

The Red Sea contains hundreds of islands, most of which are in its southern sector. According to Mahmoud (1979), the Red Sea has about 397 islands, about 2.1 islands per 2.56sq.km of water. Islands clearly create navigational problems, and at the same time provide opportunities for groups interested in interdiction of shipping. However, most of these islands are little more than exposed reefs, and large islands (with an area of more than 20sq.km) are limited to the Dahlak, Farasan, Kamaran, Zukur and Great Hanish groups.⁽³⁶⁾ Figure 2.2 shows the most important islands in the Red Sea; and table 2.2 shows the ownership of those islands. The Arab riparians own two thirds of the islands in the Red Sea, but widespread coral reefs and lack of fresh water have kept most of these islands from being permanently inhabited. As in the case of coasts, the neglect of these

islands by the Arab states caused Hewidi (1980) to warn that such empty Arab territories might attract strangers who are characterized by an odd desire of colonization.⁽³⁷⁾ However, apart from peacetime military exercises, some strategically situated islands like Perim, Tiran and Socotra could be useful in wartime as in the Israeli-Arab wars of 1967 and 1973.

Regarding islands in the northern part of the Red Sea, both Mahmoud (1979) and Blake (1982) refer to numerous small offshore islands around the southern end of the Gulfs of Suez and Aqaba. Mahmoud considers Um Gamar, Shadwan and Gubal islands as the most important ones at the entrance of the Gulf of Suez. To Blake, Tiran and Sanafir, at the entrance of the Gulf of Aqaba, are the most strategically significant islands in the northern part of the Sea.⁽³⁸⁾

Tiran Island lies in the centre of the throat of the Gulf of Aqaba, in the direction of Ras Muhammed, 5 to 6.4km from the Saudi coast and 4.8km from the Egyptian shore. It is 200km from the Saudi air base at Tabuk. Its shape is irregular and it is 11.2km long from north to south and forms the eastern limit to the Strait of Tiran. Except for the summit (524m) on the southern part of the island, the remainder of Tiran consists of a sandy plain with low hills. On the western part, two prominent hills rise to heights of 47 and 94m, and due to the tremendous amount of coral cliffs on the coasts, landing is provided only by the two sandy

beaches on the western coast.⁽³⁹⁾

Sanafir lies 2.4km east of Tiran. Numerous limestone hills with jagged irregular peaks characterize the eastern part of the island. The highest peaks here rise to an elevation of 100m. A promontory, bordered with patches of coral reefs lies on the northwest corner of the island. Post World War Two information refers to an area in the middle of the island as a landing-ground for aircraft. These sources add that Sanafir lacks water; and rain falls only in the winter months of December, January and February.⁽⁴⁰⁾

Originally and formally, Tiran and Sanafir belonged to Saudi Arabia which leased them to President Nasser in 1954 as "a friendly gesture for the purpose of blockading Israel's southern port of Eilat". Israel was able to capture the islands and break the blockade in the 1956 and 1967 wars.⁽⁴¹⁾ After the conclusion of the Camp David Agreement in 1978 the future of the islands became somewhat controversial and a quarrel arose between Egypt and Israel over them. According to Arab sources, Ariel Sharon, the former Israeli Defence Minister, wanted the islands as a "small base for Israeli gunboats". Egypt reacted by announcing that after Israel's withdrawal from Sinai, it would not accept any Israeli presence in the peninsula. President Mubarak made it clear that Egypt "would not accept to be remiss of others rights" - which was taken to include the Saudi right to Tiran and Sanafir.⁽⁴²⁾

However, it is reported that Israel "warned the United States and Egypt that it would not withdraw its troops if the islands were to revert to Saudi control".⁽⁴³⁾ The Arab sources emphasize Saudi ownership of the islands and indicate Egypt's intention to return them to the Kingdom as an initiative for anticipated negotiations between the two countries. Moreover, Prince Fahad (now King) announced that

"the restoration of the two islands from the Israeli enemy and their return to Saudi Arabia is a responsibility of Egypt alone".⁽⁴⁴⁾

Blake (1982) maintains that Egypt occupied these islands only in 1949 he questions Saudi claims to the islands which could become the subject of serious dispute.⁽⁴⁵⁾ However, the Economist reports that the islands are to be treated under an agreement in much the same way as Sharm al Sheikh⁽⁴⁶⁾ which the Camp David Accords guarantee as open to all.⁽⁴⁷⁾ Interestingly, some sources report American intentions of using the islands as a base for the Central Command (formerly Rapid Deployment Force).⁽⁴⁸⁾

The southern part of the Red Sea contains hundreds of islands. In this area, the most strategically important are Perim, Kamaran, Dahlak, Farasan and Socotra in the Gulf of Aden. Kennedy mentions a group of six islands known as Jezirate Seba, lying about 9.6km off the African coast and 16.5km south-south-west of Perim island.⁽⁴⁹⁾ Apart from Perim and Jezirate Seba, the only other island in the area of Bab

al Mandeb is Dumerra whose outer edge is about 1.6km off the African shore and 22.4km west-north-west of Perim island. Hewid (1980) mentions that this group which lies between the western and major channel of Bab al Mandeb and the African shore and known as the Seven Sisters, is of a volcanic nature.⁽⁵⁰⁾ The New Encyclopedia Britannica (1974) confirms this by indicating the existence of a group of active volcanoes just south of Dahlak Archipelago (16°N); it also mentions the recently extinct volcano on Jabal at Tair.⁽⁵¹⁾ Lapidoth (1982) points out that these islands are hot, dry and uninhabited. She also mentions other islands north of Bab al Mandeb and controlling its northern mouth. These - apart from the most important mentioned above - include Sajid, Auntufash, Urmak, Uqban, Fatma, Halib, Jabal at-Tair, Zubair islands, Abu Ail islands, Zuqar islands - including Djezirat Zuqar, Great Hanish, and Small Hanish.⁽⁵²⁾

Regarding the ownership of these islands, Dumerra and the group of Jezirate Seba belong to Djibouti. Sajid and Farasan are Saudi islands. Auntufash, Urmak and Kamaran belong to AR Yemen. PDR Yemen owns Perim, Uqban and Socotra. Dahlak Archipelago, Fatma and Halib are Ethiopian islands. Lapidoth adds that sovereignty over the islands located in the centre of the Red Sea is disputed between Ethiopia, AR Yemen and PDR Yemen. These islands are: Jabal at-Tair, Zubair islands, Abu Ail islands, Zuqar islands - which include Jezirate Zuqar, Great Hanish and Small Hanish.⁽⁵³⁾ Blake

(1982) remarks that disputes over ownership of islands in the seas around the Arabian peninsula are dangerous due to their strategic significance, and complicate boundary delimitation.⁽⁵⁴⁾

In spite of their small size, the islands in the vicinity of Bab al Mandeb, as well as those in the mouths of the Gulfs of Aqaba and Suez, could be used to control or interrupt navigation. Therefore, the importance of the Jezirate Seba group stems from its being part of the navigable channel of Bab al Mandeb. Although the strategic importance of islands increases with proximity to major chokepoints, the islands north of Bab al Mandeb like Kamaran, Farasan, Zuqar, Hanish, Halib Fatma and Dahlak could be strategically crucial, since military action from such islands could threaten the coasts of these littoral states. A brief overview of the most significant islands in the southern Red Sea will follow, from which it will be seen that some have the geographical potential to provide genuine bases and fortress facilities while others do not.

Perim, a former British coaling station, now belongs to PDR Yemen. It is rocky, barren and volcanic; Al Yamani (1947) suggests that every part of Perim tells that it was once a volcano.⁽⁵⁵⁾ It is situated at the narrowest point of the Red Sea where it bisects the Strait of Bab al Mandeb into two channels: the Western channel between the island and the African shore, and the eastern channel, 16.4km wide, lying

between Perim and the Asian coast. According to the Naval Intelligence Division (1946) the channel is 19.2km wide; but various other sources - which could be more accurate - say that its width is about 16.7km. This channel is navigable while the eastern channel (9.3km wide) is dangerous for shipping. Perim Island is 3km at its widest point and about 7km long.⁽⁵⁶⁾ In 1968 the island was inhabited by 300 people.⁽⁵⁷⁾ According to the Naval Intelligence Division (1946) the highest point on the island is on its eastern end; whereas its north-western coast is flat and sandy and its southern shore is irregular and all its bays are blocked by coral reefs.⁽⁵⁸⁾ Intersected by fresh water-courses, the surface of the island is composed of basalt rocks. Perim is situated within an area prohibited to shipping.⁽⁵⁹⁾ The south-western part of the island contains a harbour which is well sheltered except against the southerly winds. The entrance of the harbour, on the middle of the eastern side of the island, lies between Pirie and Lee Points, which are less than 900m apart.⁽⁶⁰⁾ The strategic significance of Perim was recognized during the 18th and 19th centuries. When the British saw Napoleon's conquest of Egypt as a major threat to their communications with India in 1799, they forcibly occupied Perim and blockaded the Red Sea. Owing to the lack of water on the island the British stayed for only a few months and withdrew their troops to Aden. In 1857 again the British annexed the island and for some years used it as an

important coaling and signal station.⁽⁶¹⁾ The British built forts and a lighthouse on its peak, and made large tanks for drinking water. Thus, they turned the island into a key for two great doors to India and the Red Sea.⁽⁶²⁾ Perim has the largest lighthouse in the whole Red Sea to guide ships passing the Straits of Bab al Mandeb. It also has two small airfields, one of which is about 1,000m long.⁽⁶³⁾

In the late 1960s, when the British decided to quit southern Arabia, they offered to internationalize the island and put it under United Nations supervision to guarantee the freedom of passage through Bab al Mandeb. However, PDR Yemen claimed the island and sovereignty was transferred to Aden in 1967 after the inhabitants of the island opted to join the new Republic. Perim thus gives PDR Yemen a distinctive advantage of control over Bab al Mandeb.⁽⁶⁴⁾

Since the early 1970s the strategic importance of Perim has re-emerged. Bell (1973) sees the strategic significance of Perim as comparable with that of Sharm al Sheikh. Bell states that Israel built a counter-presence in that area in the 1970s on the Ethiopian Dahlak islands off Massawa. He adds that the revolutionary regime in Aden maintained that "the Israelis are in Ethiopia on more than a training mission", and that they have established their "own Zionist Perim further up the Bab el Mandeb - just in case".⁽⁶⁵⁾ An Israeli viewpoint maintains that before the 1974 Arab Rabat Summit, PDR Yemen declared its intention to fortify Perim Island; but in that Conference Aden agreed to a 99-year lease of the island to Egypt for \$150 million,⁽⁶⁶⁾ paid by Saudi

Arabia.⁽⁶⁷⁾ Al Hakim (1979), however, maintains that the government of PDR Yemen announced that

"the so-called lease of the island (of Perim) was not a subject for debate by anyone at the Seventh Arab Summit Conference in Rabat".⁽⁶⁸⁾

Salama (1980) puts the Arab view that PDR Yemen might not be strong enough to defend the island against any Israeli raid; and because of the tremendous strategic value of the island, it should be transferred into a common Arab base. However, PDR Yemen rejected such a strategy, but agreed that the Egyptian navy could use the island if emergency arises.⁽⁶⁹⁾ Anthony Cordesman (1984), a US Middle East defence analyst, also believes that Perim is a valuable military facility.⁽⁷⁰⁾

According to Rear Admiral Hanks (1981) during the Israeli-Arab war of October 1973, Aden's tanks and artillery were based on Perim, and provided back-up support to Egyptian destroyers which patrolled the southern reaches of the Red Sea on the look-out for vessels flying the Star of David or Israel-bound Iranian oil tankers. Since then, the Israelis have been seriously concerned about the strategic threat the island could pose to their navigation through the southern entrance of the Red Sea, and accordingly have established some counter measures claiming that the island was within range of Israel's naval base in Southern Sinai. Responsibility for the "Coral Sea" incident in which an Israel-bound tanker was rocket-attacked by the PLO, somewhat

surprisingly left Aden unsuspected by Israel.⁽⁷¹⁾ However, Abir (1974) believes that the Palestinian Bazooka missiles could not have been fired from the island without PDR Yemen's help or consent.⁽⁷²⁾ Israeli military presence on other islands in the southern Red Sea has been also alleged by Arab sources. According to Mahmoud (1979), Israel built two naval bases on the islands of Fatima and Halib - the largest of the islands of the Bay of Assab close to the Eritrean coast and about 43.2km to the north of Bab al Mandeb. He adds that Israel used the island of Dumeirra, 20.8km northwest of Perim and near the African coast, for reconnaissance, and occupied some of the Zuqar group for communications. The same story is cited by Hewidi (1980).⁽⁷³⁾ However, although one may not doubt the validity of these claims, during the reign of Emperor Haile Selassie, when Israel had a close relationship with Ethiopia, one cannot accept these views after the Marxist revolution in September 1974. The new regime has maintained a pro-Arab stance, and in 1981 entered into a politico-strategic alliance with two of the most anti-Israeli regimes, Libya and PDR Yemen (see chapter 7).

Regarding superpower strategic interests in Perim, Soviet military presence in or close to it has been indicated since the early 1970s. According to Yodfat and Abir (1977) in 1974 reports mentioned that the Soviets had forces on the island, another recent view maintains that the Soviets were engaged in constructing a new base at the Bay of Turbah, near

the island. A third more recent claim comes from Andrew Boyd (1984) who indicates that "Russia acquired valuable naval facilities at Aden and on the island of Perim and on Socotra".⁽⁷⁴⁾ On the other hand, since the early 1950s the Americans were not far from Perim. Their military presence since 1973 near Bab al Mandeb has been indicated by Abir (1974).⁽⁷⁵⁾ Blake (1981) points out that superpower interest in the island stems from the fact that Perim could be employed to deter shipping from using the navigable channel where blockade is not easy due to its depth of more than 180m⁽⁷⁶⁾. The currents are also fast enough to complicate mining the strait.

Kamaran Islands: this group of island, of which Kamaran is the largest, lies about 4.6km off AR Yemen's coast, and about 320km north of Perim Island. From north to south Kamaran measures about 25km and is about 9km from east to west. The area is about 179.2sq.km. It is composed of rock and sand, and is generally low and sandy in appearance, but relatively high towards the southern end, where the highest point on the island (Jabel Yamen) reaches 24m. The sheltered Kamaran harbour, with its low head and mud bank, lies on the eastern coast of the island. The harbour is entered between North Point (15°20'N, 42°37'E) and Milton Point which lies 650m to the south-south-west.⁽⁷⁷⁾ During the 1940s the harbour served as a quarantine base for Muslim pilgrims en route to Makkah and as a centre for export trade, charcoal and

dried fish. Apart from Kamaran village there were three other villages, all inhabited by fishermen who used to exchange some of their fish catches for vegetables. Some pearl-trading took place on the north western side of the island. These pearls used to be marketed in Bombay.⁽⁷⁸⁾

Since the 16th century different governments have ruled the island and used it for various purposes. During the 16th century the Portuguese occupied the island, built a fort, and used it as military headquarters. Later, the Turks defeated the Portuguese and destroyed the fort. From 1915 to 1967 the island was under British occupation.⁽⁷⁹⁾ On November 30, 1967, PDR Yemen was proclaimed independent comprising the Territory of Aden, the islands of Perim, Kuria Muria, Kamaran and other offshore islands (according to the UN General Assembly Resolution 2183 (XXI) of 12 December 1966). On November 30th 1967 the UN was informed by the United Kingdom that:

"... The people of Kamaran had decided to unite with Aden and accordingly it too would be part of the new State ..."

It is worth recalling that the people of Perim opted to join PDR Yemen; while the people of Kuria Muria chose to unite with the Sultanate of Oman.⁽⁸⁰⁾ Perim island has an airfield, a port and an office building; its population, composed of Arabs, Ethiopians, Indians and Somalis, is nearly 3,000, most of whom practise fishing.⁽⁸¹⁾

Being of strategic significance, the ownership of the island has thus been a matter of dispute between the United Kingdom and Yemen AR in 1956, and between the latter and PDR Yemen. In 1956 when Britain granted concessions for oil exploration on the island, the Yemeni government in Sanaa protested against the issue on the basis that Kamaran was part of its territory. London rejected any claim to the island by the Yemeni king. On this issue, Taylor (1972) argues that while Britain regarded the island as part of her Aden colony, Yemen AR claimed it as part of the former Turkish province of that name. However, the authorities in Sanaa did not press their claim. After 1967, conflict between the two Yemens over the sovereignty of the island was anticipated. In 1972 PDR Yemen abdicated the island in favour of Yemen AR.⁽⁸²⁾ In 1984 the Americans maintained that the Soviet Union seemed to be "expanding military facilities" on the island".⁽⁸³⁾

Dahlak Islands: the Ethiopian Dahlak archipelago lies on Dahlak Bank - which extends to 288km south-east, with the outer edge lying between 48 and 128km. The islands are situated on broad shallow-water shelves northeast of Massawa Channel, on the African coast, near the port of Massawa in the Eritrean Province. The islands extend along Dahlak Bank in the form of reefs and banks.

The villages on the northern side of the archipelago were centres of pearl-fishing. Owing to the lack of water,

the islands were supplied with water from the mainland and thus water had to be stored in tanks. Massawa Channel lies between Dahlak Bank and the Eritrean coast; it extends south-south-east for 345.6km. It is bisected into northern and southern Massawa Channels which provide safe and convenient thoroughfare; nevertheless, caution is needed since low islands existing in this area are not easily seen.⁽⁸⁵⁾

During the European colonial era, Dahlak had military significance with an aircraft landing ground, in addition to other facilities such as a wireless telegraph station. In the early 8th century, Muslims occupied Dahlak islands, controlled Abyssinia, and retaliated against the Abyssinians who had burnt Jeddah. By the early 10th century the Abyssinians regained a hold on the African shore at the southern end of the Red Sea - including the islands. However, by the 11th century, Muslim Arabs called Najahids were able to recontrol the islands which in the 12th century came under the control of the Muslim Shaddadid Dynasty whose territory included Massawa.⁽⁸⁶⁾ The second important island in the group is Norah, 16km north of Dahlak Al Kabir. Although none of the other islands display such special significance as Dahlak and Norah, some had military value because the Italians used them as aircraft landing-fields.⁽⁸⁷⁾

Since the early 1970s the strategic significance of Dahlak archipelago has been recognized. Bell (1973) includes this group with Perim when he considers them important as

Sharm al Sheikh. In the early 1950s, the US gained a 25 year lease for Seninyan and Dahlak Islands from Ethiopia to enforce ~~the former's~~ ^{Western} military bases in Mauritius, Maldives, and Diego Garcia.⁽⁸⁸⁾ During the era of Emperor Haile Selassie of Ethiopia (prior to September 1974) "the Israelis had a secret monitoring station on the Dahlak Islaneds ..."⁽⁸⁹⁾ Not only the Americans and the Israelis, but also the Russians gained a foothold in the Dahlak islands. The Financial Times (1980) reports that Soviet ships acquired "facilities ... in the Ethiopian-owned Dahlak islands in the Red Sea". More information on Soviet presence there is stated in Foreign Report (1983) which indicates existing Russian influence in Ethiopia by pointing out that "Soviet forces are building up their base on the Dahlak islands in the Red Sea".⁽⁹⁰⁾

Farasan Islands: this group of islands belong to Saudi Arabi and contain the largest islands on the Asian side of the Red Sea: Farasan Kabir and Segid, which are practically one island. They have plains, valleys and hills composed of coral rock. The whole group lie between Khor Itwad and Meidi, on a shallow offshore shelf. The group correspond in position to the Dahlak archipelago because both groups lie on the same shelf. They have irregular shapes and the highest point on them is 78m. Their area is 450 and 180sq.km respectively; and they are joined by a spit. Both have small anchorages, and a water supply.⁽⁹¹⁾

According to the Saudi newspaper, Al Madina Al Munawarah

(May, 1984) there are 73 islands in the Farasan group. Farasan, Kabir, Segid, Gamah and other islands are said to have date palms and a small population. The Farasan group has a very fascinating beauty, especially Farasan and Segid, suggesting that the Farasan islands are potentially useful for tourism.⁽⁹²⁾

Socotra: The island is located 35km off PDR Yemen's coast to the south overlooking the Gulf of Aden. Its western extremity is some 200km to the east-north-east of Cape Guardafui or Ras Asir - the easternmost tip of the Horn of Africa. It is mountainous and the highest point is 1,428m.⁽⁹³⁾ Socotra is 138km long, and 36km wide.⁽⁹⁴⁾ In 1966 its population was 166,000, estimated to be over 200,000 in 1985. Hadibo is the capital of Socotra, a village situated on the northern part of the island. Bell (1973) states that Socotra is obscure and has no visible resources, and its population live on fishing and goats. Other sources indicate that although the island is generally barren, it has some agriculture, coastlands and valleys; it has livestock, dates, gum and fishing; it exports dates, gum, incense and ghee. Also, it is described as having a significant continental shelf which is now being explored for oil.

The strategic location of the island is widely acknowledged. The New Encyclopedia Britannica (1974) considers it one of the major Indian Ocean islands. Maritime authorities emphasize the strategic location of the island

close to shipping lanes entering or leaving the southern part of the Gulf of Aden. On the other hand, they point out its exposure to the monsoons, and its being devoid of safe harbours or anchorages, like those magnificent ones in Aden.⁽⁹⁵⁾ Consequently, Socotra is rarely visited by ships. The island, formerly British territory, has been owned by PDR Yemen since the independence of the latter in 1967. For many centuries the Eastern seaborne trade enriched the Arabs of Oman and Yemen.⁽⁹⁶⁾ In their rivalry with those Arabs, the Portuguese aimed at capturing the strategic approaches to the Indian Ocean in order to seal off foreign shipping access and establish territorial bases around its coasts. Therefore, in 1506, Alfonso Albuquerque seized Socotra and Aden to block the entrance to the Red Sea. While extending its hegemony in the western sector of the Indian Ocean, Britain occupied Socotra and Aden in 1839.⁽⁹⁷⁾

As early as 1970 reports referred to Soviet marines landing on the island, and that the latter would be turned into a Russian base. Today, Socotra is considered by some to be "the lynchpin in the Soviet network" of military presence that includes Dahlak, Assab and Aden. Thus, Socotra constitutes a central strategic interest compared even to Aden. Such a view has been held by Anderson and Blake (1982) when they maintain that a political change in PDR Yemen could lead to the dismantling of Soviet facilities in Aden - as the case with Berbera in 1978, but Soviet evacuation from Socotra

would not be an easy task.⁽⁹⁸⁾ During the first half of the 1980s numerous sources indicated Soviet acquisition of valuable and dependable naval facilities in Socotra. Cordesman (1984) maintains that in a security agreement between PDR Yemen, the Soviet Union and Ethiopia, the USSR may have been allowed to build submarine pens on the island. He adds that the Soviets built a major anchorage close to Socotra.⁽⁹⁹⁾ When Israel learned the news that the Soviets had turned the island into a base, one of her newspapers warned both Moscow and Aden that

"any move to choke-off Israeli routes to Eilat would be resisted, and noted the air mileage to Aden and Socotra".

Aden denied the reports and took journalists to the island to prove its hands were clean. Rejection of such alleged Soviet military presence also comes from Vali who contended that, in 1976 at least, "the report according to which Socotra island has been turned into a Soviet air base has proved incorrect". But he concedes that "there are fleet anchorages which are used by Soviet warships..."⁽¹⁰⁰⁾

Quoting Egyptian sources, Lapidoth (1982) states that Socotra has become "a haven and training ground for various terrorist groups". Cordesman (1984) maintains that PDR Yemen is expanding its air facilities at Hadibo and that the island contains one of PDR Yemen's naval bases.⁽¹⁰¹⁾ PDR Yemen's claim to an Exclusive Economic Zone over 200 miles around the

island, would put the entire area between Socotra and PDR Yemen's coast and the African coastline within the former's E.E.Z. Despite the rights of other states enshrined in the 1982 UN Convention on the Law of the Sea (Article 58) there could be fears that PDR Yemen and its allies in the Tripartite Pact might be tempted to threaten shipping for political reasons. The Gulf of Aden controls access to Bab al Mandeb.

Red Sea islands may be harnessed for the construction of ports, airfields, or refineries. Despite the small size of most Red Sea islands, some are endowed with strategic positions adjacent to major shipping routes, and hence they enjoy strategic value. The possession of islands in the Red Sea would surely give their owners an opportunity to exercise some influence. The best chance in this respect are for PDR Yemen (Perim) and Saudi Arabia (Tiran and Sanafir). However, the situation for Saudi Arabia could be critical as its islands lie in the only outlet for Israel to the south. Consequently, Saudi Arabia could find itself in confrontation with Israel if the former tries to exercise the right bestowed on it by The Law of the Sea Convention in 1982, namely the right of coastal states to decide whether passage of a ship endangers that state's security or not, before allowing passage (chapter 6). While the Saudis may not create problems for US ships passing in the vicinity of areas under their jurisdiction, PDR Yemen's revolutionary regime might do so.

As Couper (1978) indicates, some islands have assumed a new importance in world geography because their ownership can give access to potential mineral bearing areas.⁽¹⁰²⁾ However, the present significance of Red Sea islands is strategic.

2.2 Physical Characteristics

2.2.1 Climate

Generally speaking, Red Sea climatic and weather conditions are typical of the Middle East. The region is characterized by long, hot and dry summers. It remains very warm in winter. High ground on both sides brings weather variabilities.⁽¹⁰³⁾

Winds: Wind is mainly light along the Red Sea. From latitude 19°N to the northern end of the Red Sea, the prevailing winds are north and northwest. The occasional westerly or 'Egyptian', winds are the best known in that part. During the winter they blow with some violence, and are generally associated with fog and sandstorms. Between latitudes 14° - 16°N, the winds are variable; but from June to the end of August, strong north-west winds blow south and sometimes they extend to Bab al Mandeb. By September, the pattern retreats to a position north of latitude 16°N. In the area south of 14°N, the dominant winds are south and southeast. Areas near the coasts are sometimes characterized by hot or sand-laden winds from the desert.⁽¹⁰⁴⁾

Table 2.3Precipitation at selected Red Sea stations

Station	Highest average mm	Month/months	Period with no precipitation	Annual total mm.
Suez	5	March, November-December	April-September	24
Eilat	8	February-March, and December	June-September	29
Port Sudan	41	November	-	67
Jeddah	31	December	June	63
Masawa	35	December	June	180
Hodeidah	23	December	-	89
Djibouti	52	November	June	144
Aden	8	January	-	39
Socotra	81	December	April, July-August	195

Source: Hydrographer of the Navy, Red Sea and Gulf of Aden Pilot, 12th edition 1980, publisher: Hydrographer of the Navy, Taunton, England - 1980, pp.34, 46, 41, 48, 44, 50, 55, 51, 60.

In the southern part of the Red Sea shipping is affected by the southwest and northeast monsoons. In the Horn area, they erode the shoreline and practically halt navigation of small vessels for several months of the year, especially in the northern part of Somalia.⁽¹⁰⁵⁾

Cloud: The Red Sea region is covered by small amounts of cloud. Sometimes when rising dust forms strata at a higher level, a yellowish grey tint blurs the normal blue sky. Fisher (1983) remarks that absence of cloud here, especially away from coasts results in great heat with the sun beating down uninterrupted.⁽¹⁰⁶⁾

Precipitation: In general, rainfall is scanty and irregular. Absence or scarcity of rainfall along the sector from Suez to Jeddah is characteristic. Toward Massawa relatively great quantities of rainfall occur from October to April due to the proximity of the mountainous hinterland. For the rest of the region, east of Massawa, precipitation is little, except in Socotra island where it becomes moderate in June and heavier in November and December (table 2.3). However, although the domination of the Trade Winds throughout Arabia renders the latter as dry land, it is agreed that orographic precipitation caused by monsoonal currents from the Indian Ocean causes substantial rainfall in parts of PDR Yemen and Oman, and mountainous relief intensifies rainfall.⁽¹⁰⁷⁾

Rain in the northern part is mainly due to the crossing of cold Mediterranean fronts. Here, the average is only 25 or 50mm at places like Cairo, Suez and Tor. On the Asian coastline the average amount normally occurs in 10 to 30 days, and in nowhere exceeds 13mm. On the African side this quantity reaches 17mm at Massawa. Sometimes snow covers the peaks of higher mountains in winter. In the period from May to December, the Eritrean mountainous area experiences thunder which is rare in the coastal waters. In sum, the typical annual rainfall of the region is not more than 175 or 200mm; but, with special reference to coasts, the amount is more plentiful in winter than in summer. (108)

Visibility: Visibility is normally good or very good and fog is rare. The frequency of fog over the whole Red Sea area is less than two per cent. Poor visibility - below 8km - occurs in many parts of the Red Sea between May and September. Drizzle and heavy rain also reduce visibility in the area. Visibility is also lowered to below fog limits by dust and sandstorms which reach coastal waters. However, the northern part of the Red Sea is the worst affected by dust and sandstorms. (109)

Temperature: Most of the Red Sea area is either hot or very hot. Temperatures in this part, according to Fisher (1983), are higher than at the equator. It is normal to have daily maxima of 38°-46°C, and the area has experienced over 52°C. In February the mean temperature of the water of the

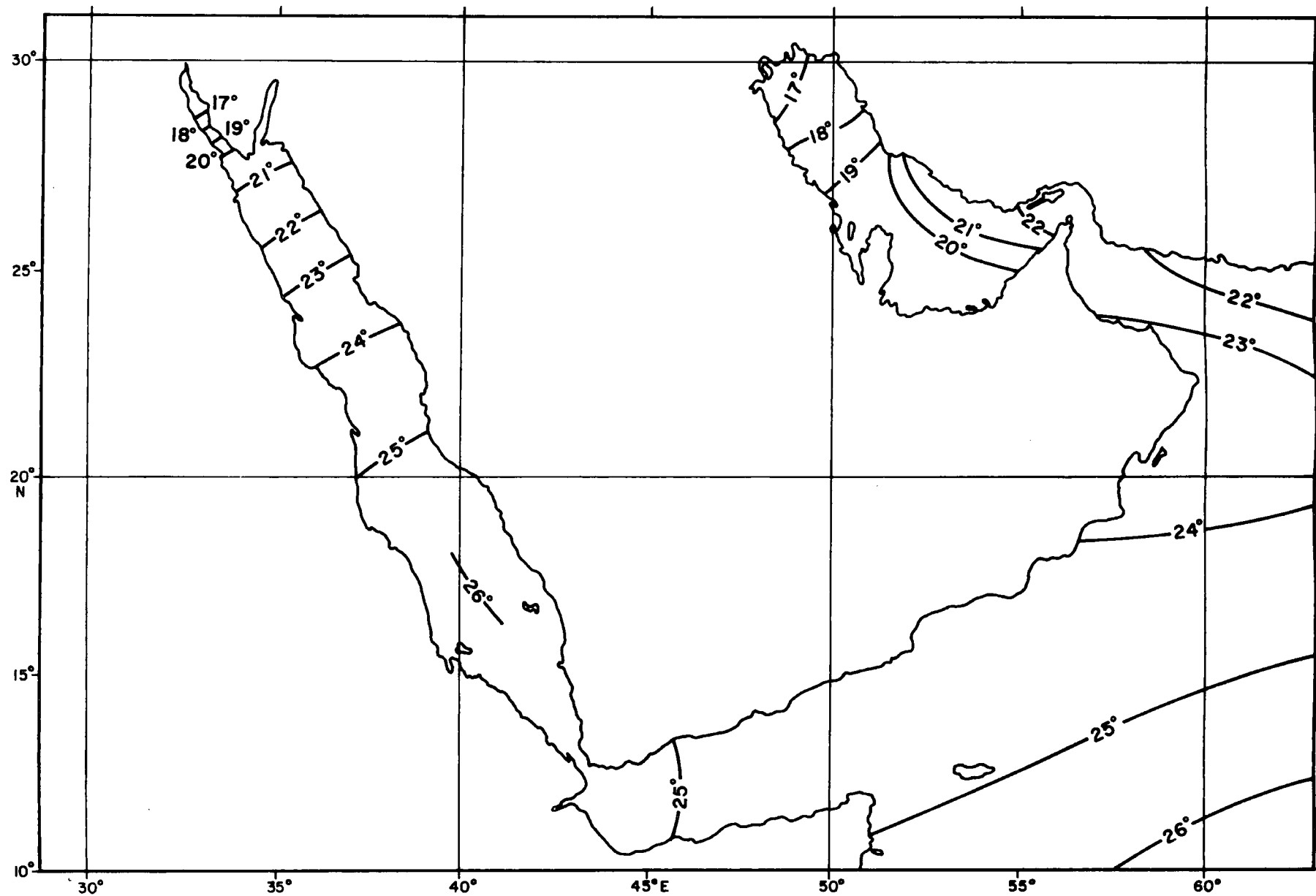


FIG. 2.3 MEAN SEA SURFACE TEMPERATURE (C°) - FEBRUARY

Table 2.4

Daily and monthly mean and maximum temperatures during January and July at selected Red Sea stations

Station	Month	Mean daily maximum °C	Mean daily minimum °C	Mean highest °C	Mean lowest °C
Suez	January	20	9	23	6
	July	37	23	41	20
Jeddah	January	29	19	32	13
	July	37	26	40	22
Port-Sudan	January	27	20	30	15
	July	41	28	46	24
Massawa	January	29	22	32	19
	July	39	31	42	27
Aden	January	28	23	29	19
	July	36	28	39	26

Source: Hydrographer of the Navy, Red Sea and the Gulf of Aden Pilot, 12th edition, 1980, Hydrographer of the Navy, Taunton, England, 1980, pp.34, 41, 44, 48, 51.

Gulf of Suez is 18° (figure 2.3 and table 2.4). This gradually increases to 26°C near Bab al Mandeb; and then it drops to 23°C off the southeast coast of Arabia. August is the hottest period when temperature jumps from 28°C (figure 2.4). during the southwest monsoon the temperature of the surface water in the area of Cape Guardafai reaches its minimum of 28°C . This low temperature is associated with upwelling of cold, deep water off the African coast north of the Equator. In summer, the air over the water is warmer than the sea by about 1° or 2°C but in winter it falls to 1°C below. The average annual temperatures of 29° to 30°C in the coastal waters near Massawa and Assab are the highest average of coastal stations in the world.⁽¹¹⁰⁾ Table 2.5 shows temperatures over some Red Sea areas.

Humidity: The averages of humidity along the Red Sea coasts and adjacent waters are about 75%. The highest reading of 90% takes place almost at dawn in flat coastal areas. Fisher (1983) remarks that in the Red Sea and the Gulf humidity, particularly in summer, creates living conditions of great discomfort, to the extent that rich people escape this period by living in hill stations. During the period from May to September, humidity becomes quite high over the southern part and near Aden (table 2.5.). It is also reported as highest near the northern-most tip of the Gulf of Aqaba, close to Eilat and Aqaba.⁽¹¹¹⁾

In sum, the climate of the Red Sea region is generally

Table 2.5

The average wet-bulb temperature (°C) over the Red Sea

Month	Red Sea			Gulf of Aden
	Lat 27°N	21°N	15°N	
January	16	19	23	22
April	21	24	26	26
July	25	27	29	27
October	23	27	27	26

Source: Hydrographer of the Navy, Red Sea and the Gulf of Aden Pilot, 12th ed. Hydrographer of the Navy, Taunton, England, 1980, p.32.

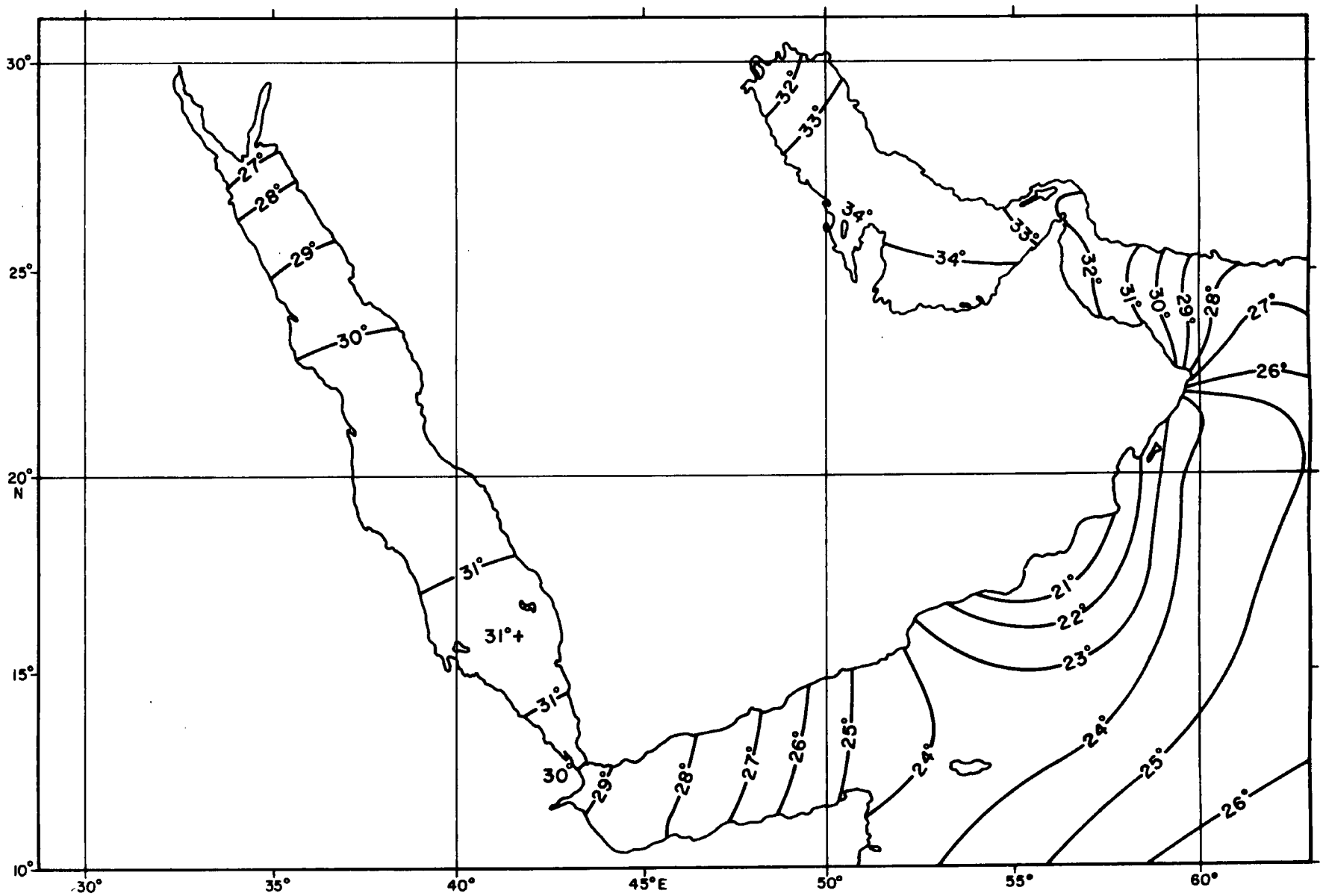


FIG. 2.4 MEAN SEA SURFACE TEMPERATURE (C°) - AUGUST

characterized by burning hotness, aridity, atmospheric humidity and sandy, duty winds. Such a climate renders year-round active life difficult. As Fisher points out, only with technology have people become able to lessen the effects of such climate - eg, by desalination of sea-water for crops and drinking, and air-conditioning of houses.⁽¹¹²⁾ Obviously, the bulk of Red Sea population has no access to such amenities.

Bell (1973) argues that although European rivalry for control of the Red Sea shores was great, the climate and sand, besides national hostility, baffled the grand designs of the imperial powers. He refers to the Italian defeat at Adwa in 1896, as an example of native hostility.⁽¹¹³⁾ However, despite the unpleasantness of climate in the Red Sea region, both superpowers acquired footholds as early as thirty years ago. In the modern world, combat would be facilitated rather than impeded by the Red Sea's physical environment.

2.2.2 Currents and Tides

Currents: Currents in the Red Sea are categorized as predominantly weak, except in the southern sector towards Bab al Mandeb.⁽¹¹⁴⁾ At the latter, according to Mahmoud (1979) they are characterized by high speed, reaching to 320km in 24 hours.⁽¹¹⁵⁾ Figures 2.5 and 2.6 represent the pattern of currents for the months of January and July respectively. The period from May to October is a transitional stage between

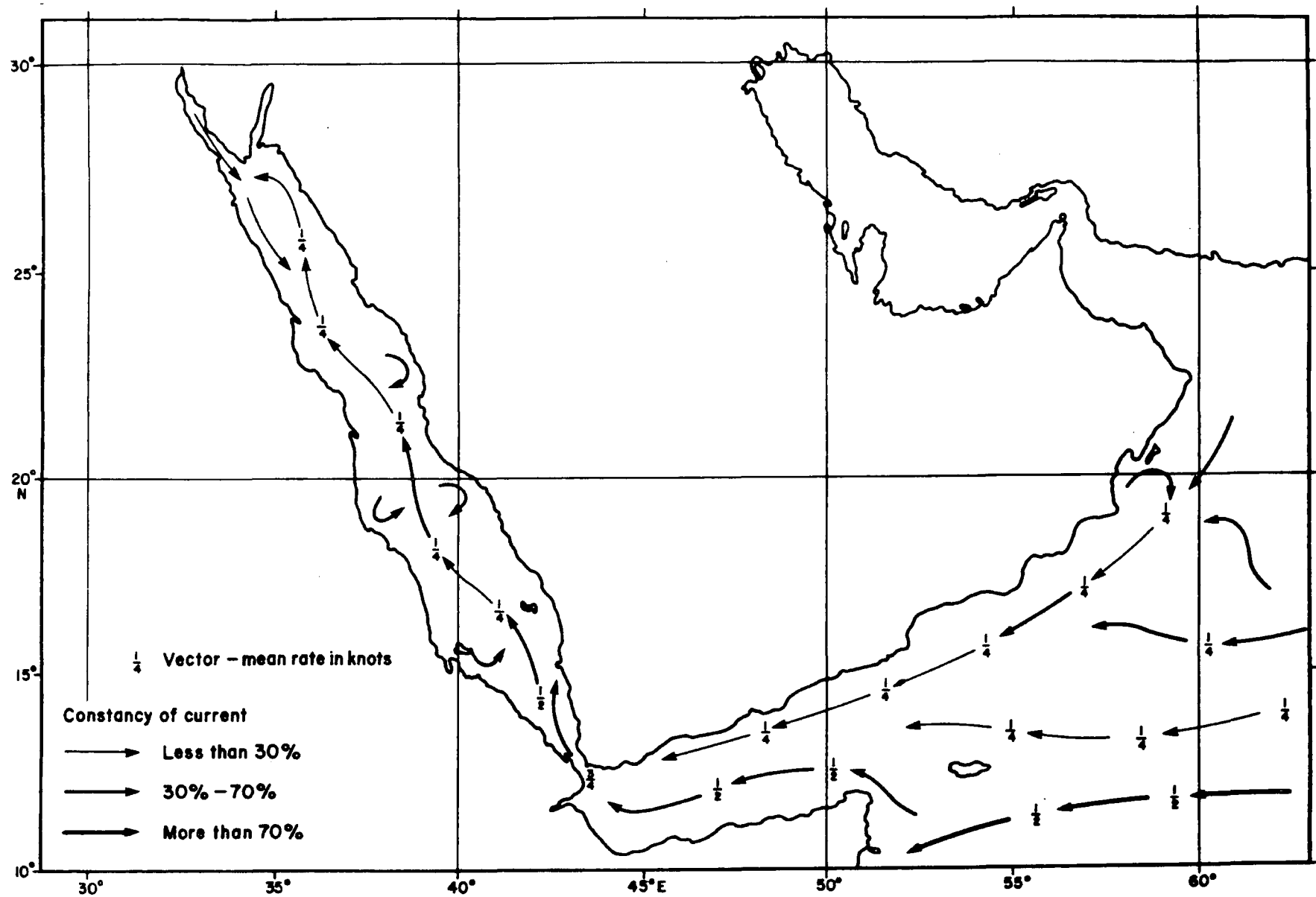


FIG. 2.5 TYPICAL PATTERN OF CURRENTS - JANUARY

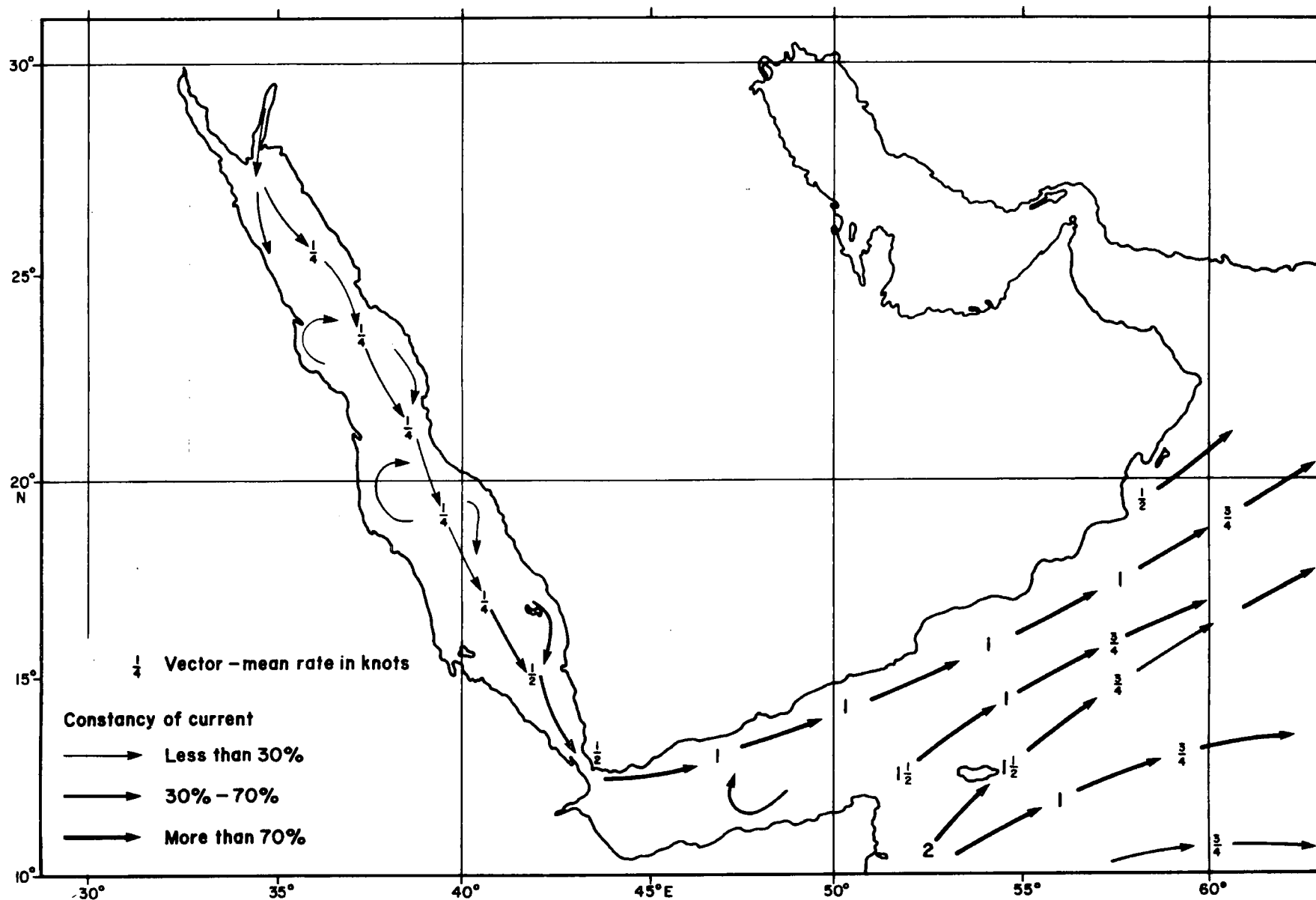


FIG. 2.6 TYPICAL PATTERN OF CURRENTS - JULY

the two patterns. Superimposed on the flow southeast or northwest are many local eddies which may be one of the factors that create the great variability in Red Sea currents. During September and before the establishment of the season flow, currents at Bab al Mandeb are weak and variable in direction.

In the Gulf of Aden currents are reported to be weaker and more changeable than in the Arabian Sea. Throughout April, currents going west continue to prevail over those going east. However, this predominance ceases in May; and currents become generally weak and vary in their direction. In June, when the southwest monsoon is established, east-going currents are most frequent and highly stable except in the southern part of the gulf, south of about latitude 12°N where eddies of systems of counter-currents predominate. here, quite often, west-going currents operate. In September while east-going currents are almost restricted within the area north of latitude 13°N , those on the south become very variable. During October, currents related to the northeast monsoon, prevail.

Tides: Since the classical medieval era, and to some extent today tides are sometimes known as adversaries of navigation. The predominance of reefs in the Red Sea has caused variations in water level; and hence tides in the Red Sea vary somewhat from one area to another. While tidal variation at the Suez Canal is 2.1m, it is only 0.6m at El

Table 2.6Spring tidal ranges in the Red Sea

Area	Latitude	Spring range of tide
Shaker Island	27° 30'N, 34° 00'E	About 0.6m
Near Sawakin	19° 07'N, 37° 20'E	No appreciable semi-diurnal tide
Kamaran Bay	15° 20'N, 42° 40'E	About 0.9m

Source: Hydrographer of the Navy, Red Sea and the Gulf of Aden Pilot, 12th ed., Hydrographer of the Navy, Taunton , England, 1980, p.18.

Akhawein (The Brothers) islet ($26^{\circ}19'N$ $34^{\circ}51'E$) south of the Gulf of Suez. Tidal variation is just more than 0.3m, and even imperceptible in other places. The level of water in the northern part of the Red Sea is usually raised by the strong southerly winter winds from December to March. In summer, the strong northerly winds lower that level by as much as 0.9m. ⁽¹¹⁶⁾

The tide of the Indian Ocean does not enter the Red Sea which develops a local oscillatory tide of semi-diurnal type. The fluctuation of the tide is not large, but whilst this oscillation is featured by high water in the southern end of the sea, it is indicated by low water in the northern end and vice versa. ⁽¹¹⁷⁾ Table 2.6 shows spring ranges of tide at different areas in the Red Sea.

Tides in the Gulf of Suez and in the Gulf of Aqaba are caused by the effects of tidal oscillation in those waters. Occurrence of high water in the Gulf of Suez between Suez ($29^{\circ}56'N$, $32^{\circ}33'E$) and Ras Gharib ($28^{\circ}21'N$, $33^{\circ}06'E$) is almost simultaneous. But when water is low at Suez, it is high at the southern part of the gulf, and vice versa. Suez has a normal spring range of about 1.4m and an extreme range of about 2.0m. High water occurs almost simultaneously over the entire Gulf of Aqaba and the Gulf of Suez. But in the former, it takes place sixty to ninety minutes later than at Shaker island which forms the southwest entrance point to the Strait of Gubal in the Gulf of Suez. ⁽¹¹⁸⁾

Table 2.7

Relation between the average temperature of the surface water of the Red Sea and its salinity

Latitude (N)	Temperature (in C)	Salinity
12° - 15°	27.9	36.9
15° - 20°	28.6	38.1
20° - 25°	27.2	39.4
25° - 30°	23.7	41.3

Source: Mahmoud, M., 'The Red Sea in Global Strategy' in Al Siyasa Al Duwaliya, No.57, July 1979, Al Ahram Corporation, Cairo, 1979, p.33.

2.2.3 Salinity

The rate of evaporation and the rate of influx of fresh water (rivers and precipitation) are the two factors determining saltiness of water. Owing to the very high evaporation rates in the Red Sea, in excess of 2m annually, and the lack of inflow of fresh water ⁹ because of deserts surrounding the sea, its waters are amongst the saltiest seawaters in the world, over 40 parts per thousand (40%) while the world average is 36%). The lowest year-round salinity in the Red Sea is 36% on the southern end or around Perim island, and it gets progressively higher throughout the length of the sea until it reaches 41% in the Gulf of Suez and the Gulf of Aqaba.⁽¹¹⁹⁾ In depths of 48m, where deep pools of hot salty water exist, the temperature reaches 56°C and salinity is recorded as eight times above average for normal seawater.

During the 1960s a number of pools of hot brines were discovered at depths of 1920m, where the temperature is extremely high. The mean temperature of the brine in the Atlantis II deep is almost 60°C and its salinity is 256 parts per thousand, and with no oxygen. Similar pools of water are also indicated in Discovery Deep and in the Chain Deep⁽¹²⁰⁾ (at about 21°18'N). Table 2.7 reveals the relation of temperature to salinity in the northwestern quadrant of the Indian Ocean. The area between the Equator and the Arabian peninsula has a maximum salinity of over 37 parts per

thousand. Salinity in the Indian Ocean varies from 32 to 37 parts per thousand.⁽¹²¹⁾

Although the Asian side is hotter than the African, salinity is greater in the latter. The reason, according to Mahmoud (1979), is that the temperature of the surface water on the Asian coast creates high humidity, which in turn slows the rate of evaporation in the water; consequently a low degree of salinity is created. Militarily, he adds, high degree of salinity affects the speed of sound waves in the sea; therefore, the Red Sea is not a suitable theatre for submarine operations.⁽¹²²⁾ On the other hand submarines in transit would be more difficult to detect.

In addition to the outflow of water from the Red Sea through Bab al Mandeb, there is a constant sub-surface flowing out of highly salty water throughout the year. South-flowing bottom water from the Gulf of Suez spills over the sill at Bab al Mandeb.⁽¹²³⁾ With regard to waters circulation in the Red Sea it is pointed out that when these waters are too hot, they move northward; but when they cool, they sink and create a deep current which flows over the southern end of the sea and pours into the Indian Ocean through the Gulf of Aden. Unesco Marine Science Programme for the Red Sea, and Unesco Technical Papers in Marine Science state that the pattern of the circulation of the Red Sea waters reverses from June to September; and in this movement, intermediate waters from the Gulf of Aden carry nutrients

Table 2.8Red Sea:seawater desalination plants*

Plant	Capacity Cum/day
Jeddah	323,000
Al Wajh	60,000
Duba	20,000
Yanbu al Bahr	19,000
Haql	6,000
Umm Lajj	5,000
Al Qunfidah	3,800
Eilat	3,788
Al Lith	459
Farasan	250

Source: Couper, A. (ed.) The Times Atlas of the Oceans, Times Books Ltd, London, 1983, p.118.

* Except for Eilat, the rest are in Saudi Arabia.



into the relatively nutrient-poor sea, ie, the Red Sea. According to the New Encyclopedia Britannica (1974) there is a complete renewal of water in the Red Sea every 20 years. (124)

Fresh Water: Water is one of the major problems in the world. In the Middle East technology has made it possible for oil rich states to extract fresh water from the sea. The Kingdom of Saudi Arabia is heavily dependent on desalination plants utilising US technological know-how. According to MEED (1984) the Kingdom's total groundwater resources are estimated at 2.3 million million m³ with an approximate annual charge of 888 million m³. Saudi Arabia's renewable resources of water are mainly in the western region. Groundwater meets 70-90 per cent of the Kingdom's present total demand. Water shortage clearly poses a threat to the Saudi farming expansion and thus the need to get to grips with the water problem is growing more urgent. Apart from seeking new ways to conserve groundwater resources, the main option for the government is to increase the output of desalinated water. (125) Table 2.8 shows some Red Sea desalination plants.

Saudi Arabia is already the world's single largest desalination market and boasts the biggest plant ever built - a complex at Jubail, on the Gulf coast, producing about 1 million m³ of fresh water a day. The Saline Water Conservation Corporation (SWCC) operates 21 desalination

plants. Fifteen of these are on the Red Sea coast, and six on the Gulf. Stage four of the Saudi desalination project was to be completed in 1980, and Jeddah's installed capacity of desalination had to be brought up to 19 million g/d.⁽¹²⁶⁾

OPEC Bulletin (1984) points out that in 1977 Saudi Arabia and the US set up a joint solar energy research programme under the Saudi Arabian-United States Joint Economic Commission. A seawater desalination plant at Yanbu due for completion in 1985 is one of the most ambitious projects involved in the programme. The plant aims at utilizing the abundant Saudi sunlight to produce fresh water. When it operates, its daily purification capacity will be 200m³, and it will feed into the output of the larger desalination plant at Yanbu. At present the plant is not expected to be cost-effective, but officials of the SOLERAS estimate that by 1995 the plant will be able to produce a thousand gallons of water for four dollars.⁽¹²⁷⁾ However, desalination plants on the Red Sea could be vulnerable to oil pollution, fire and explosion in ships - as in the case of the July-August 1984 mining of the Red Sea, or to attack by saboteurs or military conflict, notably to Saudi plants within Israel air-range. Such events could damage or ruin these installations, which needs the supply of fresh water for urban, industrial and agricultural activities.

Table 2.9Cities /towns of over 100,000 population along Red Sea coasts

City/town	Population	Year
Jeddah	750,000	1977
Aden	300,000	1977
Suez	194,000	1976
Djibouti	160,000	1978
Hodeidah	148,000	1975
Port Sudan	120,000	1977

Source: Except for Suez and Hodeidah, the rest of the information is from the Hydrographer of the Navy, Red Sea and Gulf of Aden Pilot, 12th edition, Taunton, England, 1980, pp.115, 164, 198 and 228. Information for Suez and Hodeidah is from Willett, M. (compiler and ed.) for Geographical Digest, 1981. Published by George Philip & Son Ltd, London, 1981, pp.28, 39.

2.3 Pollution

Since the early 1970s pollution at sea has been creating growing concern among coastal states. Regional organizations, such as the Arab League Educational, Scientific and Cultural Organization (ALESCO), have become increasingly involved with the problem. All this local, regional and international concern is aroused by the fact that pollution reduces the quality of human life while marine pollution puts marine resources at risk. Articles 207-212 of the 1982 Convention on The Law of the Sea indicate that pollution to the marine environment may be derived from:

- (1) land-based sources;
- (2) sea-bed activities, artificial islands and installations;
- (3) vessels and installations, and other devices flying their flags or of their registry or operating under their authority;
- (4) dumping;
- (5) atmospheric sources.⁽¹²⁸⁾

Oil is considered as one of the most widespread pollutants at sea.⁽¹²⁹⁾ The Red Sea is clearly less vulnerable to certain types of pollution resulting from high population density (table 2.9), or large scale industry. But because of growing oil transportation (Chapter 5) and offshore oil and mineral explorations, the Red Sea is extremely susceptible to pollution. Oil slicks from drilling and oil tankers constitute the major pollution threat in the Red Sea, particularly if conflict occurs in the region

involving attacks on shipping as in the Gulf since 1982. Moreover, accidents may result when oil is transferred from ultra large crude carriers (ULCC) to smaller ships. Even cleansing of tanks can contribute to oil pollution in the Red Sea. In a situation where collision and stranding annually cause an average total loss of 15 tankers, Red Sea states are clearly worried about oil pollution. For example, in 1976 the loss of 20 oil tankers in the world left almost a quarter of a million tonnes of oil polluting the seas.⁽¹³⁰⁾ Petro-chemical industries on Red Sea coasts, especially at Yanbu, Jeddah, Aden and Suez could add to the pollution problem. Moreover, the several desalination plants on the Saudi coast discharge substances that create pollution locally which may harm the natural environment.⁽¹³¹⁾ In the Times Atlas of the Oceans (1983), the northern part of the Red Sea, specifically from about 130km north of Yanbu, is characterized by natural oil seepage; whereas in the rest, it shows high and low occurrences of oil pollution, especially around Bab al Mandeb.⁽¹³²⁾ Thus, owing to its location and function, the Red Sea is already threatened by oil pollution; and such threats are likely to increase.

Regarding solutions to the problem of pollution, only after the UN Conference on The Human Environment (held at Stockholm in 1972) did people begin to realize the big threat of pollution, and to formulate serious environmental policies to combat it.⁽¹³³⁾ With regard to the Red Sea there have been

several attempts to control marine-pollution. The UN Environmental Programme (UNEP) sponsors a Regional Seas Programme (UNEPRSP) which includes the Red Sea and the Gulf of Aden. The Red Sea is considered by UNEP as one of the world's priority areas for combatting pollution. According to Borgese and Ginsburg (1983) the Red Sea littoral states have signed and ratified the Regional Seas Programme and Related Regional conventions of the UNEP. The coverage for the Red Sea and the Gulf of Aden does not include Egypt and Israel because they are considered as Mediterranean participants, nor Somalia which is counted in the East African Region.⁽¹³⁴⁾ However, considering the fairly long coasts of both Egypt and Somalia, on the Red Sea and the Gulf of Aden respectively, the two states should be parties to this coverage because each of them is strategically located and has been greatly concerned about Red Sea security. Consequently, their exclusion could seriously affect the anti-pollution cooperation in the region.

The Arab League Educational Scientific and Cultural Organization (ALESCO) has shown considerable interest in protecting the Red Sea from pollution. In October 1974 ALESCO invited the United Nations Educational, Scientific and Cultural Organization (UNESCO) to convene a scientists' workshop on marine Sciences Programmes for the Red Sea. The meeting laid the basis for the development of an Action Plan for the region, which was adopted in two subsequent

inter-governmental conferences in Jeddah, in 1974 and 1976. In 1978, Borgese and Ginsburg indicated that at the Jeddah meeting, all the Red Sea states attended except for Israel, and Djibouti which was not yet independent. The Action Plan included a draft convention, protocol and specific proposals for scientific research and monitoring programmes. The delegates also agreed to establish regional as well as national research institutions, and to hold training courses and symposia on marine science teaching.⁽¹³⁵⁾

ALESCO has requested UNEP to participate in the programme. The latter agreed to contribute to the cost of training the scientists and technologists who will operate the marine research and monitoring stations. Moreover, they will provide equipment for surveying living marine resources in the area in order to preserve their populations for sustained productivity. Another institution known as IUCN, interested in nature conservation, tourism, education and scientific research, has been actively engaged in the Red Sea. The IUCN urged the establishment of marine reserves in cooperation with the UNESCO's Man Biosphere Programme.⁽¹³⁶⁾

In January 1981 environmental and legal experts of the Red Sea states met to make the Action Plan more comprehensive, finalize the regional Convention for the Conservation of the Marine Environment, and to conclude a Protocol with respect to regional cooperation in combating pollution by oil and other damaging substances during

emergency situations. In February 1982 the Action Plan, Convention and Protocol were all approved at a conference in Jeddah. The conference also agreed to form a regional organization to superintend the implementation of the Action Plan and function as a secretariat to the Convention. Jeddah became the headquarters of the Red Sea and the Gulf of Aden Environmental, Scientific and Cultural Organization (RSGAESCO). ALESCO is to oversee the Programme, while UNEP participates as an advisor.⁽¹³⁷⁾

The UN Convention gives considerable attention to the protection of the marine environment. Articles 207-212 of the Convention oblige coastal states to adopt laws and regulations to prevent, reduce and control pollution of the marine environment. For example, Article 209, paragraph 2, spells out the coastal state rights to legislate against pollution:

"Subject to the relevant provisions of this section, states shall adopt laws and regulations to prevent, reduce and control pollution of the marine environment from activities in the area undertaken by vessels, installations, structures and other devices flying their flag or of their registry or operating under their authority, as the case may be. The requirements of such laws and regulations shall be no less effective than the international rules, regulations and procedures referred to in paragraph 1." ⁽¹³⁸⁾

The need to prevent or control oil pollution has been the major reason why mandatory traffic separation schemes have been introduced in most of the main straits, such as Bab al

Mandeb, and other crowded sea areas. Although the number of tankers grew and tonnage carried by them has increased, better measures of control and new laws have lessened the volume of oil spills worldwide from 2.4 million tonnes in 1971 to 1.58 tonnes million in 1980.⁽¹³⁹⁾

The Red Sea is clearly threatened above all by pollution from oil and the coastal states may not welcome an increase in oil traffic through it, especially supertankers. Since regional and inter-state conflicts are, to some extent, a characteristic of the region, and since the Red Sea is the most important economic factor that links these states, combating pollution in it could represent a good basis for cooperation between its states, but US technical and financial assistance in this respect would be crucial, and might help to promote friendly relations between Washington and the regional states. Since pollution of all kinds does not respect international boundaries there is little or no choice except for inter-state co-operation if pollution is to be controlled. A narrow sea with north-south and south-north currents is especially vulnerable to pollution migration. On the other hand, pollution control could itself give rise to dispute between states, for example over monitoring, responsibilities for damage caused, and other matters. Thus, the question of pollution is not yet ended in the Red Sea; it is just beginning.

Chapter Two

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CHAPTER 3

RED SEA LIVING AND NON-LIVING RESOURCES

3.1 Non-living Resources

3.1.1 Offshore Oil Resources

Apart from being a crucial route through which commercial and military vessels pass, the Red Sea contains three major types of mineral substances: first, petroleum deposits, second, evaporite deposits such as salt, gypsum and dolomite, and third, metallic muds of the Atlantis II, Discovery and other deeps between 21°15' and 21°30'N. The first and the last constitute the most important potential sources of wealth in the region. Coastal states all over the world as well as oil companies, have evinced considerable interest in offshore oil exploration. In 1980 offshore oil production reached 14m b/d, which was more than 20% of total world output. In 1990 it is expected to reach about 24mn b/d, and the annual value of offshore production could amount to more than \$100bn.⁽¹⁾ The Times Atlas of the Oceans (1983) shows the area from the entrances to the Gulf of Aqaba and the Gulf of Suez and then southward, until the Saudi-Yemeni border, as a potential oil area. Also the southern coast of the Gulf of Aden, just east of the Somali-Djibouti border, is included in this zone.⁽²⁾ However, until now, actual offshore oil production in the Red Sea is confined to the Gulf of

Suez and Sinai peninsula. Therefore, discussion of oil and gas in the Red Sea will concentrate on these two regions.

The discovery of oil in Egypt's Red Sea, surprisingly goes back to more than one hundred years when in 1868 Americans reported its existence at Gemsa west of the entrance to the Gulf of Suez; and in February 1886 oil was found there, at a depth of 34.5 meters. Although the amount was small, Egypt's great interest in the discovery led to a new American survey of the Red Sea coastal region. American mining engineers drilled five wells at Gemsa but the drilling proved unproductive. After several costly failures to find oil in any quantity, the Egyptian government suspended the operation and ended American participation.⁽³⁾

From then until World War One, British companies monopolized oil exploratory activities in Egypt and in 1911 oil was struck, again at Gemsa; in this year Egypt's total production was only 21,000 barrels. However, British oil experts came to the same conclusion as the Americans: that there was not sufficient oil at Gemsa to warrant large financial outlay.⁽⁴⁾ Nevertheless, in 1913 the Anglo-Egyptian Oil Fields Ltd, which later became the most significant company in Egyptian oil production, acquired a 30-year concession from the Egyptian government renewable for another 15 years. The company accomplished its most successful find in 1913 when it discovered oil at Hurgada (27°15'N, 33°50'E) south of Gemsa. Hurgada's field continued to be Egypt's

TABLE 3.1

Egypt's offshore oil production 1970-1980
(1000 b/d)

Year	Production	1979-1980 (% change)
1970	257.0	
1975	165.0	- 36.00
1977	399.0	+142.00
1978	396.0	- 0.75
1979,	430.0	+ 8.60
1980	390.3	- 9.23

Source: Borgese, E., and Ginsburg, N. (eds), Ocean Yearbook, The University of Chicago Press, Chicago and London. 1982, Appendix D, p.541.

virtual sole source of petroleum supply until 1930. Compared to the rich oil resources in Iran, Iraq and other Middle Eastern countries at that time, Egypt's crude oil potential was never thought to be high.⁽⁵⁾ Significantly, however, the Americans played the pioneering role in Red Sea oil discoveries. It is worth mentioning that in January 1972, Egypt became a member of the Organization of the Arab Petroleum Exporting Countries (OAPEC).⁽⁶⁾

During the 1960s Egypt's production of crude oil expanded rapidly, nevertheless, the country continued to be a net importer of oil until 1968. Fisher (1978) points out that in the mid-1970s petroleum became the major mineral export for Egypt; and the Gulf of Suez continued to be the country's chief source of production, especially from the important fields of El Morgan, Ramadan, Belayim, and July⁽⁷⁾ (figure 3.1). By the late 1970s further substantial increases in Egypt's crude production occurred and since then Egypt has been engaged in intensive exploration activity. A target of 50m tonnes was set for 1980, and most of which was intended for export. Table 3.1 shows Egypt's oil production from 1970-1980.⁽⁸⁾

However, in 1980 the Department of Energy indicated that Egypt's output of crude oil would increase, but it added that there were doubts as to the country's ability to attain its target of 50m tonnes production before 1985. Also the Department pointed out that some uncertainty surrounds

TABLE 3.2Egyptian oil production 1983

Region	Tonnes (000)	Increase on 1982
Gulf of Suez	26,384	+10.2%
Sinai	7,255	+7.6%
Eastern Desert	1,324	+0.7%
Western Desert	994	+13.2%

Source: Various (see text)

Egypt's ability to maintain that production level to the year 2000.⁽⁹⁾ In 1983 Egypt's output reached 38.5m tonnes;⁽¹⁰⁾ and the Gulf of Suez continued to preserve its dominant position as the largest crude production area. Out of Egypt's output of about 38.5m tonnes, the Gulf of Suez contributed 26.4m tonnes, over 73% of the total (table 3.2).⁽¹¹⁾ In 1984, there was no significant increase in production. One third of the total was exported.⁽¹²⁾ Egypt continues to remain under the psychologically important target of producing 50m tonnes by 1986.⁽¹³⁾

Being greatly concerned about becoming an oil producer, between 1973 and 1983 Egypt signed 111 exploration deals with 44 companies representing 18 nationalities (table 3.3).⁽¹⁴⁾ This clearly reflected Egypt's determination to develop its energy resources upon which the country heavily depends, not only to meet rising domestic demands, but also to earn much-needed foreign exchange. Many of the concession areas are in the Gulf of Suez as figure 3.1 has shown. Obviously, the number of nationalities demonstrates a growing international, and especially American, interest in Egypt's oil resources. Such world interest could have important geopolitical repercussions if Egypt ever became a major oil exporter, not least in the Middle East itself.

Table 3.3.Gulf of Suez Offshore fields and concessions

Name of field and discovery date	Company	b/d average first 6 months 1983	Cumulative bbl to 1 July 1983
El Morgan, 1965	Amoco/Gupco	150,000	773,600,000
GS-382, 1977	"	11,200	24,600,000
July, 1973	"	83,100	325,600,000
Ramadan, 1974	"	77,400	259,900,000
SG-300, 1976	"	5,700	10,900,000
Shoab Ali, 1978	"	31,400	45,000,000
October, 1973	"	123,800	109,300,000
WD33, 1972	"	500	2,000,000
SB305, 1981	"	2,000	1,000,000
GS315, 1981	"	1,500	300,000
GS347, 1981	"	6,100	1,100,000
G376, 1981	"	500	100,000
Block 350, 1981	"	1,700	6,800,000
Belayim Marine, 1961	A Gip	85,600	360,584,000
Ras Budran, 1978	Demdex /Succo	12,500	2,250,000
LL 87-2, 1976	"	650	120,000
Ras Fanar, 1983	"	1,000	N.A.
Zeit Bay, 1983	"	10,000	N.A.

Total average per day = 598,950

Source: (Except for the last two fields) OGJ Report, Oil and Gas Journal, 26 December 1983 pp.93-94. Information of the last two fields is from Petroleum Economist, March 1983, Vol.LI, No.3, pp.96 (map), 111.

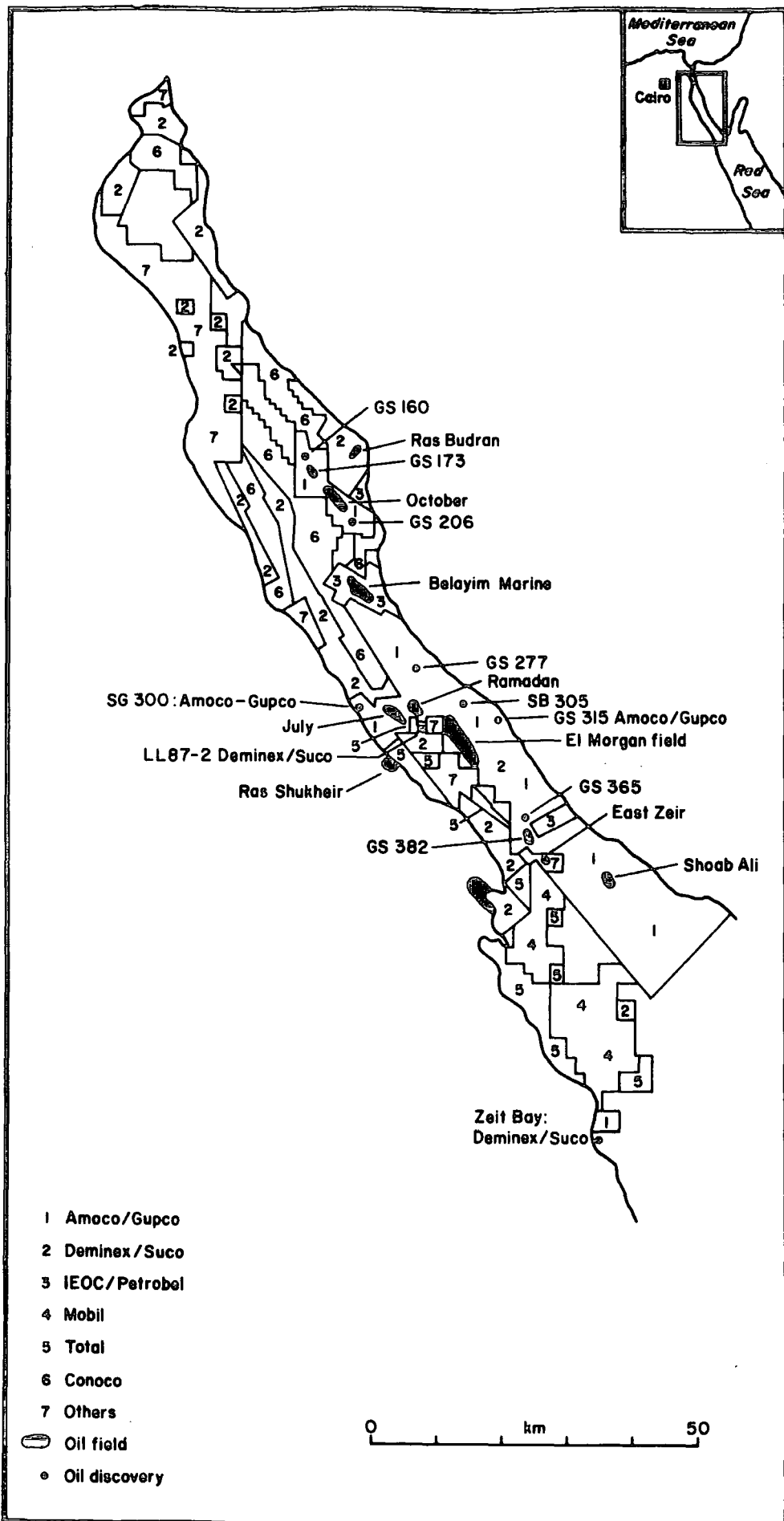


FIG. 3.1 GULF OF SUEZ: OFFSHORE FIELDS AND CONCESSIONS

Table 3.4.Egypt: value of petroleum output: 1970-1983*

Year	Revenue \$m
1970	52.35
1971	59.81
1972	63.04
1973	70.35
1974	n.a.
1975	59.6
1976	86.46
1977	127.33
1978	750.00
1979	1,300.00
1980	2,500.00
1981-82	2.700.00
1982-83	2.510.000 -

Source: (1) Middle East Annual Review, 1974, and 1975-76. The Middle East Review Co. Ltd, Essex, England, 1974, and 1975-76, pp.65 and 126 respectively.

(2) Middle East Annual Review, 1980, World of Information, Essex, England, 1980, p.208.

(3) Africa Guide 1981, World of Information, Essex, England, 1981, pp.146-47.

(4) Petroleum Economist, Vol.LI, No.3, march 1984, p.111.

(5) Al-Watan, 7 May, 1984, Kuwait, p.9.

* Value for 1970-73 is turned from Egyptian pounds into US dollars at official rate of 1974; £E = \$0.393; see Middle East Annual Review, 1974, op.cit., p.9, 1975-77 - at official rate of 1975: £E = \$0.400, see Middle East Annual Review, 1980, op.cit, 208.

Financial Times, 25 June 1984, London, p.IV.

The interim Israeli-Egyptian peace treaty of 1975 enabled Egypt to recover the Sinai fields of Abu Rudeis and Belayim. The regaining of these fields, coupled with the reopening of the Suez Canal, enhanced the expansion of Egyptian oil production, chiefly from the reclaimed fields.⁽¹⁵⁾ Blake (1978) indicates that between 1967 and 1975 the Sinai oilfields had become the Israeli's major source of crude oil. During its eleven-year occupation of southern Sinai, Israel developed the Alma field on the northern part of Sinai. These fields used to supply Israel with 300,000 b/d, or 20% of Israel's domestic consumption. However, the fields were handed back to Egypt in compliance with the Israeli-Egyptian peace treaty of 1979.⁽¹⁶⁾ Figure 3.2 shows Israel's phased withdrawal from Sinai between 1975 and 1982. In 1983 the Sinai peninsula contributed 7.3m tonnes, making a 7.6% increase over its production in 1982.⁽¹⁷⁾ The Eastern Desert produced 1.3m tonnes or 0.7% more than in 1982, while the Western Desert output reached 994,000 tonnes, making an increase of 13%.⁽¹⁸⁾

Since the late 1970s oil has overtaken the Suez Canal (chapter 4) as Egypt's major foreign exchange earner (table 3.4). In 1978 Egypt's revenues from crude oil amounted to \$750m; in 1979 they reached \$1,300m.⁽¹⁹⁾ Some sources indicate that the country's foreign earnings broke the record in 1982-83 when they reached \$3.3 billion,⁽²⁰⁾ an increase of 22.22% over those of 1981-82. But other sources put the

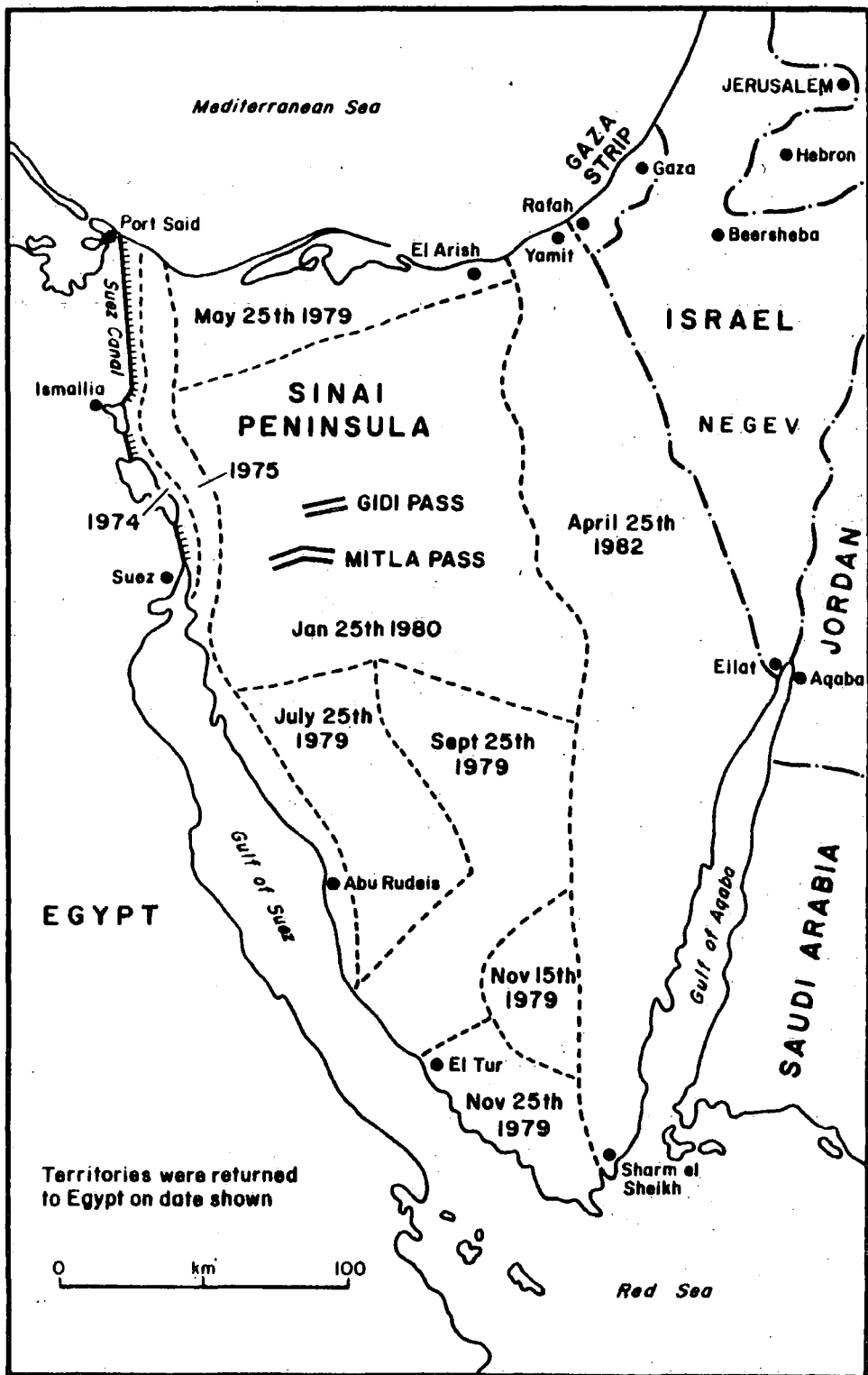


FIG. 3.2 ISRAELI WITHDRAWALS FROM SINAI: 1975-1982

Table 3.5

Egyptian energy supply 1980-2000*
million tonnes oil equivalent

	1980	1990	2000
Total demand	15.5	37.0	68.0
Percentage shares			
Oil and gas	55.0	60.0	40.0
Hydropower	45.0	20.0	15.0
Nuclear power	-	-	40.0
Renewables	-	-	5.0

Source: Petroleum Economist, March 1983, Vol.L,
 No.3, p.95.

* 8% annual growth rate assumed.

figure for 1982-83 at \$2.5 billion, indicating that there was a decline in revenues. As often happens with Egyptian figures, whatever the current level of revenues, Egypt is clearly striving to boost oil and gas productions while staggering domestic consumption continues to erode the country's big hopes of massive foreign revenues.

Alarmed by the ever-growing level of home oil demand largely due to population growth and industrial expansion, since the 1980s Egypt has resorted to gas and other alternative fuels, hoping to save oil (table 3.5). In 1983 Egypt designed schemes to build its first coal-fired electricity plant in Sinai. It was hoped that the plant would save about 200,000 b/d of oil.⁽²¹⁾ However, local consumption of gas has not been very different from that of oil, also skyrocketing (table 3.6). Although in 1983 Egypt's gas output grew by over 28% (table 3.7), its consumption rose by almost 50%, thus eroding hopes for export.⁽²²⁾ In the 1982-1987 Five Year Plan, Egypt is hoping to increase its gas production from 3.4m/cm to 12.9. The country's hope to raise gas production depends on finding new resources and the Gulf of Suez is thought to have high potential.⁽²³⁾ The Sinai associated gas scheme, started in 1984, is another source intended to boost gas output. Its ultimate production is rated at 25m/cm.⁽²⁴⁾

It is interesting to speculate whether the United States would wish to see Egypt becoming a really wealthy oil producer. Being north of Hormuz, Bab el Mandeb and the Suez

Table 3.6

Estimates of Egyptian natural gas development (Billion cubic metres)

Year	Domestic consumption	Exports	Total	Residual
1981	2.6	-	2.6	262.4
1985	5.8	-	5.8	289.1
1990	17.5	3	20.5	417.8
2000	34.3	9	43.3	585.3

Source: Middle East Review 1983, World of Information, Essex, England, 1983, p.88. Also see Petroleum Economist, March 1983, Vol.L, No.3, pp.97-98.

Table 3.7Egypt's offshore gas production (Billion CFD)

Year	Production	change	% change
1976	-		
1977	-		
1978	72.00		
1979	65.00	- 7.00	9.72
1980	57.85	- 7.15	11.00
1981	60.00	+ 2.15	3.72
1982	73.00	+13.00	13.67
1983	94.10	+21.10	28.90

Source: Offshore, 20 July, 1984m, p.52.

Canal, it would be an attractive source of oil for western Europe and the US. On the other hand, with a large population, favourable location, growing industrial base, and political influence in the Arab world, Egypt could emerge as a powerful regional state able to resist superpower overtures, and stand up to Israel. It seems possible that American oil exploration in Egypt could have been more intensive than it has been. Meanwhile, the fact that a prime source of Egypt's energy is in the Gulf of Suez is significant since this zone is vulnerable to action by Israel. Added to the Suez Canal, the oil resources of the Gulf of Suez increase Israel's chances of intimidating Egypt and pressurizing it not to break away from the peace treaty between the two. Israel's rising energy consumption (chapter 4), growing military might and disunity among the Arabs could make such a geographically close energy source very tempting for Israel to exploit.

Apart from the Gulf of Suez, potential for oil in the Red Sea lies mostly in the waters of Sudan and the two Yemens. Sudanese exploration for hydrocarbons was initiated in the 1950s and most of the prospecting operations were centred on the Red Sea coast where a number of non-commercial gas and oil finds were truck between Sawakin and Halaib. Sudan's reversal of political orientation from pro-East to pro-West in 1973-74 has attracted Western investors, especially American oil companies. In 1974, Chevron Overseas

Inc. of the United States won a deal for oil exploration of the Red Sea coast. The concession covers an area of 331,500sq.km. Chevron also got inland concessions. The country has been under continuous exploration by a number of other Western companies, including American, British, French and German.⁽²⁵⁾ however, Chevron is no longer prospecting in the Red Sea zone, and it is currently centering its activities in southwestern and southern Sudan where there are better prospects. However, since 1984 the company has stopped operating in Sudan because of continuing instability in the southern part of the country and attacks on company personnel and equipment.

In 1978 Texas Eastern made a deal to explore an area of 26,800sq.km on a Red Sea coastal tract. The firm initially drilled four wells in the area, but no finds were announced. In 1981 the company opted to continue exploration for another year in an offshore concession on the northern Red Sea coast. In 1982 Total of France scheduled further seismic work and an offshore well. Total has also been operating in the Red Sea area since 1978 when it won a contract to prospect an area of 6,400sq.km on the Red Sea hills, extending offshore south of Sawakin.⁽²⁶⁾ However, current hopes for Sudan's acquisition of oil probably lie inland rather than in the Red Sea zone.

Regarding Yemen AR's oil prospects, the Financial Times (1984) indicated that exploration has centred on Tihama, the long Red Sea coastal strip, where offshore and onshore

drilling have taken place. In 1980 Deutsche Shell, the German company, confirmed that the offshore zone between Hodeida on the Saudi-Yemeni coastal border is a promising area. To assess the reserves, the company carried out drilling in 1981 and 1982, but no finds were announced. Earlier, the state-owned Yemen Oil and Minerals Corporation (Yominco) had carried out a magnetic aerial survey on areas of prospective finds. This included the Tihama coast and offshore zones, which in early 1983 had also undergone exploratory operations by Hunt Oil - an American company - and Compagnie Francaise des Petroles (CFP). Helped by funds from the Soviet Union and Western aid agencies, Yominco also entered into further survey activities.⁽²⁷⁾ The Petroleum Economist (1984) indicates that BP initiated a production-sharing contract with Yominco, covering an area of 22,000sq.km in the same area covered by Deutsche Shell. BP must start drilling before the last quarter of 1985 elapses, or the concession will be withdrawn.⁽²⁸⁾

Aden holds promising oil resources. In 1977 and 1979 PDR Yemen signed two agreements with Agip, an Italian firm, for offshore oil prospecting. In April 1982 the company announced a 3,000 b/d find in its Sharmah IX field in an offshore block off the Hadhramaut. The discovery renewed PDR Yemen's hopes of becoming an oil producer.⁽²⁹⁾ In January 1982 PDR Yemen signed a contract with Braspetro - a Brazilian company for additional explorations in the area. During the same year

Hunt Oil held talks with Aden's government regarding the firm's interest in obtaining concessions. The Soviet Union, Iran and West Germany also provided aid to encourage oil prospecting in the country.⁽³⁰⁾

In 1983 PDR Yemen signed a new deal with Agip for exploration. The concession covered an additional offshore area of 5,000sq.km. The agreement also indicated the need to start the development of a number of earlier finds; and in 1984 the firm undertook to conduct an appraisal drilling in two wells.⁽²⁹⁾ Also in 1984 onshore concessions went to Braspetro Brazil and Hispanoil (Spain). Moreover, Kuwait's Independent Petroleum Group (IPG) won a tract offshore on the western side of Ras al Usaïda (Asida) (13°57'N, 48°10'E).⁽³¹⁾ Encouraged by sufficient seismic indication prospecting, IPG ran an onshore seismic test in May 1984 on a neighbouring block, and committed itself to drill three wells; the first - Spudding - started in March 1985.⁽³²⁾

The discovery of oil in the Egyptian Red Sea coast and waters encouraged exploration activities in Ethiopia. Those prospecting activities, located natural gas off Massawa (15°L3'N, 39°27'E) on the Eritrean coast.⁽³³⁾ Another find of oil and gas in the Red Sea has been indicated south-east of Sharm al Sheikh on the Saudi Red Sea coast.⁽³⁴⁾ Thus, apart from Egypt, no other state enjoys having actual oil resources in the Red Sea coasts and waters, although promising prospects have been indicated in some states, particularly in

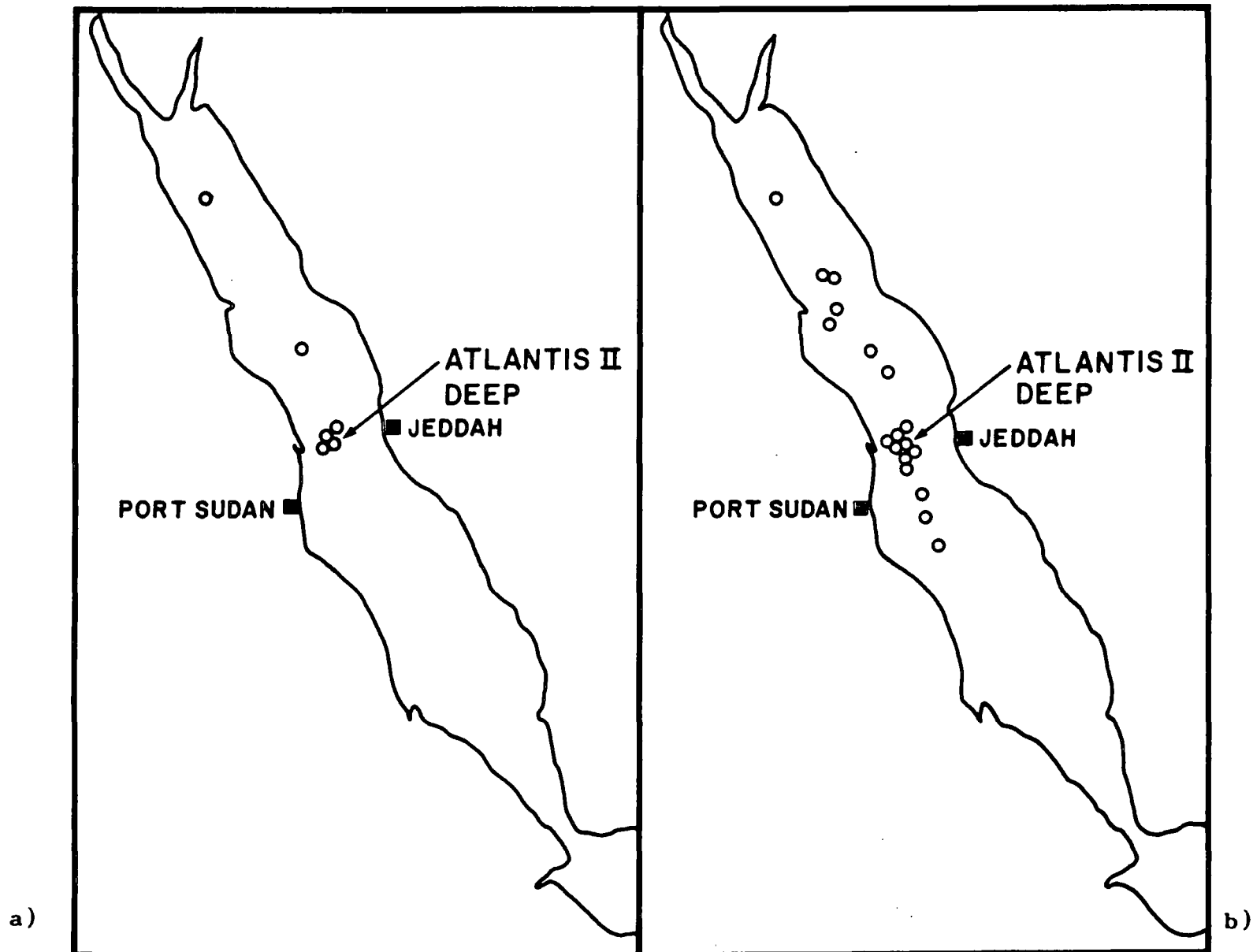


FIG. 3.3 DISCOVERY OF BRINE DEEPS AND/OR METALLIFEROUS SEDIMENTS

a) BEFORE 1969, b) AFTER 1969

Yemen AR and PDR Yemen. Considerable inland potential apparently exists in Sudan. In general, Saudi Arabia is the only Red Sea state with vast oil resources - although these lie more than 900km east of the Red Sea. The point to note is that local oil production on any major scale could elevate the geostrategic significance of the Red Sea region to an even higher level than at present.

3.1.2 Minerals

In 1965 the American mining vessel, Atlantis II discovered enormous mineral deposits in the deep troughs of the Red Sea. The largest deep containing these metalliferous sediments was named after the ship as Atlantis II deep (A-II deep). Compared to other discoveries, such as Discovery deep, and Chain deep, the A-II deep is the most important, owing to its large resources (figure 3.3.). The Discovery deep has a lower metal concentration than that of the A-II deep. The oozes of the latter and Discovery deep are located between 21°15' and 21°30'N. The metals contained in the hot brine of the A-II consist of zinc, copper, iron, manganese, silver, gold and other metals. It is commonly agreed that the existence of these metal-rich brines is related to the splitting apart of Africa and Arabia. The depth of the A-II deep is between 2,000 and 2,200m, and its area is 60sq.km. The Red Sea's valuable metalliferous deposits are a second potential offshore source of considerable value.

Reports about the discovery of the metal-bearing deposits of the Red Sea created large-scale international and regional interest; and controversy over the question of legal rights concerning these resources cropped up. On February 15, 1968, the American Metal Marketing Company applied to the UN for a 98.56sq.km exclusive mineral exploration lease to survey thermal sea-floor pools in the middle of the Red Sea. To determine the economic value of the deposits, the company requested the UN's permission for a three-year period to sample and map mineral deposits. The UN replied that it had no authority to grant such mineral rights. In 1968 another company applied to Sudan, which granted it a mining concession on the grounds that the area of the metal-bearing muds lie under Sudanese sovereignty if delimitation is based on a median line. Two other companies have "considered the hot brine areas to be international territory, beyond the sovereignty of any nation."⁽³⁶⁾

In May 1968 Sudan and Saudi Arabia began negotiations to reach an agreement by which they could exploit the Red Sea minerals; but they did not arrive at such an accord. Later that year, according to Al-Hakim (1979) Saudi Arabia decreed its sovereign rights over the minerals. Article 1 of the Royal Decree provides that

"All the hydrocarbon materials in the strata of the high sea bottom with respect to an area of the Red Sea extending below the high sea and contiguous to the continental Shelf of Saudi Arabia shall appertain to the Kingdom of Saudi Arabia." (37)

The Kingdom thus asserted jurisdictional rights over a sea-bed area beyond its continental shelf. It seems clear that it based its claim on the concept of the 200-mile exclusive economic zone (EEZ) (see below) rather than on the convention of the continental shelf. Table 3. shows national claims by the Red Sea states to maritime jurisdictions. In justification of the claim, Sheikh Ahmed Zaki Yamani, the Saudi Minister for Oil and Mineral Resources, said:

"Although Saudi ownership of these resources appears both equitable and justified, we have found it necessary to issue a Law declaring this ownership. In the meantime, the law does provide for the possibility of joint exploration of these resources with our neighbour, the Sudan, and we will contact them about this." (38)

Although Sudan did not legislate any law to claim these mineral resources, according to Al Hakim (1979), nevertheless it was aware of their economic value. Such consciousness appeared in Sudan's statement to the UN Seabed Committee in 1971 in which the former declared that it:

"would certainly not view with favour any suggestion that it should renounce its title to that area of the Red Sea in which it had already been carrying out exploratory and prospecting activities for a number of years, since it possessed these rights under existing Law, etc." (39)

However, Sudan had already legislated rights over the continental shelf adjacent to its coastal zone. Both Al-Hakim (1979) and the Secretary-General of the Red Sea Commission point out that Sudan considered all the metalliferous

sediments existing nearest to its coastline, including the A-II, Discovery and Chain deeps as subject to its sovereignty and signed joint development agreements with the West German mining company, Preussag AGA in 1973.⁽⁴⁰⁾ Griffin (1969) argues that if the ownership of these minerals is based on the median line, this claim is wholly justified.⁽⁴¹⁾ In 1972, utilizing its geographical position and political influence in the region, Saudi Arabia decreed a law enabling Riyadh to play the role of custodian of all the non-living resources in the Red Sea until the riparian states agreed to principles for settlement of the question of sovereign rights over these resources.⁽⁴²⁾

Prompted by reports about the mineral riches of the Red Sea, Egypt, Ethiopia, Saudi Arabia, Sudan and AR Yemen met on 16-17 July 1972 in their first Red Sea conference at Jeddah. The objective of the meeting was:

"to assert the rights of the states bordering the Red Sea over their deep mineral resources and to regulate the use of those rights." (43)

The conference also considered the adoption of legislative measures to protect that wealth from "foreign states and/or institutions". Moreover, the necessity for cooperative exploration and exploitation was indicated by the coastal states.⁽⁴⁴⁾ Apart from Sudan and Saudi Arabia it seems that no other Red Sea state could realistically hope to achieve

sovereign rights over the mineralized muds of the A-II deep, because most arguments for rights and ownership would be on the side of the former two states which backed up such rights and ownership by legislation.(45)

However, precedents for the Sudanese or Saudi claim to resources contiguous to either's continental shelf could be drawn from President Truman's proclamation of 1945 which stated that:

"The United States regards the natural resources of the subsoil and seabed of the continental shelf beneath the high seas but contiguous to the coasts of the United States as appertaining to the United States, subject to its jurisdiction and control." (46)

No protest against the American declaration was reported. Instead, by the mid-1950s over forty almost similar declarations had followed suit.(47)

The 1958 UN Geneva Conference on the Law of the Sea adopted a convention on the Continental Shelf which defined the rights of the coastal states but failed to define the outer limit of the continental shelf. Continental shelf rights also feature in the 1982 UN Convention on the Law of the Sea, Article 76 of this convention states that the continental shelf of a coastal state:

"comprises the sea-bed and subsoil of the submarine areas that extends beyond its territorial sea throughout the natural prolongation of its land territory to the outer edge of the continental margin, or to a distance of 200 nautical miles from

the baselines from which the breadth of the territorial sea is measured where the outer edge of the continental margin does not extend up to that distance." (48)

According to Article 77, the coastal state has exclusive sovereign rights over its continental shelf for the purpose of "exploring it and exploiting its natural resources". These resources "consist of the mineral and other non-living resources of the sea-bed and subsoil etc." (49) Even if the coastal state is unable to exploit these resources no other state can do so without the express consent of the former. It does not matter if the coastal state has not expressly proclaimed rights over these resources (Article 77).⁽⁵⁰⁾ Article 55 of the 1982 Convention defines the EEZ as "an area beyond and adjacent to the territorial sea ..."; but the EEZ should not exceed 200 nautical miles "from the baseline from which the breadth of the territorial sea is measured."⁽⁵¹⁾ According to Article 56, the EEZ entitles the coastal state to:

"sovereign rights for the purpose of exploring and exploiting, conserving and managing the natural resources, whether living or non-living, of the waters superjacent to the sea-bed and its subsoil. (52)

The riparian state also has the right to exploit and explore the zone for "the production of energy from the water, currents and wind."⁽⁵³⁾ In addition to other rights of jurisdiction, the coastal state can enact laws for "the protection and preservation of the marine environment".

Although the coastal state is entitled to these rights, it is obliged:

"to have due regard to the rights and duties of other states and shall act in a manner compatible with the provisions of this Convention". (54)

For a long time, and particularly since the convening of the Third UNCLOS in 1973, opinions regarding sea-bed minerals and deep ocean mining have been controversial. The developing states have been keen to play a part in future resource management within the international area, beyond the limits of national jurisdiction. Certain developed countries with technical and financial capabilities to extract the minerals, argued that they should acquire a fair share of the revenues of ocean mining since they would contribute the know-how and funds.⁽⁵⁵⁾ Al-Hakim (1979) thinks that the conference of the Red Sea states (1972) had been motivated by the meeting of the Third UNCLOS in 1973 and the proposed international regime and authority for the sea-bed zone beyond national jurisdiction.⁽⁵⁶⁾ This is why in 1972 Auburn said that:

"it would be most surprising if the Sudanese or the Saudi Arabian Government were prepared to consider the reservation of the brines, found at a depth of more than 2,000m and well beyond the territorial sea claimed by both coastal states for the proposed international regime. It is difficult to envisage either country giving up minerals having an estimated commercial value of hundreds of millions of dollars." (57)

The adoption by UNCLOS of the doctrines of the continental

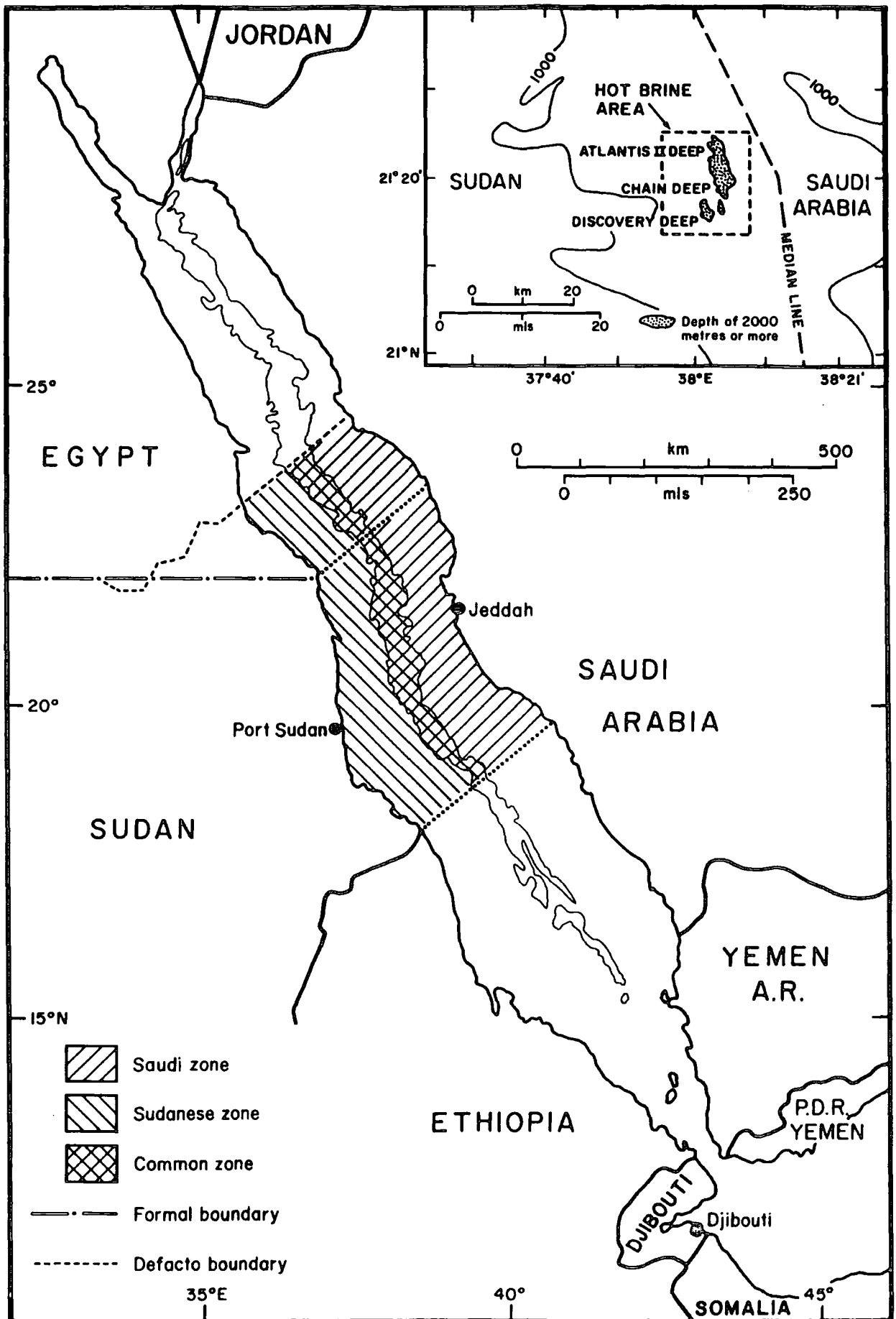


FIG. 3.4 SUDANESE/SAUDI AGREEMENT ON RED SEA SEABED, 1974.

INSET: HYPOTHETICAL MEDIAN LINE AND ATLANTIS II DEEP

shelf and the EEZ has clearly protected state rights over sea-bed resources.

3.1.2.1 Saudi-Sudanese Agreement

To avoid disputes, in 1973, Sudan and Saudi Arabia resumed negotiations to settle the question of seabed ownership. Good political relations contributed in creating the secure environment that led to the conclusion of a bilateral agreement between the two states in May 1974. The accord recognizes both states' sovereign rights over the minerals.⁽⁵⁸⁾ Blissenbach and Nawab (1982) allude to the slow progress in reaching international agreement on disputed boundaries of opposite states as a motivation for agreement.⁽⁵⁹⁾ According to the terms of the agreement, the seabed between the two states is divided into three zones:

- (1) a zone extending westward from the Saudi coast to a line where the water depth is uninterruptedly about 1,000m;
- (2) a zone extending eastward from the Sudanese coast to a line where the water depth is continuously 1,000m; and
- (3) a common zone lying between the 1,000 metre isobaths, including all the known deeps, where both states have equal rights to all the natural resources (figure 3.4).⁽⁶⁰⁾

Marston (1984) indicates that the agreement expressly recognised the status of the high seas and that it would not obstruct freedom of navigation with regard to the "limits

provided for by the established rules of public international law".⁽⁶¹⁾ To develop the resources, in 1975, the two parties formed a joint administration known as the Saudi-Sudanese Red Sea Joint Commission (RSC) and chose Jeddah as the headquarters of the Commission.⁽⁶²⁾ Required funds were put up by Saudi Arabia with the proviso that Sudan's share would eventually be recovered from future profits in a way to be decided by the two states.⁽⁶³⁾ A French company, the Bureau de Recherches Geologiques et Minier was chosen by the RSC as technical consultant. Preussag AG of Germany secured the position of a general contractor for the implementation of a feasibility study, including the development of mining equipment and mining tests to develop the mineral resources of A-II deep. The firm is reported to have developed a technology that proved successful in pre-pilot mining tests.⁽⁶⁴⁾

The Secretary General of the RSC (1984) points out that one of the intentions of the agreement is to establish a basis for wider arrangement between all Red Sea states. He describes the principles which led to the conclusion of the accord as: "unique, somewhat ingenious but fairly simple". Facts taken into account in signing the agreement include "geography and geology, national, regional and international, political, and diplomatic considerations".⁽⁶⁵⁾ According to Blissenbach and Nawab (1982) the recovery of the metalliferous mud of the A-II should have regional and

international benefits, among them:

- (1) economic benefit for Sudan, Saudi Arabia and the general contractor;
- (2) the establishment of the principle of cooperation - as it is being practised by the RSC and its contractor;
- (3) the manner in which the RSC handled the problem of technology transfer, greatly disputed elsewhere, could set a precedent for other areas.⁽⁶⁶⁾

Red Sea minerals could significantly contribute to the diversification of the economies of Sudan and Saudi Arabia, the latter until now solely dependent on oil. The Saudi need for diversification was stressed in 1984 by King Fahad himself.⁽⁶⁷⁾ As for handling the problem of technology transfer, thanks to Saudi Arabia's vast financial resources and good relations with the sources of technology, there have been no problems. For example, if these sediments were between Ethiopia and Yemen AR, or in the sea-bed of PDR Yemen, poor states and not having friendly relations with the West, the problem might still be there. Finally, as for the RSC's responsibility not to pollute the Red Sea by the extraction of the mineralized mud, it may be too early to evaluate environmental risks, resulting from mining and on-shore processing. As ^{it is} indicated by the RSC's Secretary General (1984), unless the precautionary measures commended by the Commission are implemented, these risks may not be kept to a reasonable level.⁽⁶⁸⁾ Thus, there is a need for a

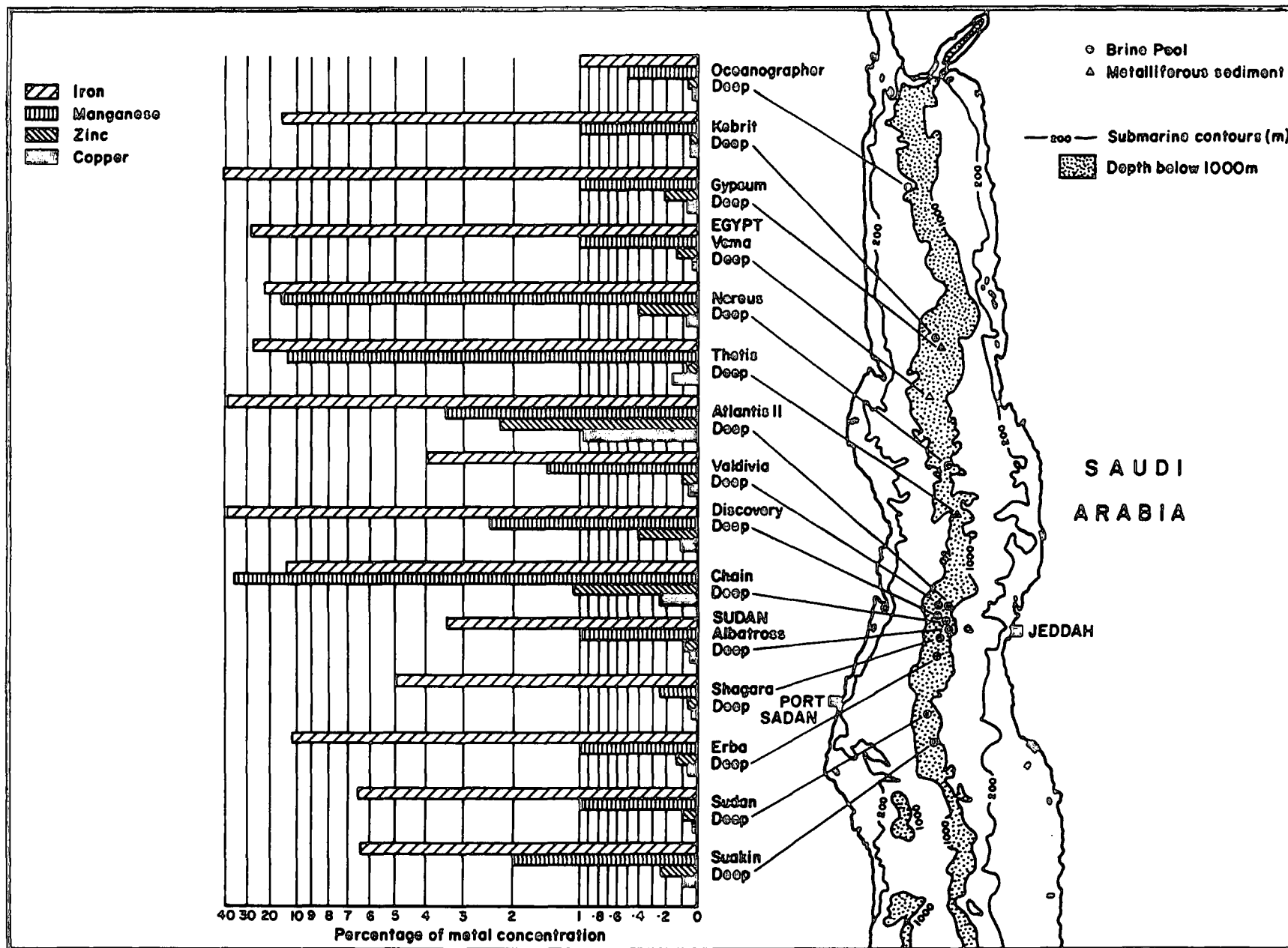


FIG. 3.5 PERCENTAGE OF METAL CONCENTRATION IN RED SEA MINERAL DEPOSITS

long-term assessment of the environmental effects of continued mining in the Red Sea, not least upon fish stocks.

Quantity, Value and Exploitation

The number of deeps so far identified is eighteen; the most recent being Commission 1 deep, discovered in 1979 in the southern sector of the Common Zone.⁽⁶⁹⁾ Although many deeps have been tested no mineral findings to match those of A-II deep have been found; and in most deeps iron and manganese predominates.⁽⁷⁰⁾ Figure 3.5 shows the percentage of metal in Red Sea deeps. Table 3.8 shows the possible quantities revealed by various sources. The averages obtained by the sediments are 2-5% zinc, 0.3-0.9% copper, and 60-100 parts per million (ppm) silver. The existence of cadmium, cobalt, some gold and by-products of the processing stages such as gypsum, is indicated.⁽⁷¹⁾ The economic outlook of these sediments is expected to be good provided that metal prices withstand inflation. In the late 1960s, sources other than Griffin (1969) (table 3.1) estimated the economic value of these minerals as \$2.5-8bn for the metals in situ; but by 1974 their value shot up to \$25bn. The Guardian (1982) expects it to exceed \$3bn, Borgese (1983) mentions \$6.7bn, and a fifteen years life expectancy. But in May 1984 the Secretary-General of the R.S.C. stated in the Saudi newspaper Al Riyadh, that according to early estimates annual revenue of these deposits could reach \$208m at March 1985 dollar prices

Table 3.8

Quantities of metals in the Atlantis II deep in the Red Sea - according to different sources

Estimator	Metal	Quantity in tons	Value:US dollar at 1967 quotes	Value:US dollar at March 1985 quotes
Griffin, W. (1969)	Copper	1,060,000	1,270,000,000	1,467,227,090
	Zinc	2,900,000	860,000,000	2,621,460,800
	Silver	0,004,500	280,000,000	73,967,256
	Gold	0,000,045	50,000,000	390,000,000
	Lead	0,080,000	20,000,000	28,248,500
	Iron	24,300,000	-	-
Total		2,480,000,000	4,522,214,256	

Source: Griffin, W., International legal rights to minerals in the Red Sea deeps' in Degens, E. and Ross, D. (eds) - 1969. Hot Brines and Recent Heavy Metals Deposits in the Red Sea, Wood Hole Oceanographic Institution, Wood Hole, Mass., Springer, Verlag Berlin, Heidelberg, New York, 1969, p.570.

Estimator	Metal	Quantity in tons	Value: US dollar at March 1985 quotes
The Guardian 1982	Copper	400,000	553,670,000
	Zinc	1,700,000	1,536,718,400
	Silver	4,000	65,748,672
Total			2,156,137,072

Source: The Guardian, 18 February 1982, p.14.

Estimator	Metal	Quantities (in tons)	Value: US dollar at March 1985 quotes
Blissentach, ^E and Nawab, ^Z (1982)	Copper	12,000	16,610,118
	Zinc	60-80,000	54,237,120
	Silver	100	1,643,716
Total			72,490,954

Source: Blissentach,^E and Nawab, Z. (1982) 'Metalliferous sediments of the sea-bed: the Atlantis II deep deposits of the Red Sea' in Borgese E., and Ginsburg N. (eds) 9 /1983 - Ocean Yearbook 3, The University of Chicago Press Ltd, Chicago, 1982, p.82.

in Saudi Arabia. While no economic value is attached to the 30m tons of iron and zinc production - though (1%-2% of the world total) it would certainly contribute to the economies of the countries involved in the project.⁽⁷²⁾

As to the technical viability of the project, it is pointed out that although encouraging findings are many, no assessment of overall technical and economic feasibility of the project could be drawn from development work so far carried out. The project really needs 200-300 days of long-term test mining and metal production on a pilot scale.⁽⁷³⁾ This pilot mining and metallurgical operation is to achieve three objectives:

- (1) to increase experience with the newly developed technology which will be applied extensively and over a longer period of time;
- (2) to gain a better evaluation of the economic value of the sediments; and
- (3) to assess the long-term environmental impact of continuous mining.⁽⁷⁴⁾

Regarding commencement of actual extraction and commercial exploitation of the minerals, the Secretary General of the RSC (1984) told Al Riyad that by 1987 they would be ready to enter the stage of commercial production, and by 1990 world markets will be supplied with metals extracted from the sea-bed of the Red Sea for the first time.⁽⁷⁵⁾

As already mentioned, Article 77 of the UN Convention

protects the right of the coastal state to defend its property against trespassers. If the RSC's rights were violated by another power, they could request the assistance of the US, which may be tempted by these resources and thus extend its military might to the Red Sea, as is anticipated by Eaks (1982). In fact, US interest in Red Sea minerals has been there from the start. Moreover, in mid April 1979, the chartered American vessel Sedco - an offshore oil drilling ship - was converted into a mining ship and employed in exploratory work at A-II. (76)

Apart from the metalliferous-rich muds of the Red Sea the Saudi Kingdom is endowed with metal riches located in its western provinces. In 1950 Saudi Arabia asked the USGS to start charting the Kingdom's western half, which is known to geologists as 'the Arabian Shield'. This region extends the length of the Saudi Red Sea coastline and stretches eastwards across the peninsula, until Riyadh. It is suggested that the enormous mineral-rich deposits of this region makes it comparable with the oil-rich eastern province of Al Hasa. (77)

Deposits of gold, silver and copper have been discovered throughout the mineral-rich western region of the Kingdom. Also discoveries of phosphate, lead, potassium, zinc, iron and aluminium have been announced by the Saudi petroleum and Mineral authorities. Enormous amounts of coal have been located in the Al-Qassim area, reported to be of good quality, and near to the surface. (78)

Table 3.9Egypt's mineral production ('000 tons) 1973-79

Item	1973	1974	1976	1977	1978	1979
Phosphate rock*	553.0	507.0	500	-	635	635
Iron ore	656.0	1,302.0	1,200	1,400	1,100	1,400
Manganese	3.0	5.0	nq	nq	nq	nq
Salt*	460.0	485.0	640	-	750	750
Asbestos	0.3	nq	nq	nq	nq	nq
Aluminum	nq	nq	nq	90	101	104

Source: Except for Aluminum, the 1973 and 1974 information is from Middle East Yearbook 1978, published by I.C. Magazines Ltd, London, p.160. Figures for iron ore and aluminum 1976-and 1979 are from New African Yearbook 1981-82, published by I.C. Magazines Ltd, London, 1981-82, pp.20-21. The rest of the information is taken from Middle East Annual Review, 1983, published by World of Information, Essex, England, 1983, p.150.

nq = no quantity is given.

With these new mineral discoveries the Saudi Kingdom is seen as entering a new economic era in which non-oil resources will be major sources of national income. The Deputy Petroleum and Minerals Minister, Engineer Ghazi Sultan points out that:

Those who believe that the Kingdom is totally dependent on oil are mistaken as this country is endowed with many mineral riches which put her on a par with mineral producing nations such as phosphate, coal, tin, potash, copper, lead zinc, gold, silver, iron and aluminium... This is not to mention mineral deposits in the Red Sea bed ..." (79)

With the exception of the Sudanese and Saudi mineral finds, the only other state with a fair amount of minerals in its Red Sea Zone is Egypt. With regard to their value, Fisher (1978) states that Egypt's chief mineral resources are phosphates, coal, iron ore, zinc, barytes and magnetite. He points out that 9% of Egypt's total exports even in 1974 came from mining ^{and} quarrying. Egypt's iron ore resources between the Nile Valley and the northwest coast of the Red Sea, were then much bigger than once thought possible.⁽⁸⁰⁾ According to Mustafa (1984) deposits of lead, zinc, and manganese exist in Egypt, in the El Qusair-Berenice coastal strip. Table 3.9 shows Egypt's mineral production between 1973 and 1979, and table 3.10 shows value of mining products in Egypt, 1974-1978.

Prompted by the realization of the significance of mineral resources in Arab territories, the Arab Organization

Table 3.10Value of mining products in Egypt: 1974-1978

Year	Income in \$
1974	1.50
1975	1.82
1976	2.01
1977	2.20
1977 January	1.60
1978 September	1.91

Source: Middle East Annual Review 1980, published
by World of Information, Essex, England,
1980, p.207.

for Mineral Wealth, an affiliation of the Arab League, has decided to draw an Arab geological map, expand the Higher Institute for Mineralization in Morocco, and establish a higher institute for minerals in Amman (Jordan). Asharq Al-Awsat (12/1982) reports that a symposium about mining exploitation was held in Jeddah, and Shaikh Yamani, the Saudi Minister for Petroleum and Minerals Wealth, emphasized the Arab need to search for alternative Arab wealth, notably mineral wealth.⁽⁸²⁾

Owing to its unusual geology, and its enormous untapped economic potential, the Red Sea will inevitably continue to be a subject of extensive study and further exploration of mineral concentrations may occur. In the 1970s the German Social Democrat, Helmut Schmidt warned that during the 1980s the industrial West would face a struggle for world mineral products. Also during the decade of the 1970s the President of the National Strategy Information Center in the United States, Frank Barnett indicated that the age of detente is shading into the era of resource war; in his view the Soviet Union has been seeking to seal off mineral-rich Africa from America and its Western and Japanese allies.⁽⁸³⁾ Thus, suffice it to say that at a time when the US has already entered the so-called 'resource war' with regard to mineral imports,⁽⁸⁴⁾ the discovery of ~~strategic~~ minerals in the Red Sea has enhanced the latter's importance regionally and globally as well, because as Legum (1978) indicates, the

discovery has rendered the Red Sea attractive not only to the US but the USSR as well.⁽⁸⁵⁾

3.2 Living Resources: Fisheries

Generally, the Red Sea is characterized by a paucity of fisheries because plankton production which develops in shallow waters does not thrive in its deeps; it thus lacks nutrient resources that support fish. Compared to the Red Sea the Gulf sustains high levels of such elements, and contains more fish than the Red Sea. Nevertheless, the southern sector of the Red Sea comes second to the southeastern coasts of the Arabian peninsula - which are the richest fisheries of the whole region. But the rest of the Red Sea has much lower potential. In the northern sector of the Red Sea, around Gardafa - in the Gulf of Suez - sardine is caught by lamparas, or nets used with lights to attract the fish to the surface. The Gardafa area also has shrimps and various kinds of fish exist in its centre.⁽⁸⁶⁾

The deeper waters of the Red Sea, rather than the shallows of the Gulf, make a better environment for sharks. Altogether, about 400 species of fish have been identified in the Red Sea. However, apart from the lack of nutrient components as a reason for paucity of fish in the Red Sea, the presence of coral reefs restrict the activity of bottom trawlers. Moreover, the narrowness of the continental shelf of the Red Sea is also responsible for the scarcity of

fishing grounds there. In sum, no major fishing industry is associated with the Red Sea.⁽⁸⁷⁾

PDR Yemen waters are among the richest zones for fish. According to Lackner (1984) the fishing industry is playing a major role in Yemeni development, where improvement of villagers' training and reduction of their isolation is one of the priorities. Apart from improving the population's diet, PDR Yemen's fish earns precious foreign exchange. Lawless (1978) says that in 1975 fresh and dried fish constituted the main export and in 1972-73 PDR Yemen's fish catches were valued at \$23.86mn. He adds that exports of fish make up about 36% of the total exports of local products.⁽⁸⁸⁾ Between 1971 and 1983, PDR Yemen invested about \$196.05m in infrastructure and building up of industrial fishing capacity. Migration to the nearby oil rich states, and the more secure employment by the national fishing fleet have reduced traditional small-scale fishing.

To increase its catches, PDR Yemen has made concessions to Japan and the Soviet Union since the 1960s. The agreements provided for the delivery of part of the catches to PDR Yemen. Lawless (1978) indicates that in February 1975, PDR Yemen entered into a joint venture with Iraq, with capital of \$30m, in which PDR Yemen owns 51%. The enterprise was to develop a deep-sea fishing fleet to trawl in PDR Yemen's territorial and international waters. In 1980 and 1981 PDR Yemen's trawler fleet produced about 14% of the national

Table 3.11

The Red Sea: marine fish catches

		<u>1 9 7 7</u>			<u>1 9 8 3</u>	
	Total marine catch (metric tons)	Red Sea catch (metric tons)	Red Sea Per cent of total marine catch	Total marine catch (metric tons)	Red Sea catch (metric tons)	Red Sea Per cent of total marine catch
Egypt	29,582	7,899	26.7	25,090	13,650	54.4
Ethiopia	2,472	2,472	100.0	3,750	3,750	100.0
Israel	9,100	Nil	Nil	9,500	68	0.7
Jordan	31	31	100.0	17	31	100.0
Saudi Arabia	23,400	23,400	100.0	26,425	26,425	100.0
Sudan	23,570	23,570	100.0	29,500	29,500	100.0
Yemen A.R.	17,500	17,500	100.0	12,200	12,200	100.0
P.D.R. Yemen	63,983	Nil	Nil	74,124	Nil	Nil
TOTAL	169,638	74,872	44.1	180,606	85,624	47.4

Source: F.A.O. Fisheries Department, Rome (Unpublished data by private correspondence, May 1985).

catch.⁽⁸⁹⁾ In 1982 the foreign fleets - fishing by agreement in the country's waters produced 38% of the total catch. However, depletion of PDR Yemen's fishing resources is anticipated due to their being over-fished by the Soviet and Japanese fleets which use intensive methods.⁽⁹⁰⁾ In the early 1970s PDR Yemen's estimates of potential yield were over 360,000 tonnes per annum. But later, a more realistic figure of about 125,000 tonnes was indicated, compared with 74,000 tonnes in 1983⁽⁹¹⁾ (table 3.11).

Internally and externally funded projects to develop inshore fishing capacity in PDR Yemen have been planned. One of these projects is the Third Fisheries Development Project involving \$21.4mn. In this project, the World Bank's International Development Association (IDA) is supplying \$6m of the cost; the European Economic Community (EEC) £3.4m; the International Fund for agricultural Development (IFAD) \$5m; and the PDR Yemen's government \$7m. Seeing that the project needs more funding, in October 1983 the Arab Fund for Economic and Social Development (AFESD) - in Kuwait - agreed to provide \$3.3m.⁽⁹²⁾ Owing to its promising fishing resources, PDR Yemen declared in 1977 an exclusive economic zone (EEZ) of 200nm. Thus, when the proposed EEZ is formally adopted, PDR Yemen will benefit considerably. Blake (1982) sees no Arab State apart from Morocco that gains from the adoption of the suggested zone to the same extent as PDR

Yemen and Oman.⁽⁹³⁾

In Ethiopia, the role of fishing in the traditional economy is negligible. Commercial fishing is entirely restricted to the Red Sea coastal waters, and involves little deep-sea fishing. Production has fluctuated from year to year because of poor techniques and equipment and the relative total dependence on foreign markets. In Somalia, owing to droughts, in 1975, the government was able to turn a few nomads into fishermen in spite of great resistance from the former who traditionally considered fish-eating with abhorrence. Due to the persistence of this antipathy, the Somali coast usually lacked large fishing communities. However, Somalia's almost untapped fisheries resources are understood to be extensive notably along the Indian Ocean coast.⁽⁹⁴⁾ With regard to Israel some fishing takes place in the Gulf of Aqaba. However, fishing is one of Israel's sources of national income, but only a limited quantity is available off Israel's Mediterranean and Red Sea coasts; therefore Israeli trawlers sail to the rich fisheries off the Ethiopian coast and engage in deep-sea fishing there, as well as in the Atlantic Ocean.⁽⁹⁵⁾

In the Red Sea proper as well as in the Gulf, commercial fishing has proved unsuccessful as a long-term project because of insufficiently large catches. And although the Farasan Banks are thought to be a promising part of the Saudi Red Sea fisheries, Japanese and Korean commercial fishing

Table 3.12

Distribution of areas suitable for Red Sea fishing, excluding the Gulf of Aden

Country	Area (sq.km)	percent of total
Saudi Arabia	41,553	51.3
YAR	16,848	20.8
Egypt	10,854	13.4
Sudan	8,910	11.0
Djibouti	2,835	3.5
Total	81,000	100.0

Source: Adapted from Al Riyadh No.5897, Aug. 15, 1984, Riyadh, Saudi Arabia, p.12.

projects in the area were unsuccessful.⁽⁹⁶⁾ The following are considered by a recent study carried out in the Arab Red Sea waters - as among the factors that impede Red Sea fisheries:

- (1) physical geography which limits the viable area of fishing to 81,000sq.km; (table 3.12) shows the distribution of this area)
- (2) the human factor which includes shortage of manpower, illiteracy (90%) which hinders the skill of fishermen, low income from fishing, migration inland where wages from some developing industries are greater, and emigration to the neighbouring oil rich states;
- (3) the use of traditional and poor fishing equipment such as small fishing boats;
- (4) lack of facilities such as wharfs where fishermen can unload their catches and load provisions, fuel and water supplies, repair and maintenance workshops and storage, refrigeration and freezing plants;
- (5) lack of adequate transportation from production to marketing areas; also mentioned in the report were inadequacy of technical and managerial personnel, absence of statistical information; and absence of adequate associations of fishermen.

The study emphasizes the need for a strategy based on three main dimensions to develop Red Sea fisheries. First, the establishment of a central governmental administration for fisheries in each state. Second, the organization of

fishermen into effective cooperatives. Third, the setting up of a regional institution for Red Sea fishing grounds , especially due to the threat posed to Red Sea fishing resources by the activity of foreign fishing vessels under the umbrella of concessions or joint venture. (97)

It is also worth mentioning that since nothing can limit the mobility of the fish between ponds created by the 200nm EEZ, Couper (1978) indicates that it is imperative for countries to enter into very elaborate "catch agreements and surveillance systems". To develop and increase animal protein, greatly needed by Red Sea nations, the latter have to consider such programmes as increasing fish farming, seabed aquaculture, and evolving methods for the use of fauna. (98)

According to Ayubi (1984) some Arabian peninsular states, such as Saudi Arabia, PDR Yemen and others, have recently made claims to ex^cclusive rights over areas of the sea much larger than those previously contemplated by international law mainly for control of fishing activities. (99) Article 56 of the 1982 Convention of the United Nations Conference on the law of the Sea III (UNCLOSIII) has given coastal states the right to protect and preserve their marine environments. Article 61 which deals with the conservation of the living resources has bestowed such rights on these states to determine the allowable catch of the living resources in their exclusive economic zones

(EEZ) (see chapter 6) and the right to protect these resources from over-exploitation.⁽¹⁰⁰⁾

It is estimated that by the year 2000, the Arab world may face shortages of food amounting to 2.5m tons of meat, 5.5m tons of milk, about 28m tons of white meat and about 28m tons of eggs.⁽¹⁰²⁾ Therefore, if fishing resources in the Red Sea and other Arab waters are developed, they may lessen potential deficiency in animal protein, not only in the Arab states but also in the desperately poor countries of the Horn of Africa. It seems likely therefore that a fresh element may enter the international scene in the region in the shape of fishing disputes. At the same time, interest in offshore resources will intensify.

Petroleum and mineral resources have given hope of easing economic problems of some states and encouraging others to undertake research for such assets. These resources have attracted Western, especially American, companies engaged in exploration and the extractive activities. These resources could create problems with regard to the delimitation of maritime boundaries, between Red Sea states despite the precedent of peaceful cooperation established by Sudan and Saudi Arabia. The existence of minerals near the shores of the Red Sea could increase the strategic importance of these areas, and their attraction to outside powers. It is therefore easy to imagine a future in which the Red Sea and Gulf of Aden coastal states take a keen interest in the

control and protection of their offshore waters. Egypt, and Israel already ~~pos~~^sess powerful navies of regional standing with some ocean-going ships. Sudan, Saudi Arabia, Ethiopia, Somalia and Oman already possess coastal navies, chiefly consisting of large patrol vessels, while the Yemens and Jordan have small patrol craft.⁽¹⁰²⁾ These forces are likely to be strengthened, thus heightening the potential for local conflict quite regardless of superpower activity.

Chapter Three

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PART II:

UNITED STATES INTERESTS IN THE RED SEA REGION

CHAPTER 4

SHIPPING INTERESTS

4.1 Introduction

The Red Sea has global significance as the major highway between the Atlantic and Indian Oceans via the Mediterranean Sea and Suez Canal. On world maps of any scale this function can be seen at a glance. By the end of the 18th century and up to World War Two, the Red Sea had played a vital role in European colonial expansion, with special reference to British imperialism, and British-French-Italian competition, particularly in the southern half of the Red Sea region. By the 1950s and 1960s the Red Sea began to capture the interests of the US and USSR. From the late 1960s to the present it has become a contested arena between the superpowers for economic and strategic reasons. Locally, conflict over the Red Sea between the Arabs and Israel established a pretext for superpower involvement (chapter 7). The Red Sea has a number of constricted waterways which make its use as an international highway subject to political decision (chapter 4.) and military action. The Suez Canal, the Strait of Bab al Mandeb and the Strait of Tiran are arguably the flash points of the region.

The aim of this chapter is to investigate the importance of the shipping lanes of the Red Sea, its ports and strategic

water-passages with regard to US economic and strategic interests. Despite a distance of over 18,000km separating the United States from the Red Sea, such interests were reaffirmed in a Senatorial testimony given by Professor Donald Levine of Chicago University in 1976. He indicated that the US has

"a strategic interest in keeping the Bab el-Mandab, the port of Jibuti, and the Red Sea open to the flow of international shipping, especially to Israel, Western Europe, and North America". (1)

Discussion will also cover the 1982 Convention on the Law of the Sea, and its impact on the Red Sea and its waterways in an era when US interests in the freedom of navigation, over flight, and sea-bed mining have faced formidable challenges from the developing nations including the Red Sea States. Such challenges generated US opposition to the Convention, and finally US refusal to become a signatory. Discussion will also include vulnerability of shipping in the Red Sea, especially after the threat posed to navigation in the Middle East by the tanker war in the Gulf since 1982 and the mining of the Red Sea, in July-August 1984.

4.2 The Suez Canal

"The breaching of the Suez Canal was an authorization to the breakout of a new war which is still continuing."

"The Canal is no longer belonging to Egypt, but it is Egypt which belongs to the Canal."

G.A. Nasser (1956) (2)

Canals: There are four major canals in the world joining seas in global passage: Panama, in Central America opened in 1914; Suez, in Egypt, opened in 1869; Kiel, in West Germany, opened in 1895; and the St Lawrence Seaway in North America, opened in 1959⁽³⁾ Overland transport across narrow land routes often preceded the cutting of interoceanic canals. Such areas of transshipment and interoceanic canals have played a significant role in world seaborne commerce; and the major canals still exercise a remarkable influence on the pattern and extent of international trade, as well as on politics.⁽⁴⁾ While international straits are subject to rules of international law, canals are governed by the special regimes of their owners.

Historical Overview

Literature on the Suez Canal is prolific.⁽⁵⁾ Much is concerned ultimately with its geopolitical importance as an artery for commercial and naval shipping, a theme which has hardly changed since it was opened in 1869. It is pertinent to this thesis that the United States is a relative newcomer to the list of states for whom the Canal was a foreign policy preoccupation. In the following pages several issues concerning the canal will be discussed; meanwhile American/Western interests and involvement in the canal's affairs will be highlighted.

Between 1854 and 1869 an agreement between a

French-based international company and the Ottoman and Egyptian governments enabled the French engineer Ferdinand de Lesseps to construct the Suez Canal with French and Egyptian finance. To start with, he made extensive searches for assistance. On 21 October 1857 he wrote to the American President, Buchanan, hoping to get his interest in the scheme. In the letter he said:

"The liberal and generous policy of the American Union has always defended the freedom of the seas, and if any one other selfish and exclusive policy should show itself to obstruct the free communication between the Mediterranean and the Indian Sea, the principle of the freedom of the sea would receive serious injury. In that case the intervention of the Agent of the United States at Constantinople would be perfectly justifiable, aside from motives of national interests concerning the commerce and navigation of the Union." (6)

He pointed out that the cutting of the canal

"will give at a future day to the United States the occasion and the right of intervention in the councils of European diplomacy to effect, with the concurrence of France, this inevitable solution". (7)

He added that

"The respect of private property on the seas and the abolition of the blockade of commercial ports, extending over commerce from the enemy the legislation which already governs the commerce of neutrals." (8)

However, the US ignored all the arguments forwarded by De Lesseps and made no move towards the project. Without approval from the Turkish Sultan, De Lessps started work on

the canal in April 1859. But two months later, the British forced the Sultan to stop the work. The latter asked the Americans impatiently

"your Government is not afraid of the English, Would they support me with ships in case I should resist?"

The prompt American reply was ironical:

"Certainly not, your Highness! Suez and India are very far from America, and her interests there are very small indeed!" (9)

The Canal was eventually inaugurated on 17 November 1869. The US was the only important Western nation that did not officially participate. The American absence was no doubt related to the American-French dispute over Alabama which by then was actively at issue. However, the strongest reason for American absence was

"indifference at home to the desirability of a prominent representation". (10)

Wright (1969) agrees with this explanation and sees it conforming with the

"general lack of official American interest in the Suez Canal in this early period". (11)

In October 1873 an international conference was organized by the Turkish Sultan to establish a system for measuring ship tonnage in the canal. The US did not attend that meeting either. Wright (1969) thinks that the official

instruction - dated 3 November 1873 - and received by the American Minister in Constantinople explains the reason for American absence. It was:

"... it is obvious that we have little direct interest in the matter, as the flag of the United States is seldom seen in the canal, and it is not likely to be seen there often in comparison with those nations whose tonnage employed in foreign commerce may comparatively be much less than ours." (12)

He adds that the omission of the US from the Canal's administration was associated with

"United States failure on almost every level, especially commercial, to participate in Suez Canal activities." (13)

However, later, especially during its war with Spain in 1898, and after the discovery of oil in the Middle East, the US realized the strategic and economic significance of the Suez Canal. Thereafter it became interested in the affairs of the waterway, particularly after the emergence of the USSR as a rival power with interest in the Canal.

On 29 October 1888 the Constantinople Convention was signed by Austria, Hungary, France, Germany, Great Britain, Italy, the Netherlands, Russia, Spain and Turkey. The Convention provided that the Suez Canal:

"Shall always be free and open, in time of war as in time of peace, to every vessel of commerce or war, without distinction of flag." (14)
(Full text is in Appendix 2)

Understanding that the occupation of Egypt by Great Britain gave the latter a decisive voice in the Suez Canal, the US sounded out Britain about the American desire to send warships through the waterway. Britain replied that there would be no objection to US interests; moreover, no modification was made to the Convention to treat nonsignatory powers differently. However, even if any power made a protest to US use of the Canal, such an objection would not hold. Mr John Hay, the American Minister to Great Britain, who received the British reply, indicated to his Government that the attitude of the British authorities was that:

"we are unquestionably entitled to use the Canal for warships". (15)

In May 1898 the US ordered its consul at Cairo "to watch for Spanish vessels passing the Canal"; and in June the Consul was telegraphed precise instructions saying that:

"Should Spanish squadron call at Port Said or Suez, endeavour prevent getting coal and other supplies for belligerent voyage and other operations against United States in East. Mail copies this telegram confidentially Aden, Colombo, Singapore, for those consuls take similar action." (16)

However, had it not been for the British cooperation, American success in stopping the Spanish fleet in the Red Sea, seven miles outside the Canal harbour and preventing it from proceeding to the Far East would not have been possible. This British attitude towards the US was important since the

Table 4.1

Sample transit figure for Suez Canal traffic, 1883-1913
(in thousand tons)

Year	U.S.	British	Others	Total
1883	1	4,406	1,370	5,776
1887	1	4,517	1,386	5,903
1901	45	6,253	4,570	10,823
1905	13	8,357	4,777	13,134
1910	9	10,424	6,158	16,582
1913	7	12,052	7,982	20,034

Source: Wright, L.C., United States Policy toward Egypt 1830-1914; An Exposition - University Book
Exposition Press, New York, 1969, p.94.

other European powers were pro-Spanish.⁽¹⁷⁾

Wright (1969) argues that in spite of a clear lack of concern with the Suez Canal affairs the Americans have been considerably influenced by its history and development due to an analogous interest in building an interoceanic canal through Central America,⁽¹⁸⁾ the Panama Canal. He adds that American strategic interest in the Suez Canal did not develop much until World War Two and after. US indifference to Suez Canal political problems before World War One is partly explained by the absence of US shipping in the waterway,⁽¹⁹⁾ as transit figures demonstrate in table 4.1. Although the figures indicate a slight increase in American shipping through the Canal at the outset of the 20th century, a drop thereafter occurred, while British shipping and overall tonnage showed a steady rise. During World War Two, the Canal zone became a major British base which was relinquished only after President Nasser's nationalization of the Canal on 16 July 1956. Nasser's appropriation of the Canal precipitated the tripartite Israeli-British-French military invasion of Egypt in October 1956.⁽²⁰⁾ Strenuous American efforts led to the stoppage of the war and eventual withdrawal of the attackers.

Nasser's action was the outcome of a political dispute developed over requests for Western, especially American, loans to build the Aswan High Dam. One of the ways in which Nasser's move interested the Americans is that it involved

the use of strategic surprise, and thus it constituted a special kind of "hypergame".⁽²¹⁾ The draft agreement of 1955 between Britain, the US and Egypt regarding the construction of the Dam stipulated that the former would pay 30%, and Egypt 70% of the total cost of the project, about \$1.3 billion.⁽²²⁾ One of the conditions of the deal was that help from communist-bloc countries was to be refused.⁽²³⁾

Apart from the financial return from the nationalization of the Canal the action was seen to remove "the last vestige of Egypt's subordination to the West", and

"a bold defiant gesture which shocked the West and sparked the Suez crisis of 1956 and created immediate concern from the West for the security of the Canal".⁽²⁴⁾

Nasser's move enhanced his influential position over most of the main Arab nationalist movements, while his political popularity rose to its greatest height.⁽²⁵⁾ During the high tension over the invasion of the Suez Canal region by France and Britain the major American objective was to limit Soviet influence in the Middle East, and to promote Egyptian nationalism without antagonizing Britain.⁽²⁶⁾ Perennial antagonism between Israel and the Arabs led to the Six Day War of 1967 between the two parties. The canal was then closed and became the cease-fire line between Egyptian and Israeli troops.⁽²⁷⁾ As a consequence of the 1967 closure most east-west trading activity was diverted to the longer Cape route round South Africa.

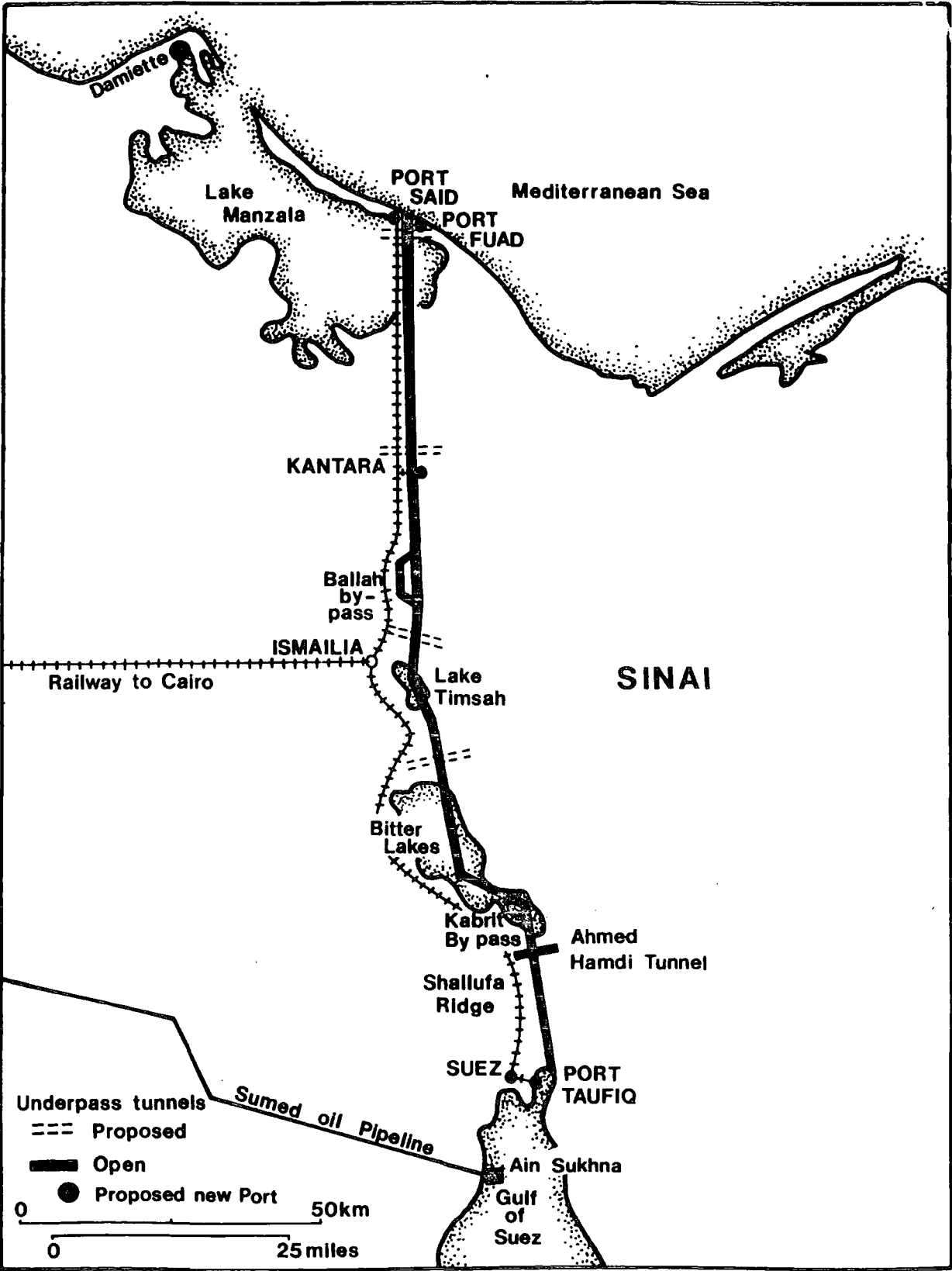


FIG .4.1 THE SUEZ CANAL SHOWING UNDERPASS TUNNELS

Physical Features and Distances

The canal - a sea-level waterway - extends between Port Said on the Mediterranean and Suez city on the Gulf of Suez, the most northwestern extremity of the Red Sea (figure 4.1). It was dug through a sandy isthmus of land and shallow Lakes. To utilize four bodies of water: Lake Manzala, Lake Ballah, Lake Timsah, and the Bitter Lakes; the canal does not take the shortest route across the isthmus.⁽²⁸⁾ Due to the absence of significant differences in water level between the Mediterranean and the Gulf of Suez, there are no locks as in the Panama Canal, and the current in the waterway is weak.⁽²⁹⁾ Though predominantly straight, the canal has eight major bends.⁽³⁰⁾ The construction of the canal and subsequent developments have been relatively easy, while its construction cost was less than half that of Panama Canal, (Couper, 1983).⁽³¹⁾ Originally, the length of the Canal was 161.6km - which included 65.6km of land-cut canals and 96km of lake-dredged channels. In 1985 its length reached 195km, including approach fairways.⁽³²⁾ Its maximum depth is 53ft, with breadth ranging between 300 to 350m, while the width under 11m of water is only 160-179m. The greatest permitted speed for tankers in ballast and other vessels is 14km/hour. Vessels need about 24 hours to transit the Canal, although the actual period of sailing is about 12 hours.⁽³³⁾ The low-lying delta of the Nile borders the Canal to the west, while the higher, rugged and arid Sinai peninsula borders it

Table 4.2

Comparative distances via Cape and Red Sea routes to principal ports, distance saving percentage and saving in days and hours at top fleet speed of 20 knots

London or Liverpool to	Via Cape Route	Sailing days and hours		Via Canal - Red Sea route	Sailing days and hours		Distance saving percentage	Saving in days and hours	
	nm	D	hr	nm	D	hr		D	hr
Bombay	10,800	22	6	6,300	13	3	42	9	3
Kuwait	11,300	23	12	6,500	13	12	42	10	-
Melbourne	12,200	25	9	11,000	22	21	10	2	12
Calcutta	11,700	24	9	7,900	16	10	32	7	23
Singapore	11,800	24	13	8,300	17	6	30	7	7
Marseille to									
Bombay	10,400	21	15	4,600	9	13	56	12	2
Melbourne	11,900	24	18	9,400	19	13	21	5	5
Black Sea to									
Bombay*	11,800	24	13	4,200	8	18	64	15	19
New York to									
Bombay	11,800	24	13	8,200	17	1	31	7	12
Singapore	12,500	26	-	10,200	21	6	18	4	18
Ras Tanura	11,900	24	18	8,300	17	6	30	7	12
(Saudi Arabia)									
Florida (USA) to									
the Gulf**	23,218	48	8	20,788	43	7	10	5	1
Rotterdam to	23,218	48	8	20,788	20	7	10	28	1
the Gulf**	22,678	47	5	12,905	26	2	43	21	8
Malta to									
Abadan***	11,971	24	22	4,271	8	21	64	16	1

Source: Except for * and **, the rest is from W.B. Fisher, 'The Suez Canal' in Encyclopedia Britannica, 15th edn, Vol.17, Hemingway Benton, publisher, London, 1974, p.768.

* From A.A-Al Sultan (1980) Op.cit., p.19.

** A.H. Cordesman (1984) Op.cit., p.559.

*** Calculated from Couper (1983) (ed.) Op.cit., pp.230-31.

to the east. The canal is in Egyptian territory and subject to Egyptian jurisdiction.

In terms of distance, the Canal demonstrates its significance in the considerable reduction of shipping distance between Europe or the US and the East (table 4.2). Figure 4.2 shows a United States view of global relative distances. For voyages between East and West, the Canal saves from 17% to 59% in distance and from 50% to 70% in fuel consumption, depending on the tonnage, speed and the destination of a ship.⁽³⁴⁾ From the Strait of Hormuz to the Strait of Dover via the Canal is over 9,600km less than via the Cape route.⁽³⁵⁾ Vessels making two-way transits of the Canal can cut 4,900km from the US round trip and 9,000km from the run to Rotterdam.⁽³⁶⁾ Cordesman (1984) emphasizes that in terms of fuel, distance and time savings, the significance of the Canal is indisputable.⁽³⁷⁾ Thus, there are obviously important benefits for commercial shipping especially small vessels. Moreover strategically, the waterway is clearly significant to naval ships between the Mediterranean, the Indian Ocean and beyond.

Experts vary as to the estimated cost of losses inflicted on the world by the eight year closure of the Canal from 1967-1976. American sources put the figure at \$800m a year,⁽³⁸⁾ but Egyptian sources suggest \$1700m a year.⁽³⁹⁾ It may be difficult to decide which is right because each has specific interest in calculating their figure. The cost was

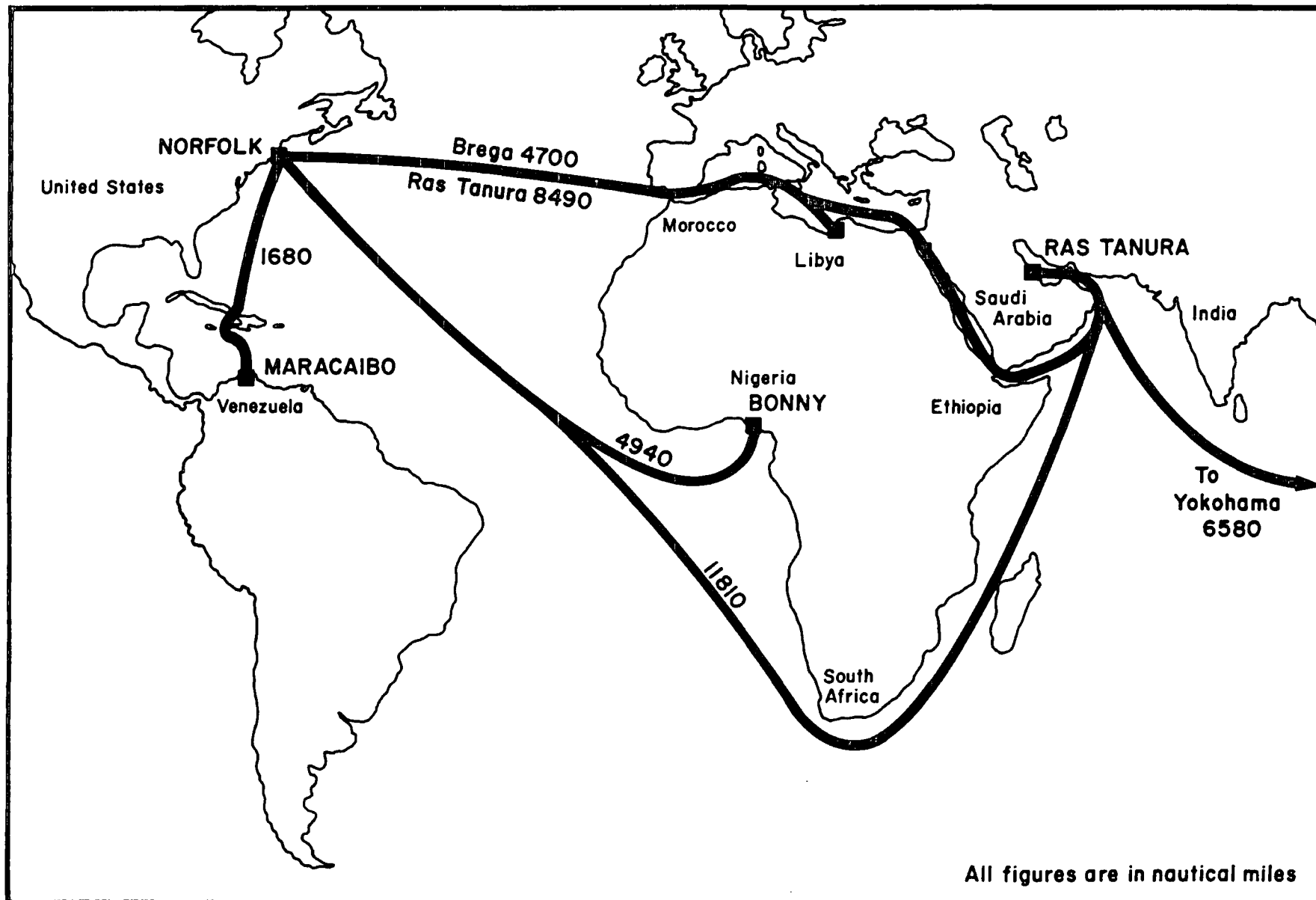


FIG. 4.2 A UNITED STATES VIEW OF GLOBAL RELATIVE DISTANCE (FROM SENATE HEARINGS, 1980)

in terms of increased tankerage rates for oil and increased transportation costs for cargo. British maritime companies lost £150,000 daily; thousands of workers were made redundant in European, East African, Red Sea and Mediterranean ports; and the cost of transportation of one ton of crude oil via the Cape route was four times greater in comparison to its rate through the Canal. The volume of trade between Asia, Africa and Europe dropped by 16%; Egypt's loss was substantial amounting to some £143 million in revenues; moreover about one million citizens were moved from the Canal area into the interior of the country and lost their jobs. Obviously the US suffered very little although there was natural American concern about the damage inflicted upon its European allies. In fact, the Americans were somewhat relaxed during the closure because it benefited them strategically (chapter 6) according to William Quandt since it deprived the Soviets of using the Canal while the Americans were entangled in Vietnam.⁽⁴¹⁾

Importance of an 'Open' Canal

Cohen (1964) pointed out that Mahan (1840-1914) considered the Suez and Panama canals as marking the southern limit of the most active regions in world commerce and politics.⁽⁴²⁾ To Mackinder (1942), according to Parker (1982), it was the Suez Canal that made the Middle East the "most vital part of the whole 'Inner Crescent'".⁽⁴³⁾ Because

40 years later after Mackinder's view the Canal is still a significant artery for oil transit and general commerce, its closure would affect:

"the cost of oil in the US, the price of Egyptian cotton in England and the availability of Ceylonese tea in London". (44)

Beneficiaries of an open canal would be Egypt, in respect of foreign revenues; European countries, for shortening of communication routes; Gulf and Asian countries, for some lowering of costs of imported goods; and the Soviet Union with regard to its transit route across the Indian ocean and the increase of its political alignment in the Red Sea region and beyond. (45)

The distance between Odessa and Bombay is 6720km via the Suez-Red Sea route, and 19,040km round the Cape of Good Hope, almost three times as much. Quoted in Wolde-Mariam (1972), Robert Hunter - former Director of Middle East Affairs in the National Security Council Staff 1979-1981 - remarks that:

"While the Suez Canal remains closed the Red Sea is the farthest point on earth from the Soviet Union by sea." (46)

The Americans perceive that in times of military crisis an open Canal could help the Soviets to use vessels of either the Pacific or Atlantic fleets to enhance the strength of the other, which is why the reopening of the Canal was seen by Senator Jackson (1970) as a Soviet "priority". Therefore

Table 4.3

The Suez Canal: transiting vessels and tankers of the US and the USSR 1967-1983

U S A								
T a n k e r s		O t h e r s		T a n k e r s				
Number	Net tonnage 5000	Number	Net tonnage 5000	Year	Number	Net tonnage 5000	Number	Net tonnage 5000
55	1,182	350	5,889	1976	173	2,211	1,249	9,738
73	1,537	459	7,519	1977	188	2,547	1,462	11,630
19	582	306	4,950	1978	264	3,109	1,753	13,781
23	660	305	4,583	1979	304	4,221	1,886	16,371
58	1,055	348	5,269	1980	343	5,173	2,031	19,610
44	789	320	5,192	1981	356	4,876	1,823	18,125
64	1,719	277	4,938	1982	350	4,509	1,962	19,471
33	675	242	3,651	1983	350	4,380	2,060	20,213
369	8,199	2607	41,991		2,328	31,026	14,226	128,939

Source: Suez Canal Authority Yearly Reports, 1976-83 Ismailia, Egypt.

during its involvement in Vietnam in the late 1960s and early 1970s the US was pleased to have the Canal closed. The Senator saw the Canal issue as a pressure point which the US could use in negotiations. To him, the reopening would deprive the US of one of the chief incentives to pressurise the Soviet Union to "make concessions on other outstanding differences".⁽⁴⁷⁾ Since the early 1980s, the Soviet Union has been ranked as the second largest user of the Canal, chiefly for merchant shipping.⁽⁴⁸⁾ Table 4.3 shows transiting tankers of the US and USSR through the Canal.

Following the 1967 war and particularly after the cease-fire of 1970 and US initiatives for an 'interim' settlement, the Canal assumed a new political importance for the US as a major element in the quest for peace in the Middle East.⁽⁴⁹⁾ Before closure, an uninterrupted passage through the Canal was an important factor in American Middle Eastern policy. But thereafter transit rights were not as important to the US as was the utilization of the waterway as an instrument of political leverage and negotiation, (table 4.4). Such value was further emphasized in the post-October War disengagement accords between Israel and Egypt.⁽⁵⁰⁾ In 1970 Senator Jackson pointed out that without Israel's consent, the Canal could not be opened. Therefore he emphasized that the reopening:

"must be considered a trump card in any forthcoming settlement of the Arab Israeli dispute".

With this in mind, he added that an

Table 4.4

Suez Canal: Northbound movement of petroleum and products,
and US share, 1976-1984 ('000 tons)

Year	Amount	US share	US % of total north-bound volume
1976	29,855	104	0.35
1977	30,878	1,076	3.50
1978	28,363	417	1.50
1979	27,284	311	1.14
1980	28,474	379	1.33
1981	36,566	1,448	4.00
1982	63,139	3,710	6.00
1983	81,223	5,055	6.22
1984	86,628	NA	-

Source: Suez Canal Authority Yearly Reports 1976-1983,
and Monthly Report January-December for 1984,
Suez Canal Authority, Ismailia.

"agreement on this point should be withheld until a settlement of the fundamental issues is reached". (51)

Thus, the Canal was thought of by Israel's American supporters as a card of pressure to reach an enforced peace with Israel.

While the American military were concerned about naval movement through the Canal, Michael Sterner of the Department of State (1974) argues that the effect of a reopened canal should not be restricted to the narrow context of naval and commercial movements; it should be viewed as a sequel to the initial Israeli-Egyptian agreement.⁽⁵²⁾ Ten years later, although Mr Sterner did not attach great importance to the Canal-Red Sea route with regard to oil supplies for the Organization for Economic Co-operation and Development (OECD) (chapter 5), he emphasized the important strategic advantage of this route for naval movements from Norfolk (USA) and the Mediterranean.⁽⁵³⁾ However, after the reopening in 1975, traffic began to return to its former levels and the Canal regained its importance in tonnage, as subsequent tables indicate.

In March 1974 the US indicated to Egypt its preparedness to sweep the canal and its approaches of mines, and provide technical help to enable Egyptian forces to locate and dispose of unexploded ordnance in the canal and along its banks. The total cost of getting the canal back to its 1967 condition was estimated at \$150-200m.⁽⁵⁴⁾ Japan, the World

Bank and the UK all participated in the project. Mr Michael Sterner of the American State Department (1974) made it clear that the Israelis did not contribute to the scheme, either financially or mechanically; he added that they provided very detailed information of the minefields they had placed on the east bank of the Canal. He considered the information as very helpful; and that the US had full cooperation from the Israeli intelligence in locating the mines.⁽⁵⁵⁾ After thirteen months' scouring operation, through Western, especially American, money and technical assistance, the Canal was cleared and reopened in June 1975.

After the reopening of the Canal, the first Israeli vessel transited the waterway in April 1979⁽⁵⁶⁾ thanks to the Israeli-Egyptian peace treaty of that year. During the Congressional debate in 1974 over the US contribution to the reopening of the Canal and Israel's chances of using it, Mr Sterner explained that both Egypt and Israel agreed to defer the issue until they reached a final peace settlement.⁽⁵⁷⁾ The canal is important to Israel; statistics show that in 1982 and 1983 the number of ships flying the Star of David reached 38 and 50 respectively, carrying tonnage of 412,000 tons in 1982 and 584,000 tons in 1983, a 41.7% increase.⁽⁵⁸⁾ According to the treaty the parties agreed on:

"The right of free passage by ships of Israel through the Gulf of Suez and the Suez Canal on the basis of the Constantinople Convention of 1888 applying to all nations." (59)

EXPANSION OF THE SUEZ CANAL

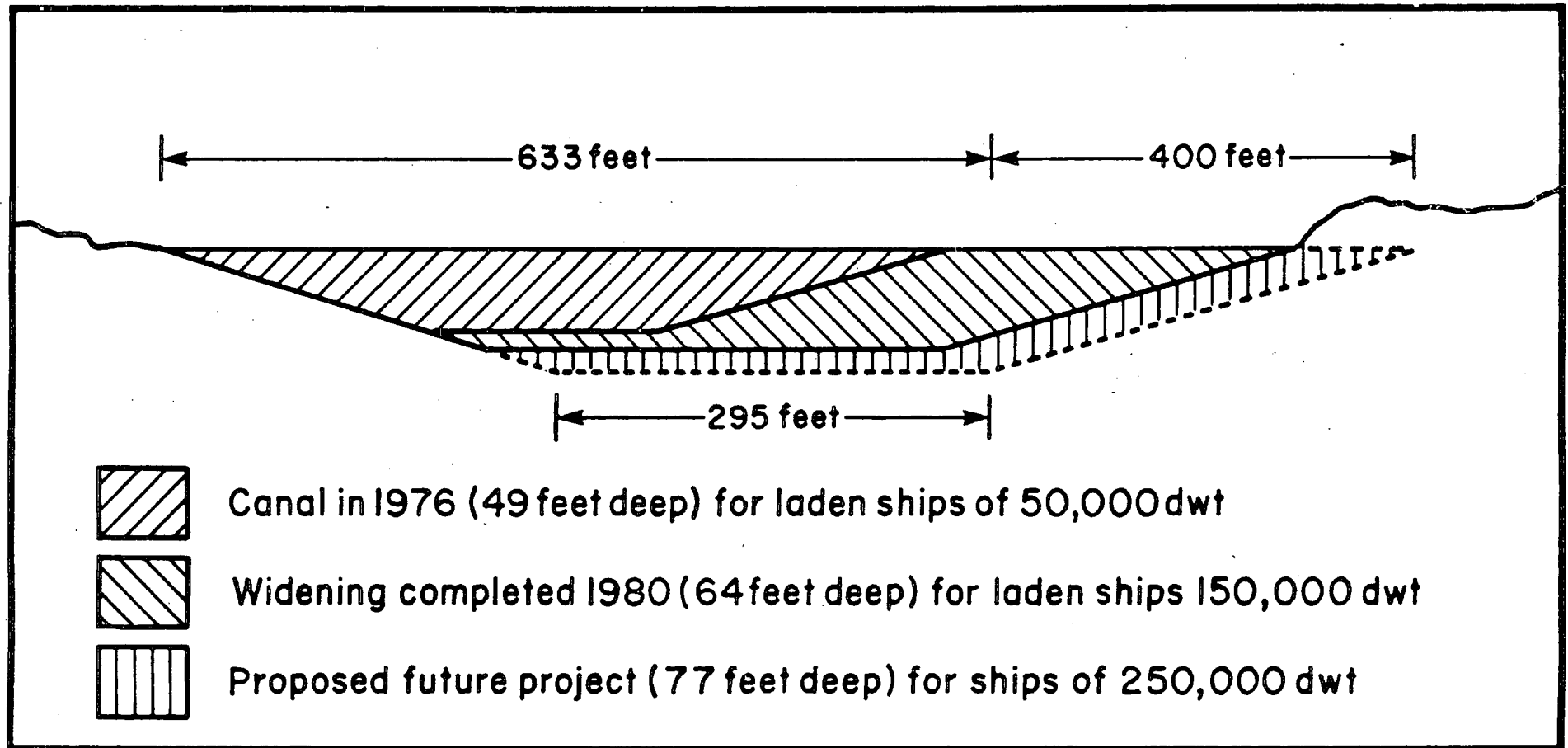


FIG. 4.3 CROSS-SECTION TO SHOW EXPANSION OF THE SUEZ CANAL, 1976-1980

Development Projects

For some years after its breaching the canal was 22ft (8m) deep, 72.2ft (22m) wide and a permissible draught of 24.6ft (7.5m). Between 1876 and 1954 it witnessed seven development projects. The first stage of the eighth scheme, known as the Nasser project, was completed in 1961 and enabled vessels of 37ft draught to transit the waterway.⁽⁶⁰⁾ In 1962 two salvage stations and a system of direct radio communication between ships and the traffic control station were established at Ismailia. The second stage of the project, finished in 1964, brought allowable draught to 38ft. When it was reopened in June 1975 permissible draught was only 33ft but a month later it came to be 38ft.⁽⁶¹⁾

On 16 December 1980, the first phase of a massive development project of widening and deepening the Canal was completed. The execution of this stage cost \$1,270m. The scheme funded by Japan involved the construction of three bypasses and increased the draught from 38ft to 53ft (figure 4.3).⁽⁶²⁾ Owing to this expansion, the canal is able to handle more than one third of the world's tanker tonnage laden and more than 90% in ballast.⁽⁶³⁾ With such depth, the waterway can accommodae almost the entire world's cargo vessels.⁽⁶⁴⁾ The bypasses raised the Canal's daily transit capacity by 12 ships (Al Ahgam 5/84). The paper adds that the Chairman of the Suez Canal Authority, Izzel Adel states that the Canal had entered the era of super tankers. The project

served supertankers in two ways:

- (1) From Europe en route to the Gulf empty tankers of 370,000 tons can pass through compared with 250,000 tons before; and
- (2) the increased draught and the widening from 297 to 480m enables the Canal to handle tankers of 150,000 tons fully laden and 200,000 tons partly loaded compared with 70,000 tons before. In October 1981, the authorities inaugurated the Suez Canal Vessel Traffic.⁽⁶⁵⁾

Management: Owing to the completion of the first stage and the opening of the Saudi East West pipeline in 1981 (chapter 5), tanker traffic in the Canal has risen significantly (tables 4.5). The development programme included equipment and human factors; and most important here is the promotion of maritime surveillance and its furnishing with the most modern equipment. The project also included the construction of four highways, and five tunnels traversing the Canal and linking the west and east banks.⁽⁶⁷⁾ Thus, Africa and Asia were linked for the first time by road through the four km long Ahmed Hamdi Tunnel which was completed on 1st October 1980.⁽⁶⁸⁾ The tunnel cost \$143m and includes a two-lane highway accommodating up to 1,000 cars per hour⁽⁶⁹⁾.

Quoting Canal officials, the International Herald Tribune (January 1985) indicates the shelving of the plans

Table 4.5

Suez Canal: Effect of East-West pipeline on tanker traffic
(thousand tons deadweight)

Direction	Ship size dwt	1980	1981	1982
Northbound	10-70,000	19,937	21,067	21,423
	<u>over 70,000</u>	<u>21,602</u>	<u>28,090</u>	<u>42,995</u>
		<u>41,539</u>	<u>49,157</u>	<u>64,418</u>
Southbound	10-70,000	21,068	20,898	22,483
	70-175,000	41,895	42,730	57,923
	<u>over 175,000</u>	<u>51,145</u>	<u>134,368</u>	<u>82,696</u>
Total		<u>114,108</u>	<u>197,996</u>	<u>163,102</u>

Source: The Drewry Tanker Market Review: 1982, Drewry Shipping Consultants Ltd, London, reproduced in Petroleum Economist, Vol. L. No.6, June 1983, p.241.

for the second phase of development. The reason, according to the paper, is the continued levelling off of Egypt's revenues from the Canal and the sluggishness of the Canal's shipping since 1980.⁽⁷⁰⁾ Although there has been continued rise in Canal revenues between 1980 and 1984 (see below), the income has been short of the \$1m projected by the Chairman of the Canal.⁽⁷¹⁾ The deferred phase was intended to increase^a the number of daily transits of vessels from 62 to 78 by cutting new bypasses.⁽⁷²⁾ The postponed phase is also designed to deepen the canal to increase its wet cross-section to 4200sq.m and the permissible draught to 67ft, thereby achieving the objective of handling fully loaded tankers of 260,000dwt and up to 300,000dwt partially loaded.⁽⁷³⁾ Completion of this stage was scheduled for 1986-87, and its cost was expected to reach between \$750m to \$1b.⁽⁷⁴⁾ The development project would have been the biggest scheme so far undertaken by Egypt, expected to bring a revenue of \$1200m annually. Moreover, it was seen to alleviate some internal economic difficulties, besides its re-enforcement of the importance of the canal as a vital artery and the shortest and cheapest international water passage.⁽⁷⁵⁾

Japan would play a leading role in building the second phase, consisting of a second canal running parallel to the existing one, to handle two-way traffic.⁽⁷⁶⁾ The future widening of the Canal could change the pattern of crude oil movement, although the volume of traffic will depend on dues

Table 4.6

The Suez Canal: Volume of goods traffic in both directions, quantities of petroleum and products and their percentage to total volume: 1966, 1975-1983 (thousand tons)

Year	Southbound goods traffic			Northbound goods traffic		
	Total	Petroleum and products	%	Total	Petroleum and products	%
1966	47,725	8,953	18.76	194,168	166,718	85.86
1975	19,140	2,012	10.51	18,480	5,309	28.73
1976	45,633	3,969	8.70	72,020	29,855	41.45
1977	56,063	4,068	7.26	72,630	30,878	42.51
1978	80,182	4,316	5.38	69,597	28,363	40.75
1979	81,919	8,970	10.95	78,730	27,284	34.65
1980	89,729	13,994	15.60	86,547	28,474	32.90
1981	102,532	18,211	17.76	93,896	36,566	38.94
1982	106,588	20,312	19.06	124,805	63,139	50.60
1983	115,703	17,010	14.70	141,002	81,223	57.60

Source: Suez Canal Authority Yearly Report, Ismailia, Egypt, pp.117-118.

fixed by the canal authority compared with fuel costs and time consumption by circumnavigating the Cape of Good Hope.⁽⁷⁷⁾ Following the execution of the first stage of development, the Canal Authority increased transit charges in January 1981 by 50%, the first rise since 1967. To encourage traffic in general and also the largest tankers, in particular, the Authority has taken a conservative approach towards dues, and put them on a sliding scale. Since the beginning of 1983 a new transit rate has come into effect. In January 1984 transit rates were increased by 5%. These dues were expected to bring a net increase in canal revenue of about \$30m by the end of that year. In January 1985 tolls were again put up by 3.74%.⁽⁷⁸⁾ However, despite these increases, the Chairman of the Suez Canal Authority (1984) contends that still the Canal will continue to be the cheapest maritime route between East and West; and consequently, the volume of trade which passes through the canal is much larger than that using routes competing with the Canal.⁽⁷⁹⁾

Number of Ships and Tonnage

Since the reopening of the Canal, the number of flags, as well as tonnage carried through it, have continued to show a steady growth (table 4.6). while in 1976 the ships of 85 nationalities passed through the canal, in 1983 it increased by 11.8% reaching 95 despite a slump in the world oil market

Table 4.7Canal revenues :1980-1984

Year	Income (\$m)
1980-1981	780
1981-1982	909
1982-1983	957
1983-1984*	960

Source: Financial Times, 25 June 1984, London.

* From International Herald Tribune, 17
January 1985, New York.

since 1980. In 1966, 21,250 vessels with tonnage of 274.25m tonnes, transited the waterways; and in 1982 the figure rose to 22,545 ships loaded with 363,5328m tonnes passed through. By 1980, even before the completion to the present depth, total tonnage carried through the waterway had surpassed the peak year before the closure. In 1981, despite a slump in world oil demand, the number of tankers transiting the canal had increased by 16% over the 1980 level, while the rise in tonnage was as much as 46%.⁽⁸⁰⁾ The Canal handles 14% of sea-borne world trade and 41% of the commodities exchanged in the Gulf's ports.⁽⁸¹⁾ In 1984 some 185.4m tonnes of oil were transported from the Middle East to Western consumers; and out of this amount the canal handled 86.73mt, or 47% Western imports.⁽⁸²⁾

Revenues

Once the Canal used to be Egypt's biggest source of foreign earnings, but as figures of the Financial Times (1984) reveal, canal revenues have been drastically overtaken by workers' transfers. In 1982-83 the Canal brought in ^{\$95m} \$95m, while workers' remittances attained \$3 billion. The continued slump in the oil market since 1980 has affected Canal revenues because some of the ships that transit the waterway are oil tankers. Egypt's oil exports also bring greater foreign currency than those of the canal.⁽⁸³⁾ During the last few years the Canal's earnings have been oscillating around \$900m a year (table 4.7). In 1984 the canal brought \$960m,

Table 4.8

The Suez Canal: total number of US vessels and tankers transiting the Canal, and their percentage to world total: 1976-1983

Year	V e s s e l s			T a n k e r s		
	World	US	% US	World	US	% US
1976	16,806	350	2.08	2,610	55	2.10
1977	19,703	459	2.32	2,620	73	2.78
1978	21,266	306	1.43	2,489	19	0.76
1979	20,363	305	1.49	2,698	23	0.85
1980	20,795	348	1.67	2,921	58	1.98
1981	21,577	320	1.48	3,438	44	1.27
1982	22,545	277	1.22	3,548	64	1.80
1983	22,224	242	1.08	3,602	33	0.91

Source: Suez Canal Authority, Yearly Report, 1976, 1978, 1980, 1982 and 1983. Ismailia, Egypt.

one hundred million dollars short of the projections of the Canal's Chairman. Interruptions caused by air attack on Gulf shipping and the recent series of mine blasts in the Red Sea have been considered as the major factor for the shortfall from the predicted revenue of \$1b in 1984. The International Herald Tribune (1985) indicates that damage to more than 60 tankers in the Gulf in 1984 coupled with the slow economic recovery in the Gulf countries would continue to cause a slowdown in the activity of the waterway.⁽⁸⁴⁾ However, considering the remarkable shift that has been going on since 1981 in the transportation of oil from the Gulf through pipelines terminating at the Red Sea (chapter 5) and the increased tension in the Gulf area (chapter 6), it could be argued that the canal's activity may increase, and some Cape route traffic could shift to the Red Sea.

The US and the Suez Canal

As table 4.8 indicates, there is no significant American Shipping activity in the Canal. But US interests in the canal might be best perceived in the shipping activities of America's Western and Japanese allies who depend on US military strength to defend their interests in the Middle East. Table 4.9 highlights those allies' interests.

Another strong reason to attract American interest in the Canal is the steady growth of Soviet use of the waterway, especially when US apprehension over Soviet military build-up in the southern sector of the Red Sea region and the Indian

Table 4.9

Cargo vessels and tankers belonging to six US allies transiting the Canal in 1978 and 1983, and their percentage to world total

C a r g o V e s s e l s				T a n k e r s		
Year	World total	Total of Greece, UK, W. Germany France, Italy and Japan	% of allies to world	World total	Total of Greece, UK, W. Germany France, Italy and Japan	% of allies to world
1978	21,266	7794	36.65	2,489	861	35.59
1983	22,224	5915	26.61	3,602	1043	28.95

Source: Suez Canal Authority Yearly Report, 1978 and 1983, Ismailia, Egypt.

Table 4.10The Suez Canal: transiting warships 1976-1983

Year	Number of ships	Tonnage ('000)
1976	91	334
1977	100	604
1978	122	405
1979	149	500
1980	190	1,172
1981	190	1,039
1982	180	1,094
1983	182	1,075
Total	1,204	6,223

Source: Suez Canal Authority, Yearly Reports 1976-1983,
 Ismailia, Egypt.

Ocean is considered. Such military presence, flanking the Arabian peninsula on the south-west must be worrying to the US, and therefore it may need the Canal for quick action, in time of crisis. Apart from transporting energy and facilitating naval movements, the Canal handles other crucial materials, important to the industrial West, notably strategic minerals. Also other goods include manufactured materials from the West transported to countries beyond the Suez Canal. It also serves passengers. It proved impossible to obtain detailed breakdown of commodities specifically bound or originating in the US. Data on US naval shipping through the waterway are not easy to obtain. However, since the reopening the number of transiting warships has grown (table 4.10). At a depth of 53ft, the canal is seen by the Americans as able to handle virtually all the world's warships. (85)

However, Egypt has always refused to allow nuclear-powered ships passage through the Canal fearing that an accident could close the waterway. It has been the Suez Canal Authority, rather than the Government, that strongly opposed the passage of such ships. (86) Although the Americans gave Egypt several assurances in the past, that the ships would not create danger to the Canal, civilian Egyptian authorities

"have not wanted to allow passage of anything that they believe could endanger a major revenue-producer like the Canal." (87)

But in early November, 1984

"Egypt allowed a nuclear-powered US naval ship to pass through the Suez Canal for the first time." (88)

The event is considered by the Americans as "a breakthrough" for American policy in the Red Sea-Canal route. But the nuclear-powered cruiser, USS "Arkansas",

"travelled from the Red Sea to the Mediterranean at night because of Egyptian sensitivity over the issue." (89)

being very much concerned that to create problems for Egypt and to continue enjoying success, a number of US officials, including the ambassador, Mr Nicholas Valiotes,

"warned that public discussion of the transit could embarrass the Egyptians and set-back efforts to win a permanent policy change." (90)

One official was quoted by The Guardian (11/84) as saying

"Right now, we're all very sensitive because they are ... They've done something nice and we don't want to spoil it." (91)

The USS "Arkansas" was on a spy mission of

"shadowing a conventionally powered Soviet ship that had steamed through the Canal the previous day."

The Americans think that Egypt's previous decision not to allow such passage was caused by Soviet pressure upon the former not to change policy. (92)

However, the event may be a quite significant achievement for the US, and may be to the Soviets whose navy is considered by the former as

"currently far less dependent on nuclear power than the US navy". (93)

Although such an achievement, if it continues, will enable the US to enjoy rapid mobility of nuclear-power vessels between the Indian Ocean and the Mediterranean, nevertheless it may endanger the Canal.

Vulnerability of the Canal

Since the creation of Israel in 1948, the canal has continued to be a flashpoint for Middle Eastern conflicts. Events between 1956 and 1973 have revealed both the political and military value and vulnerability of the Canal. According to an American view, the canal is vulnerable to modern weapons and in war time its protection from closure would be problematic. The canal also proved to be a feeble line of defence during the crossing of both Egyptian-Israeli forces in the 1973 war, and the view concludes that because of the Canal's minor military significance, President Sadat was convinced that the area should be transformed into a region of peace.⁽⁹⁴⁾ Sadat's peace with Israel, however, was by no means an outcome of such hopes. The Israeli-Egyptian peace cannot guarantee keeping the Canal open. The 1984 mining of the Red Sea (chapter 6), especially at the Gulf of Suez, was

a strong reminder that a wide range of Arabs and Muslims have been frustrated by the American-designed peace, and by American attitudes in the region. Thus, Sadat's peace may have left the Canal more vulnerable than before.

In 1974 Professor Ragaei El Mallakh, Chairman of African and Middle Eastern Studies at the University of Colorado, USA, wrote:

"In many people's mind the canal has been linked with colonial empires, war and the romantic aura exuded by Verdi's Aida composed for the waterway's grand opening a century ago and the glamour of emperors, kings, queens and pashas. Now the present outlook for the canal is more concentrated on Egypt's economic development, making it the most important petroleum transiting nation in the world, expanding regional linkages and growth, easing the energy crisis, facilitating world trade and deepening the mutuality of economic interests and interdependence of the Middle East not only with Europe and the Third World but with the United States as well." (95)

The character of Suez Canal traffic clearly changed between 1969 and 1975, especially with regard to oil traffic. As a result the importance of the canal has probably been under-estimated. By 1975 it was already regaining lost oil traffic and the number of ships transiting were back to pre-closure levels. In geopolitical terms perhaps the most significant developments have been (1) the opening of SUMED which further concentrates oil transportation in the geostrategic Canal/Nile Delta zone, and (2) the growing number of states with a stake in the Canal. The existing and on-going construction of pipelines from the Gulf to major Red

Sea ports (chapter 5) and an anticipated further widening of the Canal, which could occur in the 1990s, might transform world assessments of the value of the Canal-Red Sea highway.

4.3 International Waterways

An Overview

International waterways can be natural features, in the form of straits or man-made features or canals. Hanks (1981) argues that although international waterways contribute to cutting the length of voyages for merchant ships and naval traffic, they also provide opportunities for those who would seek to interdict such traffic.⁽⁹⁶⁾ At such 'chokepoints' sealanes are highly vulnerable and may require protection. In the Middle East, certain of these waterways are heavily used, notably the Suez Canal, the Strait of Hormuz, and Bab al Mandeb. Others may not have heavy traffic but are characterized by high conflict potential, such as the Strait of Tiran.

Straits: According to Bruel (1947) a strait is geographically a contraction of the sea between two territories, being of limited width and connecting two seas. Despite its separation of opposite territories a strait may function as the connecting element of those territories by traffic.⁽⁹⁷⁾ To Leifer (1978) a strait is a narrow sea channel or a corridor connecting two larger bodies of water.⁽⁹⁸⁾ The 1982 UN

Convention gives a clear definition of international straits subject to the regime of transit passage:

"... Straits which are used for international navigation between one part of the high seas or an exclusive economic zone and another part of the high seas or an exclusive economic zone". (99)

There are approximately 120 international straits in the world less than 24nm in width. The proposed extension of the territorial sea to 12nm under Article 3 of the 1982 Convention on the Law of the Sea would place all these straits into the territorial seas of coastal states. While about two thirds of them are in the developing world, most international shipping belongs to the maritime powers, predominantly Western.⁽¹⁰⁰⁾ In the past few years the right of passage through, under, or over international Straits has become a preoccupation of both coastal states and maritime powers. Along with the rise in the number of ships and the increase in their size, passage through Straits by ships has intensified.⁽¹⁰¹⁾ Such tremendous growth in shipping can be seen in a decade during which world gross registered tonnage grew from 186mt in 1971 to 420mt in 1980, an increase of over 125%.⁽¹⁰²⁾ With regard to military activity on the sea the world stock of warships rose from 4,857 in 1965, to 5,363 in 1975, a rise of over 11%; at the same time their speed, as well as their range and destructive capacity grew considerably.⁽¹⁰³⁾

Although the Convention upholds the freedom of

navigation through territorial seas with the concept of 'innocent passage' (Article 17), and through international straits with the principle of 'transit passage' (Article 38),⁽¹⁰⁴⁾ conflict of interest between littoral States and maritime powers has become inevitable, especially since the 1960s when most of the developing nations achieved independence and have become aware of their economic and security interests. Coastal States have naturally become worried about their national security which may be jeopardized by the passage of warships and military aircraft. Equally they have become concerned about dangers to their marine resources from pollution, especially by huge oil tankers. Therefore they commonly objected to the principle of 'free passage' and demanded more authorization to regulate shipping and maintain their security⁽¹⁰⁵⁾ (chapter 6). On the other hand, maritime powers are preoccupied with the interest of retaining the greatest freedom to sail through, under, or over straits joining international waters because of their dependence upon these narrow waters for both economic and strategic shipping. Maritime powers worry about the right of coastal states to determine what constitutes innocent passage, especially because some of these straits are without alternative routes, for example Hormuz, Tiran and Bab al Mandeb in the Middle East. In a classic work on the subject, Bruel (1947) indicates that straits may have naval and political importance. Strategically and tactically a strait may

"offer a comparatively easy control of the passage of merchant vessels and men of war, respectively for completely or partly barring ... The closing of a strait may be e.g. a part of the defence against a power outside the strait expected to force its way in through the strait. (105)

He adds that in this respect a strait is a strategically important, and at times decisive area.⁽¹⁰⁶⁾ Moreover, full benefit of the naval advantage opened up by straits may necessitate control of its coasts. Bruel points out that although the emergence of air-power has somewhat changed the importance of straits, the development of air attack has not materially reduced the possibility of closing a strait to warships belonging to belligerents.⁽¹⁰⁷⁾ Politically, Bruel indicates that from the earliest historical times straits have drawn conquerors, and political intrigues over straits may continue for centuries. He sees examples of this in situations where the political conditions have prevented a state from occupying its coasts; and in consequence has had to try to control the strait via a weak littoral state. Often, when one of the Great Powers have failed to gain direct control over a strait, it has confined itself to preventing a competitor from gaining dominance.⁽¹⁰⁸⁾

Africa can be thought of as having four so-called peripheral chokepoints - the Suez Canal, Bab al Mandeb, Gibraltar and the Cape in South Africa. Of these, the Red Sea arguably encompasses the most important two: the Suez Canal and Bab al Mandeb. Considerable quantities of Gulf oil pass

through these two narrows to Western consumers. Also, via these water passages large quantities of dry cargo are transported. Moreover, warships benefit from them by shortening the distance between the Mediterranean and the Indian Ocean. maintenance of access to international waterways in the Middle East, specifically the Canal, Turkish Straits, Red Sea and Gulf Straits as well as use of international communication facilities have long been regarded as crucial to American interest.⁽¹⁰⁹⁾ Besides overall American concern about Red Sea strategic waterways, the US has been greatly concerned about Israel's right to use these narrows. Such US interest has been demonstrated in various ways, for instance, in the 1975 US-Israel agreement with regard to passage through Bab al Mandeb and in US designation and implementation of the peace treaty between Egypt and Israel in 1979 following the Camp David agreement in 1978; that agreement guaranteed Israel's right of navigation through the narrow waters in the northern sector of the Red Sea. Moreover, the US has been much concerned not to allow Soviet domination over these chokepoints.

The Strait of Gubal and the Gulf of Suez

The Strait of Gubal forms the entrance to the Gulf of Suez. It has a fairway 10.4km wide at its narrowest point. The Strait controls access to the Gulf of Suez. It is safe for shipping due to the establishment of a traffic separation

Table 4.11

Physical-geographical features of Red Sea gulfs

Name of Gulf	Length (in km)	Width (in km)		Depth (in m)		tidal range (in m)	surface water temp.(celsius)	surface salinity (parts per thousand)		river runoff		
		max	mouth	max	mean			sill	max		min	max
Gulf of Aden	900	335	335	3,328	-	none	2.9	30	25	36.5	36	none
Gulf of Aqaba	180	28	6	1,828	-	462	0.7	26	24	42.0	41	none
Gulf of Suez	325	58	58	82	40-60	none	1.8	28	23	43.0	41	none

Source: The New Encyclopedia Britannica, Vol.8, Encyclopedia Britannica Inc. Helen Benton
Publisher, 1974.

scheme in the 1970s which separates northbound and southbound shipping, otherwise navigation would be difficult due to the presence of so many shoals, reefs and islets. A rectangular zone on the northeast side of the navigable channel is declared as dangerous, being a mining area. The strategic importance of the strait appeared during the October War of 1973 when the Gulf of Suez was blockaded at the Strait of Gubal.⁽¹¹⁰⁾ Tables 4.11 and 4.12 give basic data about Red Sea gulfs and main straits in the Middle East respectively.

Lying in the northwest end of the Red Sea, the Gulf of Suez forms the western arm of the former, and represents one of its principal bays; it is shallow and bordered by a wide coastal plain.⁽¹¹¹⁾ (For the geographical characteristics of the Gulfs of Suez, Aqaba and Aden, see table 4.11.) The coasts are of high lands and characterized by coral reefs, particularly on the eastern side where these reefs extend offshore a considerable distance. On both shores of the Gulf there are oil rigs; therefore caution is required while navigating in the vicinity of these coasts. The Gulf is quite deep throughout its length and to a short distance off the coast.⁽¹¹²⁾

Bell (1973) thinks that Egyptian tolerance of Israeli shipping in the Red Sea was related to Egypt's desire to exploit oil resources on the Gulf of Suez without interruption. However, the Egyptian reconquest of part of western Sinai in October 1973, and the interim peace accord of 1975

Table 4.12Middle East Main Straits used for international navigation

Strait	Sovereignty	Depth (m)	Maximum draft permitted	Length (nm)	Average no. of ships per day
Gibraltar	Spain-Morocco	82-1000	Unlimited	36	140
Dardanelles	Turkey	45-90	Unlimited	31	57
Bosporus	Turkey	70	Unlimited	15	57
Tiran	Egypt- Saudi Arabia	73-183			
Bab al Mandeb	Djibouti-PDRY- YAR-Ethiopia	42 305	Unlimited (main channel)	50	50
Hormuz	Iran-Oman	55-91	Unlimited	100	80

Source: Couper, A. (ed.), The Times Atlas of the Oceans, Times Books Ltd, London, 1983, p.151.

enabled the former to recontrol about 15% of Sinai. This development put much of the eastern coast of the Gulf of Suez, formerly under UN supervision, under Egyptian control.⁽¹¹³⁾ The presence of oil in the Gulf of Suez was expected to blockade the road to peace with Israel. In 1976, and also later in February 1978, Israeli gunboats warned off Amoco ships which were prospecting for oil around the demarcation line off the southern Sinai coast. The US officially protested to Israel about the incident. In November 1977 Israel declared that it had found oil there; consequently a high state of tension was generated in the area. In April 1978 American oil firms were warned by Egypt that they would be barred from operating in the country if they carried out exploratory activities in Israeli occupied Sinai.⁽¹¹⁴⁾ The American sponsored Israeli-Egyptian peace treaty of 1979 enabled Egypt to gain full control over the Gulf of Suez; on the other hand Israel secured the right of passing through it. But still being worried about the freedom of navigation through the Gulf of Suez, Lapidoth (1982) wants the latter to be associated with the legal regime of the Canal and treated as an approach to the latter. In such a development, the Gulf of Suez would include territorial waters and high seas.

The Strait of Tiran and the Gulf of Aqaba

Table 4.12 shows main characteristics of principal

Middle East Straits which include the Strait of Tiran. It is a narrow water passage linking the Gulf of Aqaba, en route to the ports of Eilat or Aqaba (chapter 4). The Strait lies between Ras Nusrani, 27.2km northeast of Ras Muhammad on the southeastern tip of Sinai, and Tiran island on the east. The island lies at the entrance of the Strait which is divided into two passages by reefs lying in its fairway. The Strait is dominated by Sharm al-Sheikh on the southwest. It is 6.4km wide at its narrowest point and full of reefs.⁽¹¹⁵⁾ The Strait is essential to Jordan since it is the country's only outlet to the sea and then to the Indian Ocean and Mediterranean. To Israel, the Strait is vital for Eilat which is crucial to the development of the Negev and is Israel's only access to the Red Sea. In 1967 President Nasser repeated the 1956 strategy of blockading the Israeli entrance through the Strait, installing giant guns at Ras Nasrani. Since those guns fronted the Strait and thus imposed a blockade on the Israeli port of Eilat, Israel responded by occupation of Sinai and thus controlled Sharm al Sheikh.⁽¹¹⁶⁾ During their eleven years occupation, the Israelis established a major base across Naama Bay, at Sharm al Sheikh. From that base Israeli patrol craft maintained regular surveillance in the Red Sea; and controlled access to the Gulf of Aqaba, and the Suez Canal. The Egyptian blockade of the Strait from Sharm al Sheikh in 1967 is seen by Bell (1973) as a symbolic Arab gesture that had nothing to do with tonnage, artillery ranges or magnetic mines.⁽¹¹⁷⁾

After the first Israeli-Arab war of 1948-49 the US

committed itself to safeguard Israel's shipping rights in the Strait. Since 1956 the maritime nations, led by the US, have guaranteed Israel's freedom of passage through the Strait. Moreover, in 1979 and under US auspices the Strait became open to Israel in compliance with the 1979 Israeli-Egyptian peace treaty which stipulated that

"The Strait of Tiran and the Gulf of Aqaba are international waterways to be open to all nations for unimpeded and nonsuspendable freedom of navigation and overflight." (118)

In the memorandum of agreement between the US and Israel attached to the Camp David Accords, the US promised to guarantee Israel's right to overfly and pass through the Strait of Tiran and the Gulf of Aqaba. According to the peace treaty Israel can also use the airfield that it left near Sharm al-Sheikh for commercial purposes. (119)

On 18 May 1981 the UN Security Council declined to authorize a peacekeeping force in Sinai because such authorization would involve the UN in the Israeli-Egyptian peace treaty. (120) Consequently, and in response to President Carter's prior letters to both Begin and Sadat, the US formed the Multinational Force and Observers (MFO), consisting of 2,600 men. The US provided the largest battallion plus observers and logistic support. The other units of the force came from Britain, France, Italy, Australia, New Zealand, Fiji, Colombia and Uruguay. In fact, from the start Israel wanted an American or Western rather than a UN force in Sinai

to monitor peace following the last phase of Israeli withdrawal on 26 April 1982. Sharm al Sheikh has been made the second main base of the force, where a US battallion was stationed. An Italian naval component

"verifies freedom of navigation through the Strait of Tiran and operates minesweepers at the southern end of the peninsula". (121)

Despite its lack of obvious strategic importance to the Soviet Union, unlike Bab al Mandeb, the Strait is considered significant because it has been (and still is) capable of being utilized to create instability which has had repercussions that have gone beyond the littorals of the Strait. For example, there was Soviet support to the Arabs and American/Western backing for Israel during the Israeli-Arab wars of 1956, 1967 and 1973 when the Strait was the spark that ignited conflict, especially in the first two wars.

Entered via the Strait of Tiran, the Gulf of Aqaba stretches out to make the eastern arm of the Red Sea. Geologically it is the continuation southwards of Wadi al Araba, the sandy valley flanked by high mountains south of the Dead Sea. Unlike the Gulf of Suez, its coasts are steep and bordered by narrow plains. (122)

Undisputedly, the location of the Gulf of Aqaba gives it a strategic significance, especially when Israeli-Arab hostility and Israel's threat to the security of the Kingdom of Saudi Arabia are considered. Before the Iranian Islamic

revolution, Israeli-Iranian cooperation enabled Iran to benefit from shipping its oil through the Gulf to Eilat, then by overland to Ashdod, and from there to European markets.⁽¹²³⁾ To the Americans, the intrinsic value of the Gulf of Aqaba is its function of linking both Aqaba and Eilat with the Red Sea and thus with the Indian Ocean. Moreover, the US envisages a potential increase in the importance of the Gulf of Aqaba by the future laying of pipelines (chapter 5.2) by Saudi Arabia, Iraq and other Gulf countries.⁽¹²⁴⁾

The US has pledged support for both parties in relation to their interests in the Strait of Tiran and the Gulf of Aqaba. Such commitment is also embodied in the memorandum, which says:

"The United States will support the parties right to navigation and overflight for access to either country through and over the Strait of Tiran and Gulf of Aqaba pursuant to the Treaty of Peace."
(125)

However, although US participation in the peace process between Israel and Egypt enabled the latter to regain control over its waterways, nevertheless actual Egyptian sovereignty over these assets could be perceived as partial or incomplete since Egypt must first consider Israel's interest rather than that of the Arabs in relation to their conflict with Israel.

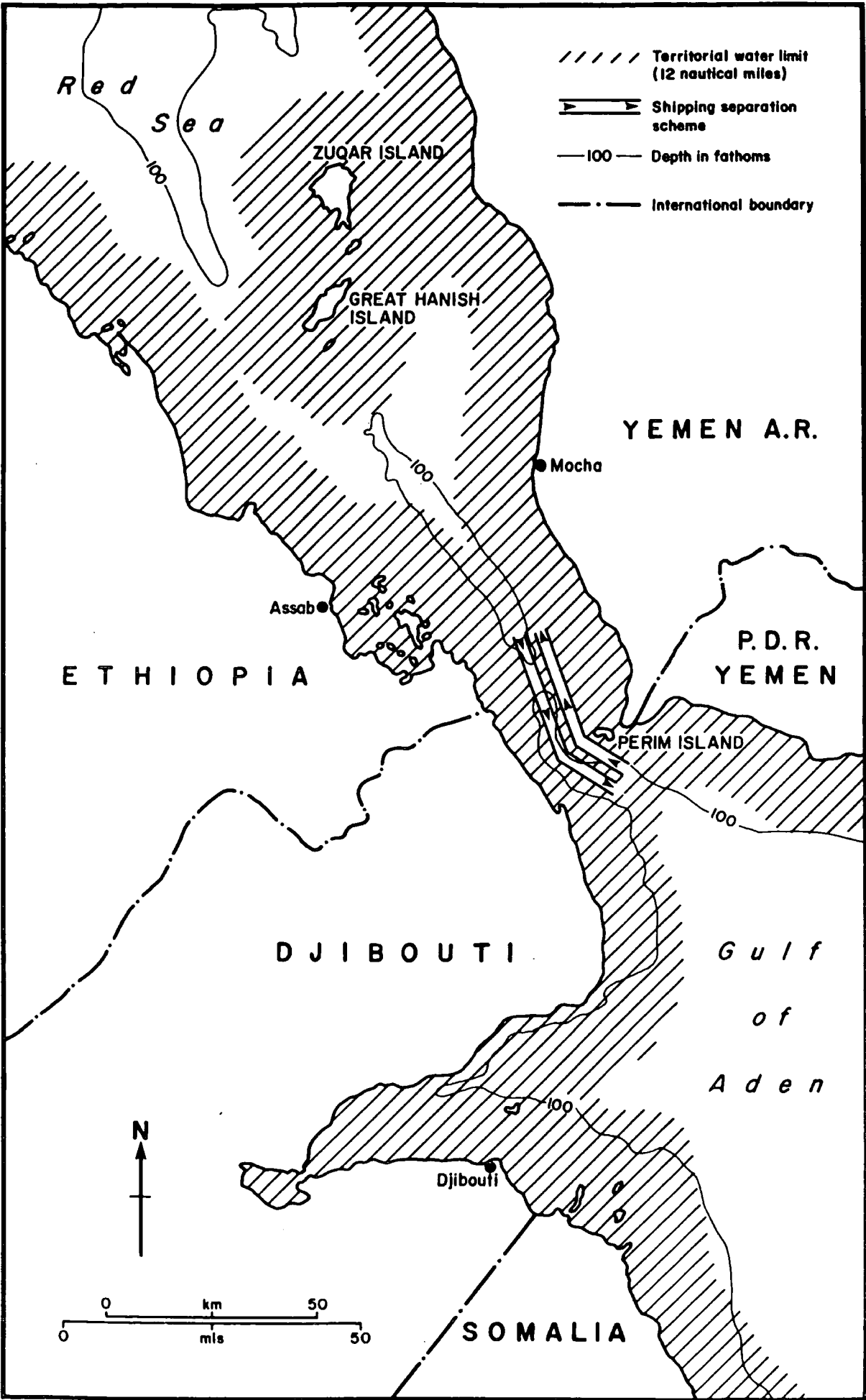


FIG. 4.4 THE STRAIT OF BAB AL MANDEB AND THE TRAFFIC SEPARATION SCHEME OF 1973

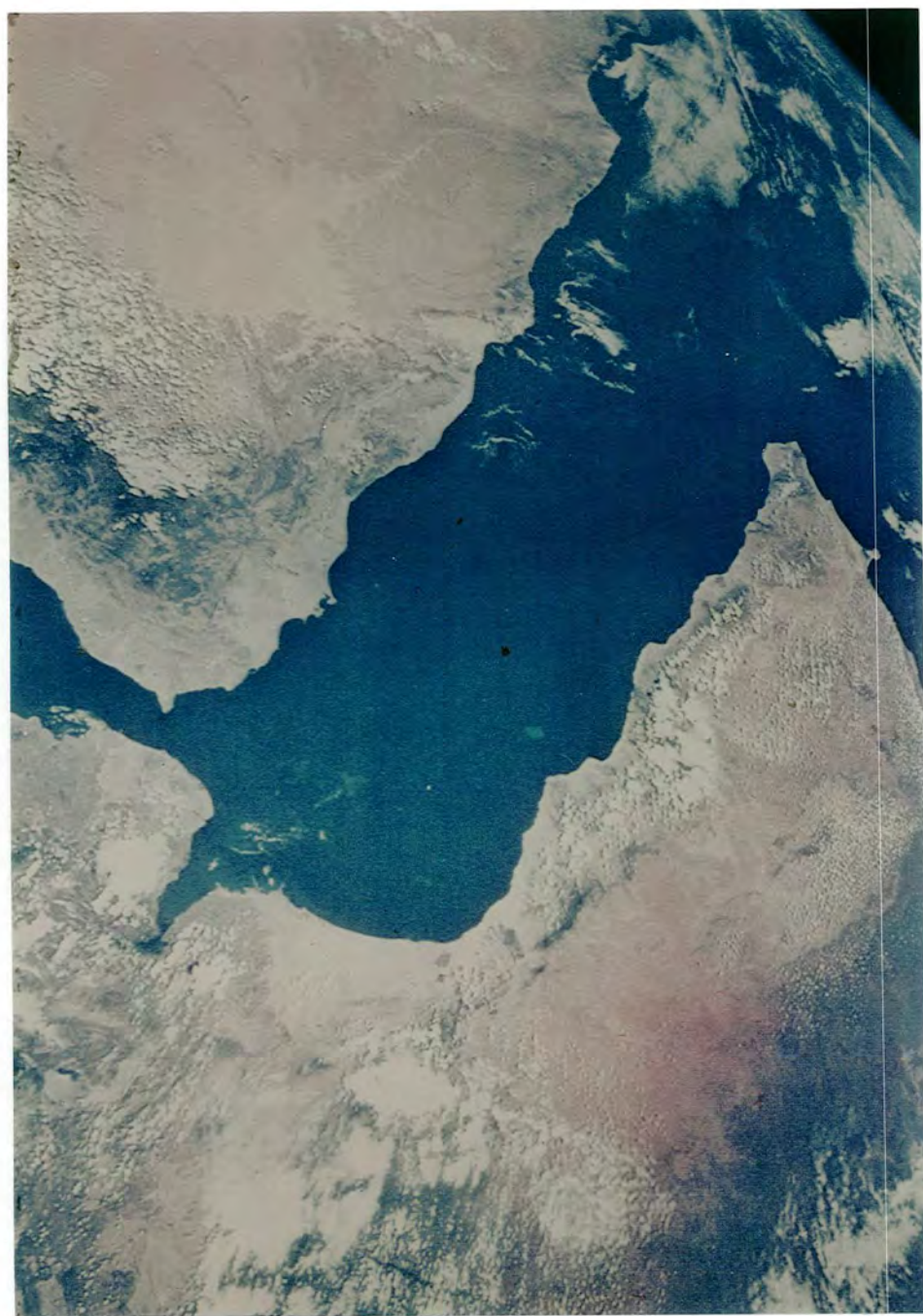
4.3.4 The Strait of Bab al Mandeb

Bab al Mandeb is the narrow waterway that separates southwest Arabia from northeast Africa. It lies between Ras Bab al Mandeb on the east and Ras Siane on the west. Perim Island divides the Strait into eastern and western channels. The latter is the larger (16.8km - 10.5 miles) lying between Perim and the African coast. The width of the smaller channel is between 4.8 and 1.6km. The western passage is deep and navigable except at a bank lying 1.11km south southeast of Pirie Point where the least depth is 11.9m. The area in the vicinity of Perim is prohibited to ships. The smaller passage east of Perim is dangerous because of strong and irregular tidal streams and coral reefs. Several casualties to ships have occurred in this channel.⁽¹²⁶⁾

Both the African and the Asian shores of the Strait are fringed by coral reefs some hundred meters wide. At Ras Bab al Mandeb their width reaches 1500m. The western shores of the Strait are dry and barren plains with many hills attaining heights of a few hundred meters in the interior.⁽¹²⁷⁾ To cut down the risk of collisions and strandings a traffic separation scheme was introduced in November 1973 by the Inter-Governmental Maritime Consultative Organization (IMCO, now IMO) in the main channel. The Scheme divides the passage into northbound and southbound shipping lanes⁽¹²⁸⁾ (figure 4.4).

It is known in Arab sea-faring history that sailors

PLATE 4.1. GEMINI II SATELLITE VIEW OF BAB AL MANDEB (SEPTEMBER
1966) FROM AN ALTITUDE OF 850KM. (APPROXIMATE SCALE:
1:3,500,000)



called Bab al Mandeb the 'Gate of Tears', 'Gate of Affliction', 'Gate of Wailing', or 'Gate of Lamentation' because of the dangers they used to face from reefs, islands or rocks against which their ships were wrecked and many sailors drowned. Therefore sailors' families used to mourn them during their absence. Additional dangers came from pirates who used to hide in the vicinity of the Strait. Another view associates the name Bab al Mandeb with the hot humid climate and bleak topography of the area. It has been suggested that the Americans might also apply the name to the present strategic position of the Strait.⁽¹²⁹⁾

The Strait is flanked on the east by PDR Yemen and Yemen AR; and on the west by Djibouti and Ethiopia (figure 4.2). PDR Yemen's sovereignty over Perim Island gives the country a clear advantage in the control of the Strait. The Americans are not at ease with regard to PDR Yemen and Ethiopia, both of which have strong links with the Soviet Union. In 1973 Bell argued that Aden might mount a blockade of the Strait against Israeli shipping. In those days, if the PDR Yemen had been militarily capable of carrying out the action it would have caused a substantial loss to Israel since its big oil supplies from Iran would have been halted. The Americans believe that Saudi passage in and out of the Red Sea could easily be blocked by unfriendly neighbours.⁽¹³⁰⁾ Tahtinen (1979) indicates that the Marxist states of Ethiopia and PDR Yemen are already in a position to close Bab al Mandeb.⁽¹³¹⁾

However, during the 1970s, Saudi Arabia has challenged PDR Yemen's claim of complete sovereignty over the Strait - according to Ziring (1984), and stressed that Bab al Mandeb is a recognized international waterway, so that "any attempt to block passage through it would be considered an unfriendly act".⁽¹³²⁾ However, despite Saudi opposition to PDR Yemen because of the latter's Marxist ideology, Saudi Arabia would certainly welcome such blockade against Israel in another Israeli-Arab war.⁽¹³³⁾

Since the late 1940s the importance of Bab al Mandeb as one of the most internationally crucial waterways has been widely acknowledged as for example by Bruel.⁽¹³⁴⁾ It plays a major role in world shipping, because when coupled with the Suez Canal, it constitutes the shortest link between Europe and the Far East. While keeping the Canal open renders the Strait important to global trading and military interests, its closure increases the dependence of Red Sea states especially Ethiopia, Yemen AR, Sudan and Jordan on the Strait. Recent American perspectives consider the Strait to be as vital as Hormuz for the following reasons:

- (1) Gulf petroleum ~~designed~~^{destined} for Western Europe uses the Strait;
- (2) the ports of Eilat and Aqaba depend on it;
- (3) because of their shift of naval facilities from Berbera to Aden in 1977-78 and their use of Socotra island, the Soviets find it convenient to have an open Bab al-Mandeb.

According to Anderson and Blake (1982) the USSR has built naval bases on Dahlak islands - as well as in the port of Assab - in Ethiopia;

- (4) the Saudis are engaged in building new port facilities on the Red Sea, notably at Yanbu;
- (5) the Egyptian naval forces have been actively operating in the Red Sea, and Egyptian vessels regularly transit the Strait en route to Oman and the United Arab Emirates (UAE); and
- (6) the French reluctance to leave Djibouti fearing that one of the perennial Horn belligerents, Ethiopia and Somalia, might annex the strategic city state since both, especially Ethiopia, claim Djibouti as part of its territory.⁽¹³⁵⁾

To the former British Ambassador to Somalia, Mr Harry Brind (1983-84) the Horn of Africa may be used to carry out "'surveillance' of the Strait of Bab el Mandel". But practically, he adds, it may not be easy to contemplate a

" situation far short of total war in which it would be possible for one superpower to close the Straits";

Yet in this case the Canal would be closed and this would leave the Straits with no real value.⁽¹³⁶⁾ Nevertheless, since the late 1970s a possible Israeli threat to Bab al Mandeb has been "a headache for Egypt and Saudi Arabia".⁽¹³⁷⁾

The schemes for the widening and deepening of the Suez

Canal could greatly enhance the significance of the Strait. The Strait already stands as a vital chokepoint regarding energy, commercial interests and military traffic, and may be viewed as the most important factor that creates the geopolitics of the southern Red Sea region. To Blake (1982), it is Bab al Mandeb and Hormuz together, that give Southwest Asia and the Horn their geopolitical significance.⁽¹³⁸⁾ Thus, as a vital Red Sea asset, the Strait attracts superpower rivalry.

Despite the difficulty of blocking the deep channel of Bab al Mandeb interference with shipping has taken place. The first such incident occurred on 11 June 1971 when the 'Coral Sea', a Liberian flag ship chartered by Israel, was hit by bazooka rockets fired from a swift patrol boat by Palestinians. The ship was carrying 65,000 tons of Iranian oil and en route for Eilat. The shelling left three holes in the ship but it did not ignite the oil. Both Israeli and American views agree that the attackers were helped by or had the acquiescence of PDR Yemen. The 'Coral Sea' incident brought worldwide attention to the Strait as a critical point of conflict, convincing Israel that it was not enough to control the Strait of Tiran, but it had to operate long-range aircraft to cover distant targets, as well as to acquire a flotilla of long-range missile boats in the Red Sea. Cordesman (1984) indicates that the Strait falls within Israeli fighter range with use of airborne refuelling.⁽¹³⁹⁾

In 1972 a French merchant ship steaming through the strait, was hit by fire from PDR Yemen's tanks positioned on Perim Island. During the Israeli-Arab war of 1973, PDR Yemen declared a blockade of the Strait against ships flying the Israeli flag ships operated by Israeli companies and ships en route to Israel. Aden also declared the Strait to be a 'war zone'. Egyptian forces participated in the blockade which was considered as an alternative geostrategic chokepoint to Tiran, then under Israeli occupation. The Israelis clearly felt the effects of the effective blockade of Eilat from Bab al Mandeb which cut Israel's sea communications to East Africa, Asia and the Far East.⁽¹⁴⁰⁾ During the 1973 war PDR Yemen deployed tanks in the area of Bab al Mandeb to monitor all shipping through the Strait. Moreover, warships of the US Middle East Force were ~~continuously~~ ^{continuously} subjected to a routine check during their north and south transits.⁽¹⁴¹⁾

The fourth attempt to interfere with shipping in the Strait occurred in October 1974 during the Rabat Arab Summit when a lease agreement was allegedly concluded between Egypt and PDR Yemen by which the former were to occupy the strategic island of Perim to interdict shipping to Eilat. However, the authorities in Aden have always denied the existence of such a deal. The event was interpreted by the Israelis as Egyptian interest in preventing a Soviet presence in the vicinity of Bab al Mandeb.⁽¹⁴²⁾ The Egyptian blockade of the Strait indicated a warning to Israel that

"freedom of passage across Tiran Strait does not secure for Israel access to Eilat because its shipping might be closed at Bab el Mandeb to the Indian Ocean". (143)

The rocketing of the 'Coral Sea' demonstrated to the Americans that attacks from the shoreline of PDR Yemen could threaten maritime traffic in the Red Sea. The situation has worsened steadily due to the American conviction that many of the rebel forces in the area have been supplied with explosives, anti-armour rockets and light-guided missiles, besides the presence of Soviet military establishments in Socotra and Kamaran Islands. Moreover, military facilities used by the USSR in Massawa and Assab increase such threats to the area of Bab al Mandeb.⁽¹⁴⁴⁾ Both superpowers are interested in deploying units of their fleets from the Mediterranean to the Indian Ocean. Owing to this need and to the Soviet military presence in the area around Bab al Mandeb, Western scholars consider the Strait "of direct strategic importance to the West".⁽¹⁴⁵⁾ Therefore, there is growing US apprehension about the threat posed by the Strait to Western and Gulf maritime interests associated with the Suez Canal. The Americans feel that the French military presence in Djibouti is some guarantee of continuing Western use of the Bab al Mandeb. However, the US feels the need for more effective policing of the Strait.⁽¹⁴⁶⁾ Therefore, in 1975 the US concluded an agreement with Israel in support of free passage in the Strait. The "Memorandum of Agreement between the Government

of Israel and the United States" stipulates that:

"in accordance with the principle of the freedom of navigation on the high seas and free and unimpeded passage through and over straits connecting international waters, the United States Government regards the Straits of Bab al Mandeb and the Strait of Gibraltar as international waterways. It will support Israel's right to free and unimpeded passage through such straits. Similarly, the United States Government recognizes Israel's right to freedom of flights over the Red Sea and such straits and will support diplomatically the exercise of that right." (147)

Although the Israeli-American accord was associated with the Israeli-Egyptian interim settlement of 1975, the subsequent peace treaty of 1979 did not abrogate it. However, most American-Israeli preoccupations about interference with shipping in Bab al Mandeb emanate from the Yemens' attitude towards Israel and the US. This is why in 1974 Abir indicated Israel's awareness of vulnerability of its shipping in waters under exclusive Arab control; therefore Israel was convinced that arguments for keeping Sharm al-Sheikh in command of Tiran Strait would be invalid if Israel were unable to protect her shipping through to Bab al Mandeb (Abir, 1974). Israel was not the only country to worry about Bab al Mandeb. Ten years later the Americans indicated their preoccupation about the uncertainty of international waters in Bab al Mandeb. (148)

Due to the importance of the Strait to international shipping and its vulnerability especially after the bazooka raid on the Coral Sea Western powers made several attempts to

put Perim Island under some sort of international sovereignty, but all such efforts failed.⁽¹⁴⁹⁾ It has been clear that Bab al Mandeb represents the second major chokepoint in the Red Sea; and it lies in a volatile area characterized by continuous instability and superpower rivalry. Therefore the Strait may be seen as one of the most dangerous troublespots in the world which could ignite war in the region. Direct and indirect American interests in the Strait are clearly considerable, and closure of the Strait may cause great problems to all nations using the Suez Canal.

The Gulf of Aden

The Gulf of Aden constituting the Southern approaches to the Red Sea is much larger than the Gulfs of Suez and Aqaba. It is fronted by PDR Yemen on the north, Somalia on the south and Djibouti on the west. Its geographical limits are defined by Bab al Mandeb on the west and Cape Guardafui on the east.⁽¹⁵⁰⁾ As a deep water basin, the Gulf of Aden is physically linked to the Red Sea via Bab al Mandeb; and thus it connects the Red Sea with the northwest Indian Ocean. It takes its name from the sea port of Aden located between the southern coasts of Arabia and the Horn of Africa, the Gulf is on the shipping lane between the Indian Ocean and the Mediterranean. Aden and Mukalla are the two major ports on the Gulf's northern coast; Djibouti and Berbera are the main ones on its southern shore. To the west it narrows at Bab al

Mandeb and the Gulf of Tadjoura. In parenthesis, it should be noted, however, that the Gulf of Aden has strategic significance quite independent of Red Sea interests. It gives access to the vital Horn of Africa and to the southwest corners of the Arabian peninsula. Both are keys to vast interior hinterlands caught up in cold war superpower competition. More than 100 years ago the Americans recognized the strategic importance of the Gulf of Aden. They thought of building a lighthouse somewhere on one of the adjacent coasts to "add to the security of vessels entering the Gulf of Aden from the Indian Ocean".⁽¹⁵¹⁾ Currently, Soviet military presence in Aden (see below) and Socotra may enhance the importance of the Gulf of Aden in US strategic thinking. If blockaded, the Gulf of Aden would render Bab al Mandeb of no use and the most important effect would be upon the Suez Canal.

4.4 Major Ports

Introduction

Throughout time, seaborne trade in the Middle East has led to the development of ports. The breaching of the Suez Canal in 1869 and the discovery of oil in the Middle East in the 1930s have greatly contributed to the growth of ports in the Red Sea region. Port development in the region is of two kinds: those that serve solely national trade needs such as Jeddah and those that function as transshipment centres,

typified by Djibouti.⁽¹⁵²⁾ As The Times Atlas of the Oceans (1983) indicates, a port's influence will sometimes go beyond the domestic environment or even territorial boundaries.⁽¹⁵³⁾ Port Sudan could exemplify this kind of port because it serves Muslim pilgrims from west and central Africa when they cross the Red Sea to Jeddah on their annual journey to Makka. Djibouti and its vital transit function for Ethiopia is another striking example.

The role played by Aden in linking Great Britain with its vast dominions in the Far East and East Africa during the imperial era is well known. The location of Aden, Djibouti and Berbera on the Gulf of Aden has given these ports a significant strategic value as they front on critical shipping routes both from the Mediterranean and the Cape of Good Hope to the Gulf. Some Suez Canal traffic has been attracted to these ports for victualling and maintenance.

There is no land-locked state in the Red Sea region; access to the sea is enjoyed by all (figure 2.2). Some states such as Saudi Arabia, Egypt and Israel are also endowed with coasts on other waters. In general, the Red Sea is characterized by paucity of good and deep ports. The average distance of over 700km between one port and another may indicate such scarcity.⁽¹⁵⁴⁾ Port activity in the Red Sea was considerably affected by the 1967 closure of the Suez Canal. For example, before the closure Aden and Djibouti were ranked fourth and sixth in the world for intensity of

Table 4.13

Red Sea principal ports: draught, number of berths, and tanker terminals#

Port	Draught	No. of berths	Tanker terminals
Aden	11.9m*	13	✓
Aqaba	10.1m*	11	✓
Assab	10.4m	11	✓
Berbera	9.8m	NA	✓
Djibouti	11m	13*	✓
Eilat	12.3m	5	✓
Hodeidah	7.9m	7	✓
Jeddah	14.0m*	44	✓
Massawa	8.85m	6*	✓
Port Sudan	11.28m	18	✓
Suez	11.28m	13	✓
Yanbu	18m	9	✓

Source: Lloyd's of London Press Ltd, 1984, Ports of the World, London, 1984, pp.18, 24, 28, 29, 59, 66, 314, 316, 353, 382, 386. 416.

* From: the Hydrographer of the Navy, Red Sea and Gulf of Aden Pilot, Taunton, England, 1980, 12th ed, pp.13, 136, 230.

NA Not available

Additional port information is in Appendix

traffic.⁽¹⁵⁵⁾ After the closure they lost their positions and even after the re-opening of the Canal, they could not regain their previous significance, due to the shift of the Cape route. A brief survey of 12 major ports in the region will follow. Table 4.13 shows draughts, number of berths and oil terminals in these principal ports; and appendix two gives detailed information about the kind of exports and imports handled by these ports, as well as facilities found in them.

4.4.2 Ports

Suez

The port of Suez is located at the southern end of the Canal. It can accommodate four ships at a time but passenger vessels take priority, and are allowed to stay alongside for 24 hours. The port has a free zone and it is an administrative centre. There are seven concrete jetties used by tankers of about 18,000dwt. There are six pipelines in operation and the port can handle all kinds of oil products.⁽¹⁵⁶⁾ However, due to Egypt's concentration of port development on its Mediterranean coast, Port Suez has only 2,000m of quays. However, it underwent harbour expansion, costing \$23m, completed in 1980.⁽¹⁵⁷⁾ The largest vessel that the port can accommodate is 228m long. The city and the port are connected to the main railway system; Suez is linked to Ismailia with a motor road which also connects Port Said with Cairo. Port

Suez is connected to Berenice and Port Sudan, 1,104km to the south, via a motorway running along the western shores of the Gulf of Suez and the Red Sea.⁽¹⁵⁸⁾

Port Sudan

Apart from the River Nile, Port Sudan is Sudan's vital outlet to the sea. It lies about 730km north east of Khartoum. In 1900 Port Sudan replaced Sawakin, 65km to the south, as the main port of the country. Besides the recently built roadway (1980), the Port is connected to Khartoum by a narrow gauge railway; it has an international airport. Its population was 120,000 in 1977.⁽¹⁵⁹⁾ Besides its vital role in Sudan's economyⁱⁿ handling more than 80% of Sudan's foreign trade, the port provides an important cultural service to Muslims, not only from Sudan, but from other parts of Africa, especially Nigeria, during their pilgrimage to Makka. The Hajj season is an occasion of economic and social activity for the port. Moreover, Port Sudan is a transit port for Uganda, Chad and Zaire.

The port's harbour has a good entrance, 278m wide, free from hazards and protected from all directions; but there is a remarkable rapid drop in depth, from 73.2m to 25.6m at the entrance. Container ships and oil tankers are handled. The largest vessel to be accommodated by the port is 11.28m deep and 277m long.⁽¹⁶⁰⁾ With American assistance, Port Sudan is undergoing a large development programme, to be completed in

1985, this includes a new ro/ro berth and enhanced grain handling capacity. The latter project, clearly important when one considers the famine disasters in Sudan and neighbouring Ethiopia and Chad, is an upgrading of existing conveyors and elevators.⁽¹⁶¹⁾ Owing to the discovery of oil in western and Southern Sudan, a project to develop a complementary container port and oil terminals will be carried out at New Sawakin Port, north of old Sawakin.⁽¹⁶²⁾ The scheme will also alleviate the burden on Port Sudan. New Sawakin is expected to be operational in 1986. Plans to improve facilities at Old Sawakin to cater for transit traffic have been considered.

Massaws

Ethiopia's major port of Massawa is located on the Eritrean coast about 55km east of Asmara, the provincial capital. Almost the same distance separates the port from the Dahlak islands. Thus, the location of the port is strategic with regard to Asmara, while proximity to Dahlak archipelago could be advantageous. The harbour is well protected and enclosed by a chain of islands. The maximum size of vessel accommodated by the port is of 8.85m draught and 180m length. A project for the construction of a ship repair yard has been started. The port is connected to Asmara by railway and, to Addis Ababa by road. Ethiopia's naval base as well as its naval academy are in Massawa.⁽¹⁶³⁾

In 1953 the US entered into a 25 year agreement with

Haile
Emperor Selassie by which the former established the Kagnaw communication station at Asmara. Two years after the overthrow of the Emperor in 1974 and the Marxist revolution, the US dismantled the station with a view to developing the former British base at Diego Garcia in the Indian Ocean. In 1978 the Eritrean rebels were able to cut communications between Asmara and Massawa, and made great efforts to capture the latter, but they were unsuccessful and were forced by the Ethiopian regime to abandon all the towns they had seized. According to The Times Atlas of the Oceans (1983) Soviet warships took part in defending the port. (164)

Assab

Assab, like Hodeidah, Aden, Djibouti and Massawa, is one of the important ports near the southern entrance of the Red Sea. Lying on the southern extremity of the Eritrean coast, Assab is Ethiopia's second major port, handling most of the country's trade. Ethiopia's only oil refinery is located at Assab; and the port is free from hazards and sandbanks, and it has three large tanker terminals. (165)

Port development programmes include extensive widening of the port area and plans for building a ro/ro berth. In 1982 Assab received 494 ships and handled 1,494,548 tons as imports and 555,884 tons as exports. It is connected with Addis Ababa and Asmara by road, but a railway line to connect Assab with Addis has been under study by British

consultants.⁽¹⁶⁶⁾

Apart from its commanding position, 50km from Bab al Mandeb, the port is in the close vicinity of the strategic islands of Fatma and Halib, which may make it more important than Djibouti with regard to the security of Bab al Mandeb. Lapidoth (1982) states that in 1979 the Ethiopian regime was able to keep Assab under its control despite strong Eritrean resistance.⁽¹⁶⁷⁾

Djibouti

Located about 100km only from Bab al Mandeb, the port of Djibouti enjoys an enormously important position. Since its annexation by France in 1884, Djibouti has continued to represent a French strategic 'toehold' in Africa. In 1897 a French-Ethiopian agreement was signed to make Djibouti "the official outlet for Ethiopian commerce", and in 1917 the Addis Ababa-Djibouti railway linked the two cities, and thus Djibouti became the chief port for transit trade to and from Ethiopia.⁽¹⁶⁸⁾ A new container terminal is scheduled for completion by 1984-85; the main objective being to facilitate transshipment to the Red Sea, Arabian Gulf, East Africa, the Far East, Europe and the United States. The project is financed by Saudi, Kuwaiti and Western financiers. In 1982, 920 ships called at Djibouti, which handled in the same year 298,869 tons of imports and 27,469 tons as exports and transits.⁽¹⁶⁹⁾ During the process of Djibouti's independence,

France deployed 18 warships (including two aircraft carriers) off the port to guarantee peaceful voting on the referendum about independence and to protect French nationals if withdrawal was needed. (170)

The city state of Djibouti is still garrisoned by 5,000 French troops despite the independence in 1977 of the former Territory of Afars and Issas. The reason resides in the strategic value of the port and the perennial Ethiopian-Somali claims to the territory. France, which also maintains a naval base in the port, invested 11m francs in port development there. (171) The Americans are very much concerned about the future of this important port. At the time of Djibouti's independence, the Americans perceived the Soviets as pursuing, through Somalia:

"the seizure of the highly strategic port of Djibouti as soon as the French leave". (172)

It is the location of the port on one side of Bab al Mandeb, joining the Gulf of Aden and eventually the Indian Ocean which matters to the United States. Consequently, apart from the threat to Ethiopia, control of the port by Somalia would

"represent the fact that Soviet-supported South Yemen stands on the other side of the strait spells its wider significance". (173)

The admission of Djibouti into the Arab League in September 1975 resulted in its denying Israeli traffic the use of the port. Salama (1980) maintains that in the late 1970s Saudi

Arabia played an important role by convincing Djibouti to cease availing civilian and military facilities to the Israeli navy which had been using the port.⁽¹⁷⁴⁾ The US makes

"from time to time routine air or sea calls using commercial facilities".⁽¹⁷⁵⁾

Two events have greatly affected the activity of the port: the closure of the Suez Canal in 1967, and the Ethiopian-Somali war over Ogaden in 1977-78. Before the Canal's 1967 closure, the port used to handle 1,000 vessels annually and it was the fifth container port of the world. After closure it was overtaken by Jeddah for the maintenance and supply of ships. However, even after the reopening of the Canal, the port has not regained its importance. Due to the Ogaden war which led to the cutting of the railway, the port's traffic has been reduced by about 15%.⁽¹⁷⁶⁾

Berbera

Situated on the head of an inlet on the southern shores of the Gulf of Aden, Berbera is about 320km from both Bab al Mandeb and Aden. It affords a good anchorage, except in strong winds. The 320m long wharf of the newly constructed port of Berbera enables the accommodation of cargo vessels of up to 12,000dwt. Vessels carrying containers can be served in Berbera. Shell operates two oil berths for vessels of up to 164.6m long and 5.49 to 8.54m deep. Berbera has a

maintenance workshop and a 40m long maintenance quay, and can handle minor repairs. Due to Somalia's lack of good roads and railways, coastal shipping forms an important element in domestic transport. Berbera is linked by road with Hargeisa, 160km southwest and with Mogadishu, the capital. The port maintains regular sea links with Aden.⁽¹⁷⁷⁾ After Somalia's abrogation of The Treaty of Friendship with Moscow and the expulsion of Soviet and Cuban advisers in 1977, Soviet use of facilities at Berbera came to an end. On 22 August 1980 the US signed an agreement with Somalia for the use of the port.⁽¹⁷⁸⁾

Aden

Aden, like Djibouti, is located on the southern approaches to the Red Sea. It is the capital and chief port of PDR Yemen. Aden's location on the crossroads of shipping lanes bestows on it an enormous strategic significance. Between 1839 and 1966 the port was known as the Colony of Aden under the British Crown; it became one of the key British naval bases on a sea route once considered of vital significance to Great Britain. The breaching of the Canal and the discovery of oil in the Persian Gulf enabled the port to assume great political and commercial importance. Before the closure of the Canal, the port's dues represented the major source of revenue for the country. The closure of the Canal hit the port very hard. In 1966 the port handled

6,000 ships; in 1968 only 1,200 vessels called. Even after the reopening of the Suez Canal, Aden has not recovered its previous level of activity and it probably never will.⁽¹⁷⁹⁾ The shift to the Cape route and the laying of pipelines to the Red Sea account for this. Fish is the major export commodity. Aden is a transshipment and entrepot functioning as a centre of distribution to and from neighbouring territories.

Aden has an inner and outer harbour. The outer harbour has a good anchorage which can serve a large number of ships. Aden's oil harbour which serves the port's refinery can accommodate four tankers of up to 65,000 tons dwt. The inner harbour contains 13 oil bunkering berths. Cargo is served by five buoy berths with depths of 10.97m, and another five with depths ranging between 5.18 to 8.53m.⁽¹⁸⁰⁾ The port has undergone an \$18m improvement project funded by the World Bank and Arab Fund for Economic and Social Development (AFESD). In November 1977 Japan built a new floating dry dock with a capacity of 12,000 tons. In 1982 British consultants completed plans for a further \$8m development project. Five new deep water berths with 770m of quayage, as well as other facilities, are to be built in the port and scheduled for completion by 1985. Also, a new floating dock with lifting capacity of 4,500 tons is said to be in operation. In 1980 the port received 2,436 vessels and handled 7,773,297 tons of cargo.⁽¹⁸¹⁾

It seems clear that Aden is becoming less attractive than Djibouti and Jeddah for the latter's more competitive bunkering, cheaper port dues and higher level of trade.⁽¹⁸²⁾ In 1981 Aden's huge refinery handled 3 to 4m tons of crude oil. With BP's assistance, its capacity is being upgraded. The activity of the complex has been enhanced by supplies coming from Kuwait and India, both of which have lost refining services in the northern Gulf since 1980 due to the Iraq-Iran war.⁽¹⁸³⁾ In current geopolitics, the Americans perceive Aden as of high strategic significance; moreover they are very concerned about the port becoming a major foothold for Soviet naval and air fleets, availing Moscow an "operational extension in a crucial area of the Indian Ocean".⁽¹⁸⁴⁾ This may explain why Washington has become keen to acquire facilities at Berbera, and Masira island (Oman).

Hodeidah

In the Red Sea and Gulf of Aden Pilot (1980) Ahmedi, rather than Hodeidah, is considered as Yemen AR's main port, but most maritime literature regards Hodeidah as the major port of the country. In 1974 the port handled 601,000 tons. Despite Soviet reconstruction projects in 1962, by 1978 Hodeidah was again badly congested, and further development started. In 1980 and 1984 another development expansion programme of \$73m was completed and new berths were constructed.⁽¹⁸⁵⁾ As in the case of Aden in the early 1970s

the Americans expressed their concern that Hodeidah was under Soviet influence. A surface road of 552km connects Hodeidah to Sanaa (160km), Jizan (216km) and to Ta'iz (176km), south south-east. (186)

Jeddah

Jeddah Islamic port is the principal port of Saudi Arabia and the pilgrim port catering for Makka which lies 27km south west inland. The port owes its growth to the presence of the Muslim shrines of Makka and al Madina, rather than to the development of commerce. Jeddah receives Muslim pilgrims from all over the world. According to Prince Abdullah al Faisal al-Turki al-Saud (1984) the number of annual pilgrims reached 2.5m; a very considerable number of whom come by sea. (187) After the discovery of substantial amounts of oil in Saudi Arabia, pilgrimage was no longer the major source of foreign revenue. In order to cope with the increasing demands of oil production and export, port facilities had to be expanded and improved considerably.

Expansion of the port since the late 1970s has enabled it to handle 6m tons of cargo in comparison with 1.2m tons in 1973. Further expansions in the early 1980s will make Jeddah the largest port on the Red Sea. Jeddah's ship repair yard, inaugurated in 1982, has two floating docks that can handle ships loaded up to 45,000dwt and 16,000dwt respectively; they are described as the first of their kind in the Red Sea. The

port authority hopes to secure 95% of the repair operations for ships plying the Red Sea. Moreover, other multi-purpose terminals and pilgrim/passenger terminal are under way. At the Northern Extension a refrigerated warehouse space of 156,000 was scheduled for completion by 1984; also a live-stock terminal as well as food and fruit terminals were planned to open in 1982; and two new berths of 400m and 100m length, designed specially for the handling of livestock, will be constructed.⁽¹⁸⁸⁾ In 1981 Jeddah handled 4,758 ships carrying 15.4m tons of imported cargo, 180,000 passengers, and 3,254,453 head of imported livestock; it also handled 615,507 TEU's (Ports of the World, 1984). In 1982 the number of ships which called at the port increased to 5,572 loaded with 19.5m tons of cargo from abroad. The port has an associated iron and steel mill and an oil refinery which has been operating since the 1960s. In 1983, the refinery throughput was more than 33.4m barrels of crude oil, a rise of 9.55% over the figure for 1982 (Arab News, 1984). The complex handled 335 oil tankers and loaded 341 tankers with oil products in 1982. The capacity of Jeddah's desalination plant, 323,000 cum/day is the largest in the Red Sea region and second only in size to that in Al Khubar (Saudi Arabia), on the eastern coast of the Arabian peninsula. Military Technology (January, 1984) indicates that both Jeddah and Yanbu industrial complexes are areas where the Saudi navy is based.⁽¹⁸⁹⁾ On 21 August 1984 King Fahad inaugurated King

Faisal's Naval base at Jeddah, saying that

"... the Kingdom's boundaries extend far more than 1,000km along the Red Sea ... the Kingdom ... will not allow violation of its waters from sea, land, or space". (190)

The base is the second to King Abdul Aziz Naval base at Al-Jubail. Prince Sultan, Second Deputy to the Prime Minister, and Minister of Defence, declared that the two bases are

"built on the basis of Islam, and for peace ... and they constitute support to every Muslim Arab". (191)

The Commander of the base explained its major function as

"the defence of security and integrity of the Kingdom's land, territorial waters ... and wealth". (192)

Yanbu

Yanbu is the second largest port on the Hijaz coast. It is located 360km north of Jeddah and 160km west of al-Madina. While Jeddah is the port of Makka, Yanbu is the port of Al Madina. It is divided into two: Yanbu commercial port and Yanbu industrial port which lies about 29km south-east of the former, and is used for landing construction material, particularly cement. Impressive oil-based industrial development has been established at Yanbu; and this has led to the rapid growth of the city as an industrial port. Yanbu was chosen as the site for significantly vital industrial

development for a number of reasons:

- (1) it provides an alternative outlet to the Gulf for oil, gas and industrial products;
- (2) it contributes to the economic development and diversification of the western region;
- (3) it provides a shorter distance for tankers and NGL carriers to the Western world and north-east Africa;
- (4) it had an existing commercial harbour in the old city of Yanbu (about 129km away from the industrial city).⁽¹⁹³⁾

The port's facilities include bulk and floating cement terminals. The East-West crude pipeline (chapter 5) is served by an offshore terminal. Three berths are used as loading points for the crude oil coming through this line.

Along the 25km coastline of the port, the construction of a special purpose harbour to serve the new industrial plants, is going on. It has been reported that the construction of a new industrial port, known as King Fahd Port at Madinat Yanbu Al-Sinaiyah (Yanbu Industrial City) has been commissioned. The port lacks railway facilities. In 1981 it handled 922,411 tons of imported cargo.⁽¹⁹⁴⁾

Transportation of oil and gas from the Eastern Province constitutes the basis of Yanbu's industry. Yanbu's population was expected to reach 42,000 by December 1984 and is forecasted to reach 59,000 by 1991.⁽¹⁹⁵⁾ Yanbu industrial complex is intended to avoid undue concentration of the Kingdom's heavy

industry in the Eastern Province. Already some major industrial projects have been set up: a crude oil export terminal supplied by the East-West trans-peninsular pipeline, and a natural gas liquid (NGL) terminal. In 1982 the NGL fractionation plants produced the first liquified petroleum gas. Yanbu may be the world's biggest cement terminal. The Saudis want this development to lessen the burden on Jeddah and to receive the huge quantities of building materials and industrial equipment imported by the Kingdom.⁽¹⁹⁶⁾ According to Blissenbach and Nawab (1982) an anticipated production of about 10 tons/day of concentrate from Red Sea metalliferous mud would also be transported to the metallurgical pilot plant at Yanbu for processing. The process would be the first mineral resource project in the Yanbu industrial complex.⁽¹⁹⁷⁾ The 175,000 b/d Lube oil refinery built by Petromine at Yanbu began production in June 1983.⁽¹⁹⁸⁾ Although Yanbu's industrial projects have been criticised by several people, according to Prince Abdullah al-Saud (1984), as "white elephants which are not economically viable" the Saudis are confident that the projects will prove the critics wrong.⁽¹⁹⁹⁾ Table 4.14 shows major industries in the port. Finally, the Petroleum Economist (December, 1981) indicates that despite official Saudi denial of plans for a giant underground storage facility for oil on the Red Sea, Saudi Arabia admitted that its storage capacity at Yanbu would be increased to around 50m barrels.⁽²⁰⁰⁾

Regarding vulnerability to sabotage or attack, Cordesman (1984) holds the view that Yanbu "is a far more secure area than any port or facility in the Gulf". However, Yanbu could be more vulnerable than Gulf ports if the American defence specialist considered Israel's threat. Moreover, it is located in the vicinity of persistent local conflicts (chapter 7) and Soviet manoeuvres. Yanbu is flanked by sources of threat from the north and south, but it is the northern source that is feared most. However, it is the question of internal or regional instability that may threaten the safety of such industrial development, not only at Yanbu but in the region as a whole. However, Saudi and American views are identical in considering Israeli threat to Yanbu. Both William Quandt (1982), former US National Security Advisor and Prince Abdulla al-Saud (1984), agree that Israel constitutes the chief source of threat to the Yanbu industrial development. Prince Abdullah al-Faisal al-Turki al Saud (1984) indicates that bombing in a single day could destroy all these schemes and buildings. He emphasizes that

"For anybody who lives in the Red Sea region, the greatest threat to all these projects is Israel."

The Saudis feel that the Israeli threat may be a pressure card to obtain access to the Kingdom's energy resources, especially to such a relatively close area as Yanbu. The Prince maintains that:

Table 4.14

Primary industries in Yanbu

Plant	Capacity	Status	Operational start-up date
Crude oil terminal	1,600,000 b/d	O	July 1981
Domestic refinery	170,000 b/d	C	July 1983
NGL plant	270,000 b/d	O	October 1982
Export refinery	250,000 b/d	C	1984 ^a
Lube oil refinery	5,000 b/d	D	
Petrochemicals (1)	450,000 t/y	C	1984 ^a
Metal processing plant ^b	-	D	
Metal processing plant ^b	-	D	

Note: a) Forecast dates

b) Each plant is undertaken by a different company

Abbreviations: C = Under construction

D = Deferred

O = Operational

b/d = barrels per day

t/y = tons per year

Source: Prince Abdullah al-Faisal al-Turki al-Saud (1984), 'Saudi Development Plans in the Red Sea Region' in Farid, A (ed), The Red Sea, Croom Helm, London and Sydney, in association with the Arab Research Centre, London, St Martin's Press, N.Y., 1984, p.44.

"The Israelis ask why they should import refined petroleum products from Rotterdam when they can get them cheaper from Yanbu." (202)

Quandt (1982) points out that Israeli air and naval units pose a threat to the port of Yanbu which constitutes an attractive target for Israel in case the latter is drawn into direct confrontation with the Kingdom. (203)

Aqaba

Being the only Jordanian outlet to the Sea, the port of Aqaba is vital to the Kingdom. To Fisher (1971) the emergence of Aqaba and Eilat, is a result of the geographical impacts of the protracted Israeli-Arab conflict and the port's modern developments are

"in response to recent exigencies of political geography". (204)

Situated at the northern extremity of the Gulf of Aqaba, the port is about 8km east of the port of Eilat. Aqaba was established after World War One and grew as Trans-Jordan's most significant commercial outlet. Before its establishment, all Jordanian trade was carried across Palestine to the Mediterranean. (205) The Lebanese civil war of 1975 which closed Beirut, and the reopening of the Suez Canal in 1975 increased the importance of Aqaba. However, this also led to

serious congestion and delays. Phosphate is the major commodity export by volume. In 1966 Aqaba handled 612,000 tons of goods, and in 1974 this jumped to 1,116,000 tons, about 95% of which was phosphate.⁽²⁰⁶⁾ In 1979 the number of ships calling at Aqaba reached 1,238, and in the first nine months of 1982 it handled 6.7m tons of cargo.

Aqaba has sufficient lighters to handle cargo, and it can serve ships of up to 20,000dwt and 9.76m draught.⁽²⁰⁸⁾ Import of some petroleum products and edible oils can be carried through pipes to tanks in the vicinity of the port, also these pipelines provide bunkers to vessels. Among the development programmes, floating berths will be replaced by permanent container terminals to handle vessels with 15m draught.⁽²⁰⁹⁾

Apart from the oil terminal and refinery, the 1976-80 plan was intended to make major investment in phosphate handling. Consequently, three major schemes took place at Aqaba:

- (1) an expansion of the port;
- (2) an increase in phosphate storage capacity; and
- (3) additional rail links to the port.

Moreover, potash from the Dead Sea began to be exported via Aqaba in 1982.⁽²¹⁰⁾ Threatened by mounting attacks on shipping posed by the Gulf war since 1980, Arab oil exporters, especially Iraq, have been much attracted to Aqaba as a viable alternative to dangerous Gulf exits. Projects for

oil pipelines from Iraq as well as from other Gulf states to Aqaba have been considered (chapter 5.2). Between 1982 and 1983 the port's exports increased by 24%.⁽²¹¹⁾

Considerable Iraqi dependence on the port since 1981 to handle large amounts of cargo has benefited Jordan with greatly needed transit tolls. Of the 6.7m tons of cargo handled by the port in the first nine months of 1982, about 60% including weapons, was bound for Iraq.⁽²¹²⁾ Aqaba is seen to

"remain an important sea port, and will always be a second line of defence for shipping, depending on where trouble should be in the Middle East".⁽²¹³⁾

Regular flights from the Aqaba airport connect it with Amman, the capital, 248km to the north; it is also linked with the ~~former~~ by an all-weather road; this road diverges 160km to the south east to connect Aqaba with Tabuk in Saudi Arabia, where the Saudis have a major military base. Also Aqaba is joined to Yanbu by a coastal road.⁽²¹⁴⁾ However, it is the Gulf war that increased the importance of Aqaba, which may thrive further after the laying of the proposed Iraqi oil pipeline. The port's position opposite Israel could threaten its existence. The expected Iraqi pipeline could increase such potential threat (chapter 5).

Eilat

Located on the northwestern side of the head of the Gulf

of Aqaba, Eilat is one of Israel's three major ports. It is Israel's only exit to the Red Sea, East Africa and the Far East. Israeli interests in Eilat and the Gulf of Aqaba preoccupied the minds of leading Zionists fifteen years earlier than the creation of the Zionist State in Palestine. Such interest was voiced in 1933 by David Ben Gurion, who later became the first Israeli Prime Minister. He emphasized that it would not be possible for Israel to possess Eilat only

"... if we could first succeed in establishing ourselves along the entire gulf of the Red Sea". (215)

This clearly reflects a long-rooted Zionist appetite for expansion in Arab lands and waters, of which the Red Sea region is the first and most important, as Israel's successive behaviour has consistently shown. Preoccupation with control over the Gulf of Aqaba, basically inclusion of Jordanian, Egyptian and Saudi land~~s~~ and water~~s~~, needs no comment. Preparations took place to make Eilat a principal port immediately after the 1956 war. Associated with this step was the Israeli positioning of the "Red Sea squadron" which consisted of two frigates of Israel's navy and the laying of the Eilat-Haifa pipeline (chapter 5). During the eight-year closure of the Suez Canal, Eilat thrived and thus enabled Israel to exploit its location as a land bridge between the Red Sea and the Mediterranean, especially for

carrying Iranian oil.

Eilat has an open roadstead besides good and safe anchorage at a depth of 36.06m. Apart from a berth equipped with bulk elevator, the port has berthage facilities for general cargo and containers. Owing to Israel's concentration on port development in its Mediterranean ports, Eilat does not seem to have much importance with regard to general cargo, except in serving the desert and thinly inhabited Negev region.⁽²¹⁷⁾ Emphasizing the importance of Eilat to the development of the Negev region, Ben Gurion (quoted in Lucas, 1984) said:

"... I am sure that the dream of a big international port city ... will be achieved. It will carry the produce of hundreds of thousands of inhabitants of the Negev, agricultural, industrial and mineral products ... to the four corners of Asia." (218)

Lucas (1984) argues that the reopening of the Suez Canal in 1975 affected Eilat because the port could not maintain the growing importance it had gained following the closure of the Canal. He adds that for economic reasons there is an increasing preference for the use of the canal route rather than Eilat. However, Ziring (1984) argues differently with regard to the significance of Eilat. He sees the port as vital to Israel. He adds that the large maritime vessels, especially oil tankers, prefer using Eilat's facilities rather than transiting the Canal to the Mediterranean ports.⁽²¹⁹⁾

The Egyptian blockade of the Gulf of Aqaba restricted the growth of settlement in Eilat, according to Pounds (1972), who adds that between 1956 and 1967 the presence of the UN peace keeping force ensured the freedom of "ingress to and egress from" Eilat. Owing to the Israeli occupation of Sinai and control of entrance to the Gulf of Aqaba after the 1967 war, the port witnessed a greater expansion to its facilities.⁽²²⁰⁾ Abir (1974) shows that Eilat and the increasingly significant oil pipeline between the former and Haifa (as well as its terminal) have been considered by the Arab Press necessary for hitting "Israel's soft underbelly" by blockading Sharm al Sheikh; an attitude which Israel considered a threat to its existence and an act of war.⁽²²¹⁾ Some Israeli strategists indicate that the elimination of Israel's need to have a military presence in the Red Sea following the Iranian cessation of oil supplies to Israel in 1979 could make Eilat "suffer in wartime because of its proximity to Jordan and Saudi Arabia".⁽²²²⁾

Shipping to Israel is a vital factor both in its economy and communications with other countries. As a result of the closing of the land frontiers to Israel by the Arabs, shipping has become very important in the transportation of supplies and in providing passages for immigrants. Israel's access to the Indian Ocean has stimulated the continuous growth of its merchant fleet.⁽²²³⁾ Israel's problem with Bab al Mandeb is seen by Anderson and Blake (1982) as "a serious

blow" to Israel, because enormous amounts of coal from Australia and South ~~America~~^{Africa} destined for Israel's new power station near Caesarea would not be able to pass through Bab al Mandeb. Plans for the transportation of coal via the Cape route have been considered, although this means a longer journey, especially for Australian supplies. (224)

In 1975 the number of ships calling at Eilat reached 110, freight loading was 497,000 tons and unloading 325,000 tons. In 1982, Eilat handled 1,100,000 tons of cargo and 30,000 twenty foot equivalent units (TEUs). The largest vessel the port can accommodate is a general cargo ship of 300m length, 12.3m draught, and 70,000dwt capacity. (225) The peace treaty with Israel obliged Egypt to sell Israel some 2m tons of oil annually which is handled by Eilat. Besides petroleum, Eilat exports chemicals and machinery and handles raw materials and hides as imports. Because transportation between Eilat and Israel's major areas of production and population is costly, Lucas (1984) anticipates Eilat's future activities will be stagnant. (226)

4.5 Conclusion

The foregoing chapter has clearly shown that Red Sea waterways and ports are both internationally and locally important. US shipping interests (especially strategic ones, and those concerning Israel) there are considerable. The Suez Canal is the most outstanding among Red Sea strategic

water passages. Its importance to the US has come late, and has been associated with the interests of Israel, and Western allies, as well as becoming a catalyst of war, and a card of pressure for peace, as it was used by the US between 1975-1979. Although US attaining of Egyptian permission regarding passage of American nuclear-powered vessels through the Canal could enhance American ability to enforce its naval capability in either theatre: the Indian Ocean or the Mediterranean, such development could be dangerous especially in an area used as a battleground between Israel and the Arabs, not least between the superpowers. Moreover, such development could threaten the safety of other coastal states; it may also endanger their marine resources if accidents occur to such ships, therefore the application of the 1982 Convention on the Law of the Sea (chapter 6.) could create an issue of conflict between the US and some Red Sea littorals over this matter.

Being preoccupied by guaranteeing freedom of navigation in the Red Sea, especially to Israel, the US showed considerable interest in Bab al Mandeb by what has been mentioned in Congressional discussions and by the entering of the US with Israel into a memorandum in which the former supported the latter's right of passage through the Strait. Moreover, the growing Soviet presence around the Strait, and the development of radicalism in that area, symbolized by the tripartite pact of 1981 (chapter 7) increased US concerns

Table 4.15

Visits by US Mideast^{t Force} to Red Sea ports: January 1974 to December 1976

Port	1974	1975	1976	Days visited 1974-1976
Aqaba	5	3	8	16
Assab	20	19	16	55
Djibouti	33	29	30	92
Hodeidah	3	5	2	10
Jeddah	4	6	24	34
Massawa	28	4	-	32
Port Sudan	-	2	5	7
Totals	93	68	85	321

Source: US Arms policies in the Persian Gulf and the Red Sea areas: past, present and future. Report of a Staff Survey Mission to Ethiopia, Iran, and the Arabian Peninsula. pursuant to H. Res. 313: 95th Congress, 1st Session December, 1977. Printed for the use of the Committee on International Relations. US Government Printing Office, Washington, 1977, p.106.

about Bab al Mandeb. Finally the Strait must be important to the US and its NATO allies with respect to the movement of naval units between the Mediterranean and the Indian Ocean.

The Strait of Tiran and the Gulf of Aqaba have shown that they can also become a catalyst in igniting war. US interest in them has been demonstrated by the inclusion in the Israeli-Egyptian peace treaty of 1979 of Israel's right to pass through them; also such concern has been reflected in the choice of Sharm al Sheikh as a stationing point for the multinational Peace Monitoring Force organized by the US, following the Israeli evacuation of Sinai on 26 April 1982. American interest in Red Sea ports can be seen in the visits made by MIDEASTFOR to some of these ports during the 1970s. Tables 4.15 and 4.16 show such visits by US and USSR's naval ships respectively. Moreover, the US search for bases, such as at Berbera in 1980 highlights such pursuit. Some Red Sea ports, especially those belonging to US friends or allies, for instance Aqaba and Yanbu, have become increasingly vital outlets for energy supplies to the West following threats (chapter 6) to oil transportation through the Strait of Hormuz as a result of the tanker war in the Gulf. Prospects for an increase in the capacity and importance of those ports could be described as high if they witness more development, especially with regard to berthing, oil terminals and bulk handling facilities. Also such prospects are high because instability in the Gulf and the Soviet presence in

Table 4.16Soviet naval operational ship visits to Red Sea States: 1967-1976*

Country	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	Days visited 1967-76
Ethiopia	-	-	1	-	-	-	-	-	-	-	1
PDRY	-	-	4	5	15	7	14	37	34	18	134
Somalia	-	-	3	7	22	20	42	61	54	75	283
Sudan	-	-	-	1	-	-	-	-	-	-	1
YAR	-	-	1	2	-	-	-	1	2	3	9
Totals			8	15	37	27	56	99	90	96	428

Source: Remnek, R. 'Soviet Policy in the Horn of Africa: the decision to intervene' in Donaldson, R. (ed.), The Soviet Union in the Third World: Successes and Failures, Westview Press, Colorado, USA, 1981, p.130.

Afghanistan, southern Arabia and the Horn of Africa could increase vulnerability of oil transportation via Hormuz; and thus trans-peninsula pipelines to ports on the Red Sea could considerably enhance the capacity of those ports.

Finally, security of US shipping interest has been an important American concern. Threats against such interests will be discussed in chapter 6.

Chapter Four

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CHAPTER 5ENERGY SUPPLY AND TRANSPORTATION5.1 Energy Supply

The aim of this chapter is to discuss US oil interests in the Middle East and the role of the Red Sea in the movement of these supplies to Western consumers, particularly the USA. The closely associated question of oil supplies to the US allies, especially Western Europe and Japan are discussed. The Red Sea region is an oil-dry area, apart from the Gulf of Suez and Sinai (chapter 3). This region is, however, crucially linked to the oil 'heartland' of the Gulf region which dominates US interests. Prior to the closure of the Suez Canal in 1967, almost all Western oil supplies were shipped through the convenient Red Sea-Suez Canal route. The closure of the Canal in 1967 turned it into a cul-de-sac, regarding navigation to and from the Mediterranean. Thereafter most shipping, especially oil transportation was shifted to the Cape routes. The reopening of the Canal in 1975 enabled the Red Sea to regain some of its significance, especially after the opening of the SUMED pipeline in 1977 and the execution of the first phase of the Canal's development project which increased the number of tankers traversing the Red Sea (chapters 4 and 5). The opening of the East-West Saudi Pipeline in 1981 further boosted Canal oil traffic.

The importance of the Red Sea as a strategic artery for

Table 5.1

Middle East oil discoveries: cumulative production and remaining reserves (billions of barrels)

Country	Cumulative production as of Jan.1 1983	Estimated proven reserves as of Jan. 1st				Total discoveries: (reserves + cum. prodn.) as of Jan.1st 1984
		1950	1965	1980	1984	
Bahrain	0.7	0.3	0.3	0.2	0.2	0.9
Iran	31.8	13.0	38.0	58.0	51.0	82.8
Iraq	16.6	8.7	25.0	31.0	43.0	59.6
Kuwait*	23.0	15.0	69.3	68.5	66.8	89.8
Oman	1.9	-	0.5	2.4	2.8	4.7
Qatar	3.6	1.0	3.5	3.8	3.3	6.9
Saudi Arabia*	50.1	10.0	66.8	166.5	168.9	219.0
U.A.E.	8.6	-	7.7	29.4	32.3	40.9
Total Gulf area	136.3	48.0	211.1	359.8	368.3	504.6
Egypt	3.0	0.2	1.5	3.1	3.5	6.5
Total Middle East	139.3	48.2	212.6	362.9	371.8	511.1
United States	136.9	26.2	34.5	26.5	27.3	164.2
Total world	515.0	95.0	341.3	641.6	669.3	1,184.3

* Includes one half of Neutral Zone

Source: Exxon Background Series: Middle East Oil and Gas, December 1984, Public Affairs Department, Exxon Corporation, New York, 1984, p.3.

oil transportation is expected to rise after the completion of the current and proposed pipelines from the Gulf to the Red Sea, as a strategy to avoid the dangers to shipping via the Strait of Hormuz, following the Iraq-Iran tanker war since 1982. The development of pipelines to the Red Sea may also encourage the execution of the suspended second phase of the Canal's development, a step which could attract even the very large crude carriers (VLCC's) to the Red Sea route. Another significant factor linking the Red Sea to the issue of US oil interests is the presence of the Kingdom of Saudi Arabia. Having the longest coastline on the Red Sea, the greatest oil reserves in the world (table 5.1) and being second in production to the Soviet Union, Saudi Arabia is by far the most important state with which the US maintains "an evolving special relationship".⁽¹⁾ Saudi Arabian plans to shift the petroleum industry and transportation to the Red Sea region is an important development that has already involved Western and especially American interests. Thus, the Kingdom's rich oil resources, its concern about the Red Sea route, its longstanding relationship with the US, which is deeply concerned about the uninterrupted flow of oil from the Gulf, especially from Saudi Arabia, all constitute sound links between the Red Sea and the discussion of oil supply.

Egypt is the other Red Sea State which significantly highlights this connection. Once one of the foremost leading powers in the Arab world prior to President Sadat's initiative

and its resultant peace treaty with Israel in 1979, Egypt initiated the 1973 Israeli-Arab war which caused the most serious experienced oil crisis ever in 1973-74 following the Arab decision to cut oil supplies to the US and other supporters of Israel. The denial of Israel's right of navigation through the Red Sea because of the issue of Palestine was an important factor in the breakout of wars between Israel and Egypt in 1956 and 1967. Thus, the fact that Egypt was the key state in waging the war which led to the disruption of oil supply to the US, and that Saudi Arabia was the central power that effected the embargo, also provide additional logic in the relationship between the Red Sea and the issue of oil supply.

5.1.1 The US and Middle Eastern Oil

Apart from narrow commercial interests, the American international oil industry raises three major issues with which each US administration has been and remains preoccupied. These matters are:

- (1) the security of international oil supplies both to the US and her allies;
- (2) the economic strength of all friendly states; and
- (3) 'selling' its own way of doing things for ideological reasons, in which oil is an important weapon (Odell, 1983).⁽²⁾

It hardly needs mentioning that the vast oil resources of the

Table 5.2

Production, consumption, and imports of US oil and its percentage contribution to United States energy 1973-1995

	1973	1974	1978	1979	1980	1981	1982	1983	P r o j e c t i o n		
									1985	1990	1995
Total energy production	62.43	61.23	61.23	63.85	65.50	65.18	63.85	61.02	68.50	76.30	85.80
of which oil	19.50	18.58	18.43	18.10	18.25	20.44	20.50	20.53	17.00	18.00	19.30
percent of total	31	30	31	30	28	31	32	33	25	24	22
Total energy consumption	74.61	72.76	78.18	78.91	75.91	74.12	70.82	70.45	81.30	85.70	92.90
of which oil	34.84	33.46	37.96	37.12	34.20	32.11	30.23	29.98	33.90	32.00	31.80
percent of total	47	46	49	47	45	43	42	42	42	37	34
Total imports of oil and oil products	12.98	12.66	17.06	16.93	13.50	11.42	9.05	8.94	14.70	12.00	10.60
Percentage of total US oil consumption	37.30	37.80	44.90	45.60	39.50	35.50	29.90	29.80	43	37.50	33.30
Percentage of US energy consumption	17.40	17.40	21.80	21.50	17.80	15.40	12.70	12.70	18.10	14.00	11.40

* One 'quad' equivalent to 172 million barrels of crude oil.

Source: Based on Petroleum Economist, Vol. L. no.1, May 1982, p.178, and Petroleum Economist, Vol.LI, No.6 June 1984, p.231.

Middle East are the main drive behind American interest and involvement in the region. As long as petroleum continues to be the veritable lifeblood of Western economies, US perception of interests in the Middle East must also be categorically related to the oil needs of the US and its Western and Japanese allies. Since the early 1960s the importance of the Middle East as a source of oil supply to the US has increased. The emergence of the US in the late 1960s and 1970s as a large-scale purchaser of Middle Eastern oil, constitutes "the most significant change in the pattern of crude oil demand in the decade".⁽³⁾ Between 1973 and 1983 the US was the largest consumer of oil among its European and Japanese allies. From 1974 to 1979 American purchases from the Middle East showed a steady increase, registering a 400% increase in 1979 compared with 1974. US emergence as a major buyer of Middle East crude oil indicates to McLachlan (1981) that the US was not only

"unable to provide other areas with supplies in the normal commercial circumstances or during periods of world oil crisis, but was also unable to meet regional demand from internal sources".⁽⁴⁾

While American demand for overseas oil has sharply risen, domestic production continued to decline until 1980 (table 5.1). In 1985 American oil production is expected to fall by 8% from what it was in 1983 (table 5.2). The real US preoccupation with oil from the Middle East, however, resides in the significance of these resources to America's Western and Japanese allies, who cannot do without them (tables 5.3

Table 5.3 Non-Communist world oil consumptions, 1973-1983

	1973	1975	1977	1979	1981	1982	1983	Percentage of total non-communist consumption	
								1973	1983
a) Industrialised States									
USA	16.4	15.3	17.2	17.1	15.1	14.4	14.3	35.4	32.9
Canada	1.6	1.6	1.6	1.7	1.6	1.4	1.3	3.5	3.0
Western Europe	13.9	12.4	13.1	13.9	12.0	11.4	11.1	30.0	25.5
Australia	0.7	0.7	0.7	0.7	0.7	0.7	0.7	1.5	1.6
Japan	4.9	4.5	5.0	5.1	4.4	4.2	4.2	10.6	9.7
Total	37.5	34.5	37.6	38.6	33.8	32.1	31.5	81.0	72.7
b) Non-industrialised areas									
Latin America	2.9	3.2	3.6	4.1	4.2	4.1	4.0	6.3	9.3
Africa and the Middle East	1.5	1.8	2.3	2.7	3.0	3.2	3.3	3.2	7.5
Indian sub-continent	0.6	0.6	0.7	0.8	0.9	0.9	0.9	1.3	2.1
Other Asia	1.2	1.3	1.7	1.9	2.0	2.0	2.1	2.6	4.8
Total	6.2	6.9	8.3	9.5	10.1	10.2	10.3	13.4	23.7
Total a) and b)	43.7	41.4	45.9	48.1	43.9	42.3	41.8	94.4	96.4
c) Bunkers	2.6	2.2	2.3	2.2	2.0	1.7	1.6	5.6	3.6
Total	46.3	43.6	48.2	50.3	45.9	44.0	43.4	100.0	100.0

Source: Petroleum Economist, Vol.LI, No.8, August 1984, p.285.

Table 5.4

Oil imports of the United States, Western Europe and Japan from the Middle East* and North Africa# and their percentage to total imports, 1983 ('000 b/d)

Area	Total imports	Imports from the Middle East	% of Middle East imports to total	Imports from North Africa	% of North African imports to total
USA	4,990	575	11.52	280	5.61
Western Europe	8,665	3,415	39.41	1,675	19.33
Japan	4,145	2,750	66.35	40	1.00
Total	17,800	6,740	37.87	1,995	11.21

Source: Based on BP Statistical Review of World Energy, June 1984. Briefing Services, Government and Public Affairs Department, The British Petroleum Company PLC, London, 1984, p.17.

* Middle East: Arabian Peninsula, Iran, Iraq, Israel, Jordan, Lebanon, and Syria.

North Africa: States on the north coast of Africa.

and 5.4). In his 1977 report, Senator Jackson emphasizes the clear American determination to hold on to the oil resources of the region because he could not think of a reliable alternative for Western supplies. He anticipates exceptionally strong competition from the whole industrial world to obtain Middle East oil. He stated that:

"For the United States, access to secure supplies of foreign oil has become an increasingly vital policy goal with the decline of domestic production and our growing dependence on oil imports ... A decade from now, the entire industrial world will be competing for available Middle East supply on an unprecedented scale ... No substitute for the U.S. presence in the Middle East oil primarily to help assure security of supplies to allies and secondarily to help assure that its own import needs are met." (5)

However, there are voices in the House of Representatives, like Frederick Richmond (1982) who do not see real American need for the Middle East oil because the US obtain its own supplies from Venezuela, Canada, Indonesia and Alaska. He emphasizes that the enormous oil resources of the Middle East

"really are of no practical value to the United States. They are of practical value to our allies in Europe, and of practical value to our very, very rich, selfish allies in the Far East". (6)

Since the US can do well without Middle East supplies, while its allies cannot, therefore

"why do the Americans pay the entire bill for the defence of the Middle East?" (7)

asks representative Richmond. However, contrary to the House's

perception, the Department of State believes that one day Middle East resources could be of more direct relevance to US needs. According to Arab News (Sept. 1984), a Congressional report indicates that US dependence on overseas petroleum will increasingly grow in the 1990s despite conservation measures and that the major US Alaskan and other State oil resources are being

"drained at a faster rate than at which new ones can be discovered or developed, a trend expected to continue into the next decade". (8)

Production from Alaska is estimated to reach 2.5m b/d in 1985, falling to 2.0m b/d by 1990 (Fesharaki and Issak, 1983).

Despite current availability of oil and seemingly easy access to it, American petroleum sources say that Western consumers will continue to depend on OPEC oil until the year 2000. These sources add that although slumps in demand eclipsed the power of OPEC, this power will

"gradually strengthen as oil consumption picks up and some of the non-OPEC production passes its peak". (9)

Meanwhile, within OPEC the centre of power will shift toward the Middle East and especially to the Arab States of the Gulf because the export potential of other countries will end. The Gulf Cooperation Council (GCC) is expected to rival OPEC as the dominant force in the oil trade.⁽¹⁰⁾ Table 5.1. shows a steady growth in the oil reserves of the Gulf, and a 26.4%

Table 5.5 US oil consumption, production and imports, 1973-1983

Year	Oil consumption	Oil production	Net imports	Net imports from OPEC	Net imports from OAPEC
1973	17.00	11.00	6.00	3.00	0.90
1974	16.40	10.50	5.90	3.30	0.75
1975	16.00	10.00	6.00	3.60	1.40
1976	17.00	9.80	7.20	5.10	2.40
1977	18.40	9.80	8.60	6.20	3.20
1978	18.30	10.30	8.00	5.70	3.00
1979	18.20	10.20	8.00	5.60	3.00
1980	16.50	10.20	6.30	4.30	2.50
1981	15.60	10.20	5.40	3.30	1.80
1982	15.00	10.25	4.75	2.10	0.80
1983*	14.75	10.25	4.99	-	0.58
1984*	15.15	10.36	5.38	-	0.62

Sources: 1) 1973-1982 adapted from MEED, 25 November, 1983, p.33.

2) BP Statistical Review, June 1984, and June 1985, pp.8, 4 and 16. The British Petroleum Co. PLC, London.

decline in American reserves between 1965 and 1984. Interestingly, such a fall was indicated exactly forty years ago by the then Secretary of the Navy, James Forrestal, in his memorandum to Secretary of State, Byrnes, dated 1 August 1945:

"Because of my firm conviction that within the next twenty-five years the United States is going to be faced with very sharply declining oil reserves".(11)

Regardless of the oil glut since the early 1980s, and the drop in world demand by 10m b/d in 1984 compared with 1979, economic recovery in the US has caused a gradual rise in American demand for overseas oil. In 1984 US oil imports increased by over 13% over those of 1982 (table 5.4). Moreover, in 1983 the US, Western Europe and Japan imported 37.87% of their total collective consumption; needless to say most of this petroleum was used by Western Europe and Japan, two areas consuming some 91.50% of their total supplies from the Middle East in 1983. In March 1985 the Petroleum Economist indicated that because of falling US domestic oil production in the period 1985-1995 the US will experience a

"renewed - and possibly heavy - dependence upon the Middle East ... for the 1990s". (12)

Not only the US, but Britain, according to Renner (1984) may need to import oil in the 1990s because its potential is also limited. He states that

"It seems likely that Britain will once again become

a net importer of petroleum in the 1990s (if not earlier)." (13)

Regarding the effect of oil on US military interests, Mangold (1978) argues that prior to the 1970s, American interests in the Middle East were defined in mainly politico-strategic terms. Before 1973 oil was essentially a commercial-financial objective of the US business and economic interests. Both Mangold (1978) and Reich (1981) agree that the situation has drastically changed since the October war of 1973 when oil assumed a new role in American perspective by being

"a significant component of the US national interest affecting American political and strategic interests and calculation of policy". (14)

In fact, Noyes (1982) shows that since 1945 the US military have indicated the critical relations between oil and US military strength. The military have often considered that obtaining adequate amounts of oil is a problem to the US. The Secretary of the Navy, James Forrestal, quoted in Noyes (1982), stated this:

"... and because oil and all of its by-products are the foundation of the ability to fight a modern war, I consider this to be one of the most important problems of the government". (15)

In early 1978 Secretary of Defence, Harold Brown, linked the security of the US and the oil resources of the Middle East. He said:

"Because the area is the world's greatest source of oil, the security of the Middle East and the Persian Gulf cannot be separated from our security and that of NATO and our allies in Asia ... We intend to safeguard the production of oil and its transportation to consumer nations without interference by hostile powers." (16)

Also to the American military lobby any discussion of US interests in the Gulf must first admit that:

"energy policy is an integral part to security policy and cannot be considered in isolation". (17)

In 1980, Joseph Sisco argued that in the decade of the 1980s, the US confronts three fundamental challenges, at the top of which will be the inescapable need to slow down unacceptable American dependence on overseas oil which, has mortgaged both American security and economy. The other two worries are rising Soviet military strength and rapid political change in the developing world,⁽¹⁸⁾ both of which could threaten easy access to oil by the West.

In sum, considering the continuously declining energy resources in the West, and the tremendous reserves of the Middle East, the area will continue to be the vital source of energy for the West, and despite the current oil glut, a surge of Western demand especially American is expected. The Red Sea, with its developing oil transportation infrastructure, could play a leading role in this respect.

Table 5.6•Arab oil cutbacks in November 1973 (hundred barrels per day)

State	Production September 1973	Production after cutbacks	Change in volume	Percentage of cutbacks
Saudi Arabia	85,499	58,494	27,005	31.5
Kuwait	35,063	24,788	10,275	29.0
Iraq	21,115	19,560	1,555	7.3
Abu Dhabi	13,980	10,485	3,495	25.0
Qatar	6,086	4,584	1,502	25.0
Libya	22,861	17,146	5,715	25.0
Algeria	10,500	7,875	2,625	25.0
Other States: (Egypt, Syria, Dubai and Oman)	11,000	8,250	2,750	25.0
Total	206,104	151,182	54,922	26.7

Source: Arab Oil and Gas Journal (16 Dec. 1973), reproduced in
Al-Sowayegh, A. (1984), Arab Petro-Politics, Croom Helm,
 London and Canberra, 1984, p.131.

5.1.2 The 1973 Arab Oil Embargo

Following the Israeli-Arab war of 1973, the Arabs were furious about US backing of Israel and resentful of the domination of American oil companies. Perceiving growing American dependence on their oil, the Arabs decided to use it as a weapon to pressurise the United States to withdraw its support for Israel. They accordingly declared a complete boycott on oil supplies to the US. Table 5.6 shows that the Arabs removed 5.5m b/d from the oil market, equivalent to 20% of total Arab production in September 1973, 10% of the non-Communist world's output, and 12% of OPEC supplies. The embargo resulted in panic buying and price hikes (Merip Reports 5/74). World oil prices shot up over 160%, for Arab light reference crude, from \$3.5 a barrel to \$9.22 (table 5.7).⁽¹⁹⁾

Three events eventually led to the lifting of the boycott on 18 March 1974 at Tripoli:

- (1) US success in making progress in disengagement on the Suez front;
- (2) The announcement of the resumption of diplomatic relations between Egypt and the US on 28 February 1974; and
- (3) Kissinger's initial steps for disengagement on the Golan Heights.⁽²⁰⁾

Economically, by mid March 1974, the US economy outlook was described as 'grim indeed'. Energy shortages caused by the embargo reached crisis proportions. Some of the harsh consequences experienced by the US included:

Table 5.7Changes in price of crude oil:1970-1983

Date	US Dollars per barrel	% change
1 Jan. 1970	1.39	-
16 Oct. 1973	3.65	+ 162.60
1 Jan. 1974	8.32	+ 130.00
1 Nov. 1974	10.46	+ 25.72
1 July 1977	12.70	+ 21.41
1 Nov. 1979	24.00*	+ 89.00
1 Jan. 1980	26.00	+ 8.33
1 April 1980	28.00	+ 7.70
1 Aug. 1980	30.00	+ 7.14
1 Nov. 1980	32.00	+ 6.70
1 Oct. 1981	34.00	+ 6.30
1 Feb. 1983	30.00	- 11.80
1 March 1983	29.00	- 3.33

* From the spring of 1979 until October 1981 OPEC did not have a unified pricing system.

Source: Exxon Background Series, Middle East Oil and Gas, December 1984, Public Affairs Department, Exxon Corporation, New York, 1984, p.27.

- (1) the laying off of 345,000 workers from services and industries such as auto industry and airlines, in addition to thousands made redundant from hotels, motels and restaurants;
- (2) the 15% gasoline shortfall would have reached 20% had the embargo not been lifted.⁽²¹⁾

However, the effect of the embargo was even more severe in Western Europe than in the US whose economy arguably enjoyed 'a temporary strengthening'. Oil companies, for example, as well as oil producers, gained a sharp increase in revenues.⁽²²⁾

Politically, the embargo initiated the first and most important challenge to the Western stance on the Israeli-Arab conflict. Because the repercussions of the embargo were particularly hard on Western Europe and Japan, the latter began to appease the Arabs and to reassert their good intentions with them and "to disavow any association with US support for Israel".⁽²³⁾ Thus, the embargo created a cleavage in the Western alliance. In response, in 1974 all members of The Organization for Economic Cooperation and Development (OECD), except France, decided for the first time to act jointly in forming the International Energy Agency to design measures to alleviate the effects of future crises. The French opposed the idea of establishing such an organization because such a body means submission to American leadership (Al Sowayegh, 1981). The French Foreign Minister, Michael Jobert, indicated that:

"energy issues have been a cover to conceal the main reason of the meeting, which is the American 'political drive to restrict the freedom of manoeuvre of Western European states and Japan, and to keep them under American control". (24)

However, the French effort to undermine the effectiveness of the meeting was overcome by President Nixon's proposal that the US might:

"cut back its military establishment in Europe should the European states prove uncooperative during the energy crisis". (25)

Therefore, the delegates agreed to implement Kissinger's programme of energy measures, regardless of French opposition.

Despite some fruitful achievements attained by the IEA,

"The political urge to pursue national self-interest proved stronger than the will to cooperate." (26)

Such an attitude proved true in 1979, following Iranian cutbacks in production, and the ensuing fear of a serious shortfall which:

"led to a wild scramble for oil, with companies making every effort to pile up stocks while governments rushed to negotiate bilateral deals with individual exporting countries". (27)

Western allies' different perceptions of what is the biggest threat to the security of the Middle East presented the political split in the alliance. While Western Europe, Japan and the Gulf States chorus the Israeli-Arab conflict, of which the Palestinian tragedy represents the cornerstone as the

major source of threat the US proclaims the USSR. The American report, The Critical Link: energy and national security in the 1980s, which discloses these differences, suspects that Western Europe and Japan have begun to forge connections with the Middle East oil suppliers, separate from the consumer alliance, the IEA. The report warns that such a development could:

"weaken the united front that the USA would like to present to OPEC". (28)

Feeling that the countries in proximity to the Middle East energy resources seek to develop unilateral links there, the report urges the US to establish a special link with the oil producers in the western hemisphere - Venezuela and Mexico,

"if they can agree over the US policy in Central America". (29)

Odell (1983) argues that regardless of the difficulties created for the US by the boycott American support to Israel was never really shaken during this period.⁽³⁰⁾ Other sources point out that Arab demand for a complete Israeli evacuation from Arab territories were not met. The lifting of the embargo as a result of disengagement between Israeli and Egyptian forces split the Arab states along familiar radical-reactionary lines (Merip Reports, 5/74).⁽³¹⁾ A different view on the matter comes from Bryson (1977); he considers the Arab utilization of oil as a diplomatic tool to have been successful because the US exerted strong pressure on Israel to

reach a ceasefire and disengagement on the Suez front.⁽³²⁾
 Quoted in Al Sowayegh (1981), Maull refers to what he considers as:

"... Arab producers strong leverage vis-a-vis Europe, Japan, and - to some extent - the United States".⁽³³⁾

However, to Odell (1983) the Israeli-Egyptian peace treaty of 1979 represents an opening up of the possibility of a long term settlement to the Middle East conflict; a solution which is still held by the US as critical to the longer-term future of oil supplies from the area.⁽³⁴⁾

Bryson (1977) believes that to:

"effect a policy based on real and vital interests associated with oil, trade, the Suez Canal link, transportation and communication routes, and stability",

the US needs a reassessment of its policy towards Israel in order to sustain sound relations with the Middle East countries.⁽³⁵⁾ The prospect that the Gulf oil states will one day compete with OPEC as the most important source of oil production

"should impress upon the Foreign Offices of the Western powers the need for an urgent review of policy vis-a-vis the Middle East. Washington, in particular, needs to ponder anew the paradox inherent in a situation which combines heavy economic dependence on Arab oil with a policy of such open diplomatic support for Israel".⁽³⁶⁾

In fact, the time has passed when only economic factors determine the international oil market. Therefore, Ebinger (1981) contends that the industrialized world, particularly the US,

"can no longer afford to disregard the vital interests of the major oil producers". (37)

5.1.3 The Military Option

The relationship between Middle Eastern oil and US national security was clearly established during World War Two. Quoted in Noyes (1982) Malone notes that:

"in June 1943, as the combat zones widened in the Pacific and the armed forces of the United States and her allies expended fuel at a prodigious, unprecedented rate ... Arabia took on a new significance to the Western democracies". (38)

By the late 1940s there was a conviction in the US that the Americans, the Europeans, and the Japanese would have to get hold of Middle East oil in order to survive.⁽³⁹⁾ Sixteen years before the 1973-74 oil embargo, America's willingness to use force to obtain access to Middle East oil was voiced by President Eisenhower. Late in 1957, in reaction to the objection of his advisor, Dillon Anderson, not to use force to get Middle Eastern oil, the President said:

"I think you have, in the analysis presented in the letter, proved that should a crisis arise threatening to cut the Western world off from Middle East oil, we would *have* (Eisenhower's italics) to use force." (40)

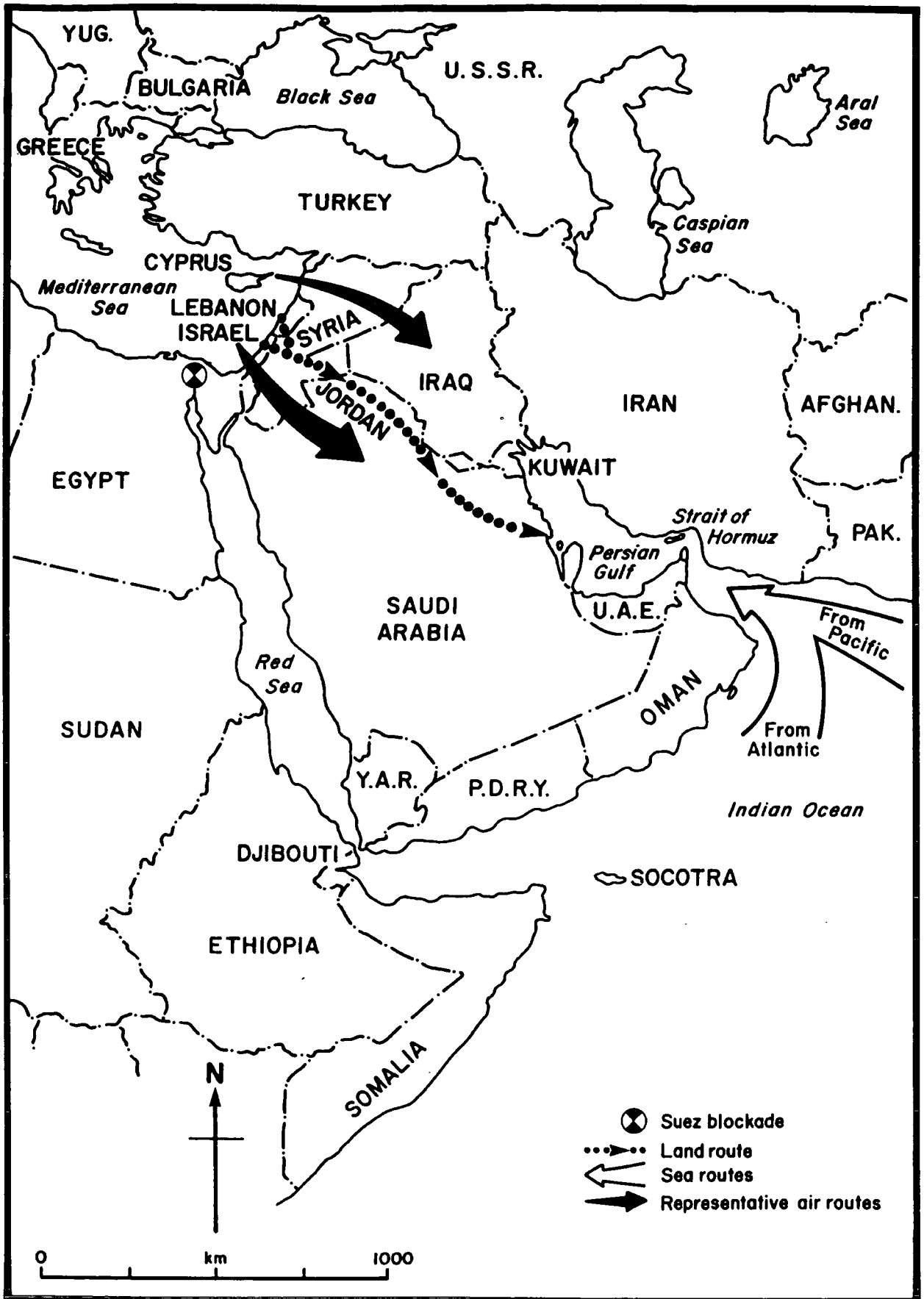


FIG. 5.1 A UNITED STATES VIEW OF EMERGENCY APPROACHES TO THE GULF REGION (FROM SENATE HEARINGS, 1980)

Military occupation of Gulf oilfields was one of the policy options considered by the US following the Arab imposition of an oil boycott in 1973-74.⁽⁴¹⁾ Figure 5.1 shows a US view of emergency approaches to the Gulf; the northern Red Sea region appears very crucial. When Schlesinger, then ~~Minister~~ ^{Secretary} of Defence, threatened on 7 January 1974 that the US might 'use force' to end the embargo, an immediate response came from Kuwait's Foreign Minister, Sheikh Sabah Ahmed al-Sabah, who declared that:

"Kuwait would sabotage its installations should any foreign power utilize force to obtain oil". (42)

In 1975 a congressional study on the military option concluded that American military intervention in the Gulf would combine high costs with high risks (Bryson, 1977), and while indications of success are poor, the punishment for failure would be "enormous".⁽⁴³⁾ The assassination of King Faisal on 25 March 1975 - according to Murarka (1980), deepened Saudi distrust of the Americans who did not conceal their intentions that if the former disregards for US interests continued, they "would not hesitate to occupy Saudi oilfields by force".⁽⁴⁴⁾ The author adds that the Saudis are aware that:

"it is not their welfare which Washington is concerned about but the welfare of their oil wells". (45)

On 30 August 1979 President Carter said that he "would not let any Arab country blackmail our nation" into a Middle East peace settlement;⁽⁴⁶⁾ meaning that he would not give in if the

Table 5.8

Four scenarios of potential disruption of oil from the Gulf

Scenario	Maximum Loss of Exports ('000b/d)	Available Additional Capacity of Other Persian Gulf Exporters ('000 b/d)	Maximum Net Loss ('000 b/d)
1. Limited regional warfare			
Iran-Iraq	4,000	1,300	2,700
Iraq-Kuwait	4,000	800	3,200
Iran-Kuwait	4,000	800	3,200
Iran-Saudi Arabia	12,000	1,300	10,700
2. Generalized regional warfare			
Iran-Iraq-Kuwait	9,000	800	8,200
Saudi Arabia-Iran-Iraq	15,000	800	14,200
3. Internal destabilization			
Saudi Arabia	10,000	1,300	8,700
Kuwait	2,500	800	1,700
United Arab Emirates	1,500	500	1,000
4. Closure of Strait of Hormuz	18,000	0	18,000

Source: Pakravan, K. Oil Supply Disruptions in the 1980s: an Economic Analysis, Hoover International Studies, Hoover Institution Press, Stanford University, Stanford, California, 1984, p.21

Arabs used oil as a political weapon to achieve their ends.

Since the late 1970s American apprehension over Soviet threats to the Gulf has grown considerably. Vice-Admiral Crowe (1978), now Director of the Navy, emphasizes the US need for a strong military presence in areas close to the Arabian peninsula. He sees the Gulf as:

"a part of the world where the United States and its allies cannot afford to live with a large degree of uncertainty". (47)

American fear of disruption of oil supplies from the Middle East has been compounded since 1979, following Soviet involvement in Afghanistan and the fall of the Shah (table 5.8). In response to fear of encroachment upon Gulf oil resources, the US formed in 1980 what was called the Rapid Deployment Force (RDF), which is now known as US Central Command (USCENTCOM). Before dwelling on the function of this force, it may be useful to consider which areas the US perceives important to American security interests. (48)

Some American political-strategic analysts argue that the US Middle East policy should consider the key area of concern as being from the Strait of Gibraltar to the Khaibar Pass, and to the sources of the Nile. (48) Interestingly, while the 'line' that defines Central Europe is 'clear' and where, if the "Soviets step across it" the US is going to fight, (49) the 'line' is unclear with regard to the Gulf, which neither the Carter nor Reagan Administration has

defined. With regard to the Red Sea region, the Americans see it as encompassing:

"all of the Arabian peninsula, Egypt, Israel and part of the Eastern Mediterranean and the Indian Ocean complex". (50)

However, with reference to the Gulf, the Department of State prefers the term Southwest Asia, because it perceives the area in which US interests need protection in a 'broader' context which includes:

"Pakistan, ... North Yemen as far as the Arabian peninsula itself ... the Horn, and of course Egypt". (51)

It is quite clear that in all these definitions, which are overlapping, the US is preoccupied with the necessity to enlarge the area of its strategic manoeuvreability. Looking at these definitions, it is also quite obvious that the Red Sea region is the only region centrally placed in US strategic definitions. The reason for such expanding definitions is given by the Department of State. Quite simply, the protection of American vital interests in the Gulf makes it imperative to consider its periphery as well. This means that the US operational zone includes the:

"areas that are not only important from our perspective but important to our friends who are there". (52)

Such broad definitions are designed to give scope for the

establishment of deterrent measures because, as the Department of State puts it,

"the most important element of our policy in this respect is deterrence". (53)

Thus, this policy of deterrence inevitably leads the US to conceive of an ever-widening geopolitical map in order to detect and confront the sources of threat and shield its friends and allies against it.

Having indicated the area where US military forces may operate, we will discuss the issue of the RDF. Perceiving the Middle East to be threatened by Soviet troops in Afghanistan, President Carter declared the region to be of great strategic importance. Therefore, the Soviet Union's attempt to:

"consolidate its strategic position ... poses a grave threat to the free movement of Middle Eastern oil". (54)

Accordingly, he believed that:

"We must call on the best that is in us to preserve the security of this crucial region." (55)

He then declared what came to be known as the Carter Doctrine:

"Let our position be absolutely clear: an attempt by any outside force to gain control of the Persian Gulf region will be regarded as an assault on the vital interests of the United States of America, and such an assault will be repelled by any means necessary, including military force." (56)

That "best ability" demanded by President Carter came to mean the creation of the RDF whose function was seen by him in these terms:

"to provide the United States with an effective capability to intervene militarily in various contingencies around the world". (51)

Obviously the force's mission is a global one. But the Commander of the force Lt Gen. Paul Kelley (USMC) indicates that the initial focus of his force will be

"the Middle East and the problems associated with that area". (58)

Those problems could include oil, regional conflict between a US ally and enemy, or even against political change that the US does not approve of. Since the Middle East is a priority area for use of the force, it follows that:

"near-term propositioning would probably focus on the Middle East and Indian Ocean area". (59)

In August 1982, John Lehman, Secretary of the Navy, declared that the US had

"formal treaty commitments to defend about 40 allies, and this commits us to all the world's major oceans. Our strategy is to be able to meet our commitments, even in the teeth of Russia's naval power". (60)

Indicating the areas where US Navy would operate the Secretary of the Navy specified the Southern flank of NATO,

Turkey and Greece, as potential naval theatres:

"Similarly, the Persian Gulf-Indian Ocean is certainly one of our key interests". (61)

Thus, the Middle East is seen by all branches of the US forces as a key battleground. A statement issued by the Defense Department in 1982 explained why the RD Task Force might be used in the Middle East:

"For the Middle East and South-west Asia, there are four primary security goals designed to support our foreign policy in that area." (62)

These goals may be summarised as follows:

- (1) to ensure the security of Israel while promoting the continuation of the Camp David Mideast peace process;
- (2) to support moderate states (for example Saudi Arabia, Oman, Jordan and Egypt) against overt attacks by radical states;
- (3) to support moderate states against the spill-over of regional conflicts and subversion aided or directed by outside powers; and
- (4) to limit Soviet military influence and leverage in the region and to deter Soviet invasion. (63)

Because of the Soviet threat to Middle East oil resources and the political stability there, the mission of the force

"is to deter Soviet aggression in south-west Asia, particularly as it threatens access to oil, and to prevent the threat of Soviet military power being used as a tool of political coercion". (64)

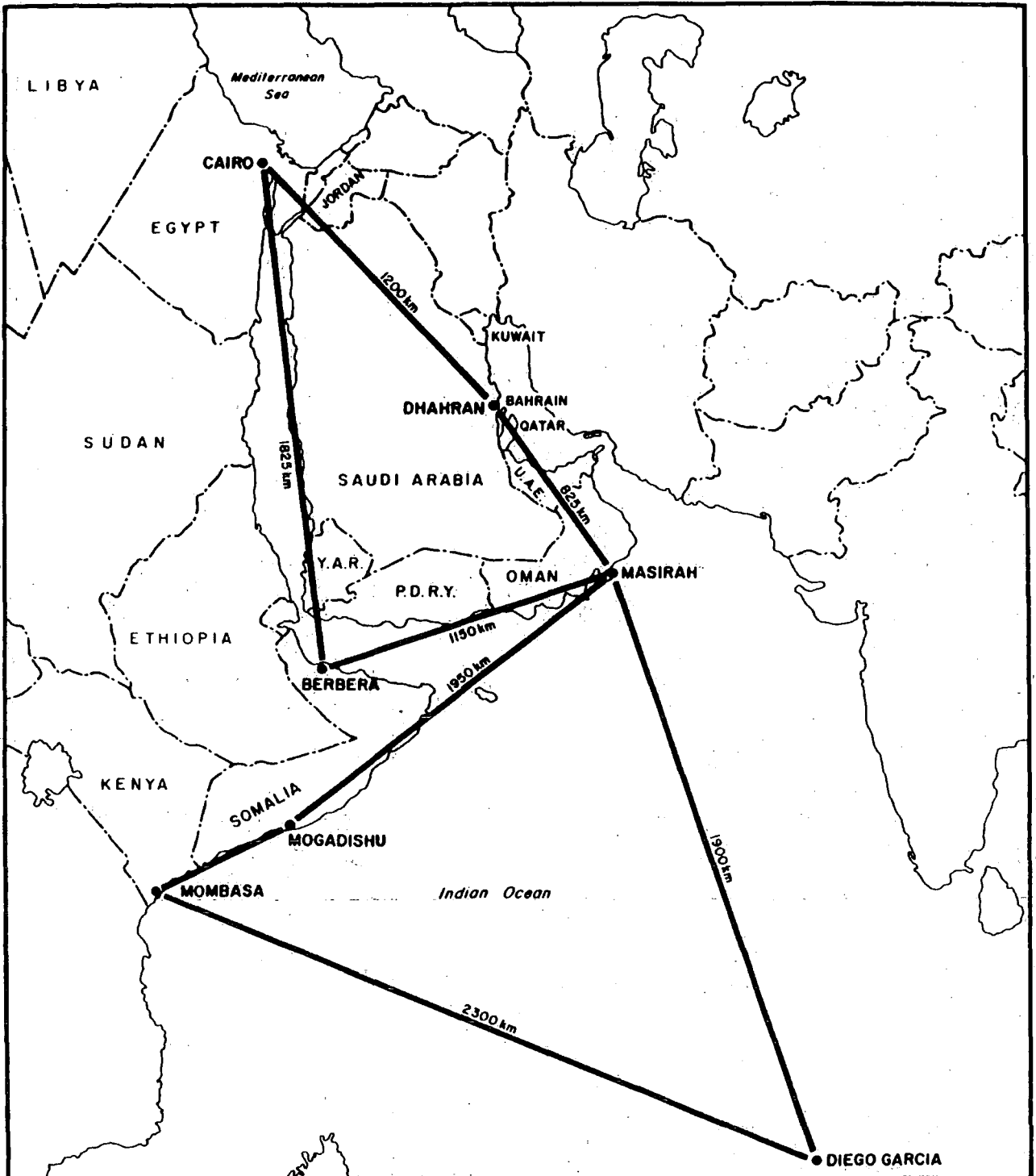


FIG. 5.2 A UNITED STATES VIEW OF DISTANCE AND ACCESS TO THE GULF REGION FROM BASES OR FACILITIES IN THE MIDDLE EAST AND NORTHWEST INDIAN OCEAN. (FROM HOUSE OF REPRESENTATIVES STUDY MISSION, 1981)

To respond rapidly and effectively, the force must avoid the geographical disadvantage created by distances of 12,000nm separating the home-base of the force from the area considered as a central theatre of action, for instance, the Gulf. The US thus began the search for naval facilities because in any action in the Gulf:

"In the initial stages, it would definitely be the Navy and Marine Corps"

that would play the major role, because, as the Secretary of the Navy puts it,

"we're there, and we can get real forces into the action much faster and start operating". (65)

During the Carter administration, the US began the search for facilities in and around the Gulf for the stationing of RDF units. The Red Sea region features quite centrally as a potential staging area for the operation of the Force. This could be seen clearly in President Carter's speech in 1980. He said:

"We are now making arrangements for key naval and air facilities to be used by our forces in the region of northeast Africa and the Persian Gulf." (66)

In April 1981, Secretary of Defense Casper Weinberger transformed the Rapid Deployment Force into a separate command area for a Rapid Deployment Joint Task Force (RDJTF). Six months later a separate command area for south-west Asia

was created. On 1 January 1983 the commander of the RDJTF became the Commander-in-Chief of USCENTCOM and all planning exercises and operations in southwest Asia.⁽⁶⁷⁾ USCENTCOM's area of responsibility stretches from Kenya to Pakistan, covering the territory of nineteen countries.⁽⁶⁸⁾

Regarding basing facilities for use by USCENTCOM, Diego Garcia, a tiny island in the Indian Ocean, so far emerges as the most important assignment. In the late 1960s the island was leased by Britain to the US, which later established an important communication centre there. In 1975 the Congress approved a plan for the development of Diego Garcia as a major naval, air, and logistic base.⁽⁶⁹⁾ The island, which has air-fields, a deep harbour, storages, workshop and other facilities, is

"fitted with the most sophisticated technological equipment from space-tracking stations to submarine-tracking gadgetry".⁽⁷⁰⁾

Apart from being far away from the Gulf, over 2,000km, Diego Garcis is claimed by Mauritius, according to the Strategic Studies (1982). The journal indicates that the leftist regime in Mauritius

"bans supply of essentials to Diego Garcia and working of the Mauritians on the island".⁽⁷¹⁾

The fact that the island is distant from the Gulf and associated with potential political problems and sovereign rights over it,

Table 5.9USCENTCOM contingency bases or facilities for the defence of the Gulf

Country	Facility	Type
Portugal	Lajes	air staging point
Oman*	Seeb	airfield/port
	Thumrait	airfield
	Khasab/Goat Island	airfield/port
	Salalah	airfield
	Masirah	airfield
Somalia*	Berbera	airfield/port
	Mogadishu	airfield/port
Kenya*	Mombasa	airfield/port
	Nairobi	airfield
	Nanyuki	airfield
Egypt	Ras Banas	airfield/port
	Etzion	airfield
Great Britain	Diego Garcia	airfield/port
Turkey	Erzurum	airfield
	Batman	airfield
	Mus	airfield

Sources: a) * From Record, J., The Rapid Deployment Force and US military intervention in the Persian Gulf, Special Report, Institute for Foreign Policy Analysis, Inc. Cambridge, Massachusetts, and Washington, DC, February 1981, p.59.

b) Cordesman, A. The Gulf and the search for strategic stability. Westview Press, Boulder, Colorado 1984, mansell Publishing Limited, London, 1984, p.835.

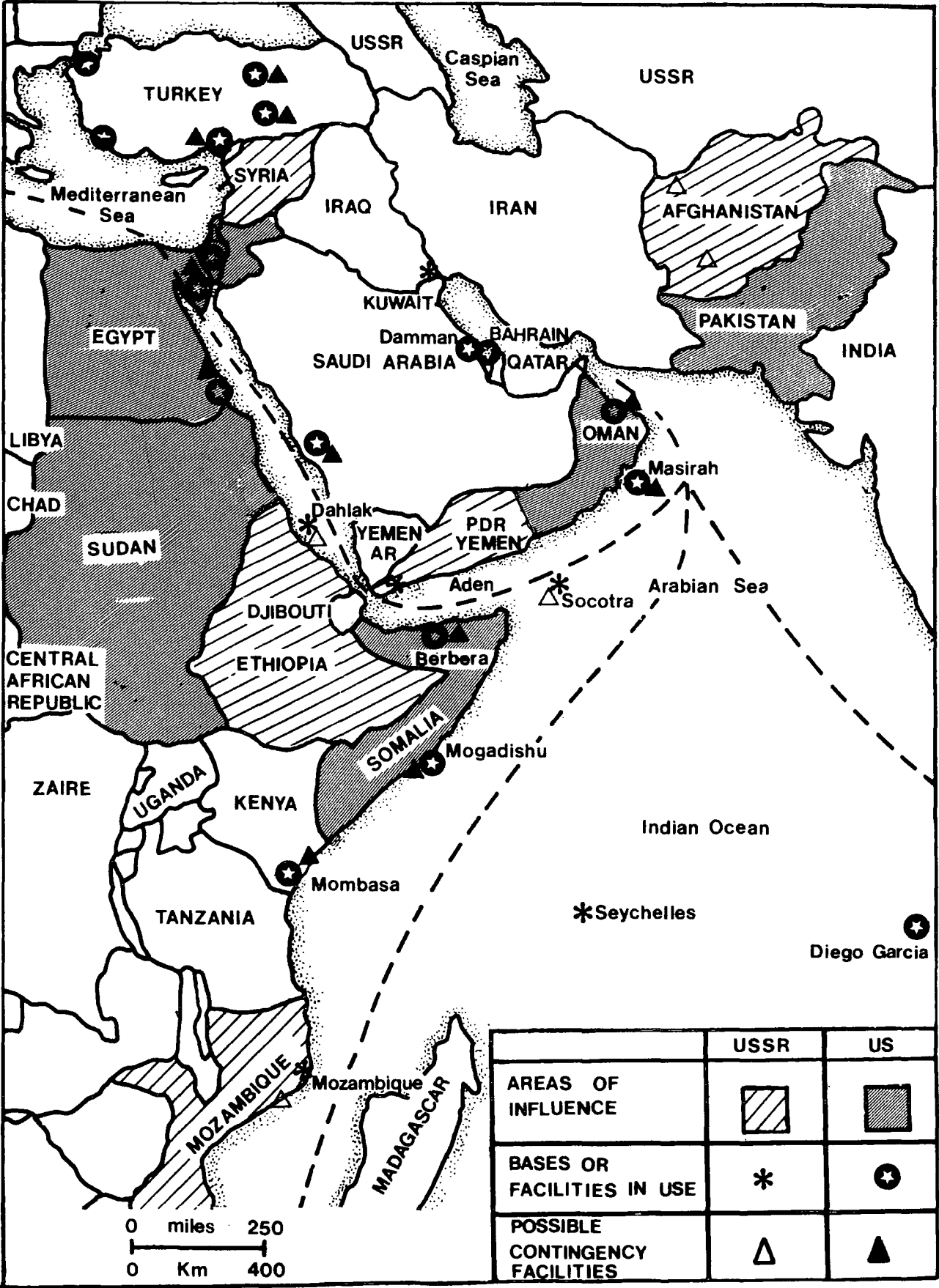


FIG. 5.3 SUPERPOWER RIVALRY IN THE MIDDLE EAST AND THE NORTH WEST INDIAN OCEAN

"forced the US to adopt the strategy of seeking staging bases..." (72)

close to the potential theatre of conflict in the Gulf. Based at MacDill Air Force Base in Florida, the USCENTCOM also has "a small 20 man headquarters on a US Navy ship in the Gulf", (73) presumably at Bahrain. The US has negotiated and reached agreements for naval and air facilities since 1980 in various parts of the Red Sea region and the Gulf. Areas where actual agreements have been concluded include Masirah, and Salala in Oman, Berbera in Somalia and Mombassa in Kenya, (74) (figure 5.3).

In 1984 president Mubarak of Egypt declared that he

"will not allow anyone to distort relations between Egypt and the US and that the special relationship between Egypt and the US is continuing, and Egypt has no alternative to it". (75)

Following this announcement Egypt gave its consent that the US could develop a base at Ras Banas for the use of Egyptian forces and not as an American military base. However, several sources indicate that Ras Banas features in the planning of USCENTCOM's facilities in the Middle East. Israel's^e naval base at Eilat could be used by the US besides Ras Banas and other bases in Sinai. (76) Table 5.9 shows USCENTCOM basing facilities for the defence of the Gulf. Egypt is specially important in respect of basing facilities because:

"Egypt plays a pivotal role because it links the Red Sea and the Mediterranean and, through its close relations with Sudan, protects the corridor into Africa, helping to form an unbroken line of defence contiguous to Libya, Chad and Central African Republic." (77)

For this reason President Carter considered the Israeli-Egyptian peace treaty of 1979 as

"a notable achievement which represents a strategic asset for America". (78)

Sudan has also been included in the system of American bases for which Diego Garcia represents the nexus.⁽⁷⁹⁾ In sum, the US is clearly determined to depend on military action as the principal means whether to guarantee oil supplies, protect friends, or to counter the Soviet threat. The Red Sea region has a central position in this respect. Jeffrey Record (1981), however, concludes that the USCENTCOM would fail the American military strategy to safeguard the Gulf, because:

- (1) it is a fatally flawed instrument for effective American military intervention;
- (2) its flaws are attributed in part to the inherent political obstacles to successful intervention in the Gulf and in part to the structural, technological and doctrinal unsuitability of rapidly deployable US forces for the likely combat environments they would confront in the region; and
- (3) fundamental alterations both in the concept of military intervention and in the character of the Rapid Deployment

Force itself are required if the strategic commitment enunciated in the Carter Doctrine is to be convincingly supported by military power. (80)

However, to make these forces adapted to the harsh Middle Eastern climate, the US conducted military manoeuvres in the Red Sea/Gulf area in 1981, 1982, 1983 and 1985, in which regional forces from Egypt, Oman and Sudan took part. One major objective of those exercises in the Red Sea region is:

"to provide US troops with training conditions similar to those throughout much of the Middle East and Gulf regions". (81)

In sum, the foregoing pages have discussed the association of the Red Sea (water and countries) with the issue of Middle Eastern oil. The issue of US, Western, and Japanese concern about and dependence on Middle Eastern oil have been highlighted. Politicization of oil, the US threat to use force, and the Arab reaction were very important issues, which led to a shaking in the unity of the Western alliance. What follows is an evaluation of the communicational role played and that will be played by the Red Sea in transporting oil supplies, especially to Western Europe. Apart from Western interests, the Gulf tanker war and its threat to loading facilities in the Gulf and passage through Hormuz, have alerted Arab Gulf States to seek alternative outlets for their exports; they seem to have found that such outlets exist above all in the Red Sea.

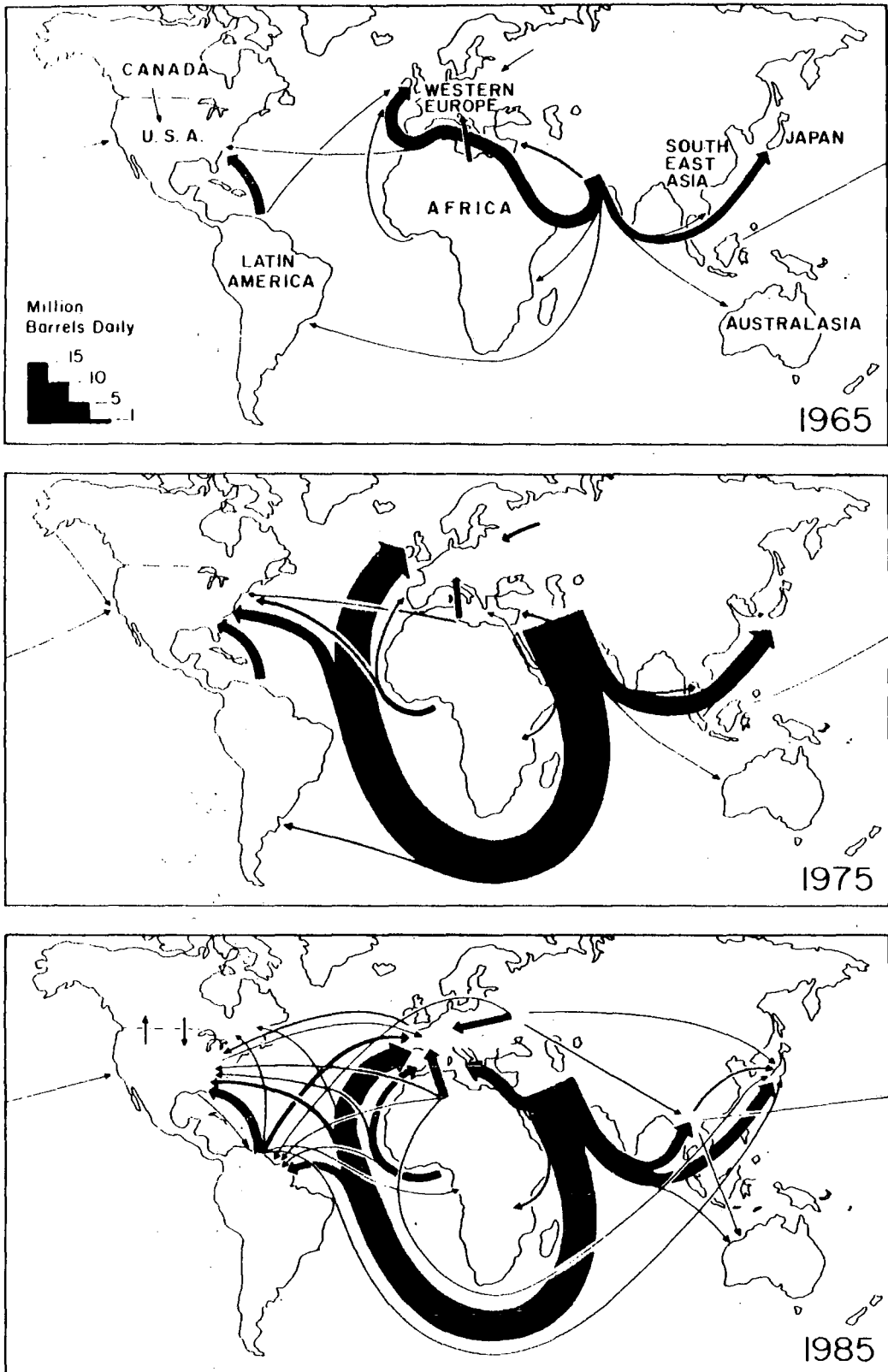


FIG. 5.4 INTERNATIONAL OIL MOVEMENT 1965-1985

5.2 Energy Transportation

5.2.1 Red Sea Route

Prior to the closure of the Suez Canal in 1967 the industrialized West utilised the short Red Sea route for the bulk of its oil needs, chiefly from the Gulf. The 5,000nm the Red Sea saves Western Europe (compared with the Cape of Good Hope route) means both savings in time and distance. However, the closure of the Canal halted that benefit for eight years. Figure 5.4 shows oil movement before and after the 1967 closure of the Canal. In 1966 some 167m tonnes of oil transited the Canal in a northbound direction, nearly six times the quantity handled by the Canal in 1976.⁽⁸²⁾ Since the reopening of the Canal oil transportation via the Red Sea has been picking up due to the merit of the route as a short-cut, especially to Western Europe. The expansion and deepening of the Canal, the opening of the SUMED pipeline in 1977, as well as the Saudi East-West pipeline in 1981, also have contributed to this recovery. In 1984 some 86.628m tons of crude oil and petroleum products passed northbound through the Suez Canal, while total Gulf oil exports to the US and Western Europe in the same year were at most 181.9m tonnes.⁽⁸³⁾ This means that over 55% of Gulf supplies to the US and Western Europe used the Red Sea route in that year. Compared to the 29.855m tons that transited the Canal in 1976, the figure for 1984 shows a tremendous increase amounting to about 200%, which clearly reflects the growing redirection of Gulf oil traffic from the

Cape route to the Red Sea route.

5.2.2 Overland Pipelines

Introduction

There is a noticeable increase in the laying of pipelines for the transportation of gas, crude oil or products in the world. These pipelines function as an alternative to the long haul at sea, or as internal means of energy transportation, especially where no sea link exists and where land configurations are inhospitable. They may not be economic, but surely they are quicker, and therefore important in a world where speed is an important component of competition. They need pumping stations to enhance their capacity, they also need terminals for loading and unloading. Pipelines may run into more than one country (see below) in which case such lines may be vulnerable to sabotage or blowing up if differences occur between the owner and a hosting country, even without difference between such countries those lines could be disrupted by non- governmental groups (see below). Pipelines need maintenance, which entails continuous expenses. The volume of crude they transport may not be as big as that carried by tankers or VLCCs. However, they are less hazardous than tankers, particularly in such troubled waters as those of the Gulf. Laying of pipelines, especially in the Middle East, could benefit the West, especially American companies due to the US upper hand in the Middle East.

In 1982 the length of pipelines laid or planned for laying in the non-Communist world was 53,130 miles. The longest mileage of 21,631 is in the US, followed by 10,068 in Canada. The least mileage of 1,440 is in the Middle East,⁽⁸⁴⁾ (table 5.10). Following the completion of the Saudi east-west pipeline (see below) in 1981, the International Petroleum Encyclopedia (1982) indicates a drop in the projection of pipelines in the Middle East.⁽⁸⁵⁾ The reason for such reduction may lie in the general decline of world demand for oil. However, the Gulf tanker war has clearly changed this situation (see below) by encouraging more building of crude pipeline. Planning for pipelines in the Middle East includes two Iraqi pipelines to the Red Sea, via Saudi Arabia and Jordan; and Oman plans the building of a 251 mile line in its northern oilfields. Also Yemen AR plans to construct a 170 mile pipeline from Salifa to Sanaa via Mabbar.⁽⁸⁶⁾ A proposed 3,600 km Trans-Africa pipeline contract was signed in 1984, to carry oil from the Red Sea to the Atlantic. However, the more vulnerable shipping becomes, the greater the use of pipelines will be. Table 5.11 shows Gulf-Red Sea pipelines.

It is the laying of new oil pipelines that has enhanced and is expected to increase the role of the Red Sea as an oil artery. The construction and/or operation of these pipelines may yield important geopolitical repercussions. As the US used the issue of the reopening of the Suez Canal in 1975 as a political card which contributed to the deradicalization of

Table 5.10

Laid or planned pipelines in the non-Communist world during and beyond :1982

Area	Length of pipelines (in miles)
United States	21,631
Canada	10,068
Latin America	9,861
West Europe	4,261
Asia-Pacific	3,874
Africa	1,995
Middle East	1,440
Total	53,130

Source: International Petroleum Encyclopedia
1982, Pennwell Publishing Co., Tulsa OK,
US, 1982, p.407.

Table 5.11Gulf-Red Sea pipelines

Pipeline	Capacity:mb/d	
	Current	Potential
Sumed	1.60	2.40
East-West	1.85	3.00
Eilat-Ashdod	0.90	1.20
Iraq-Saudi Arabia		1.60
Haditha-Aqaba	-	1.00
Totals	4.35	9.20

Sources: Various (see text).

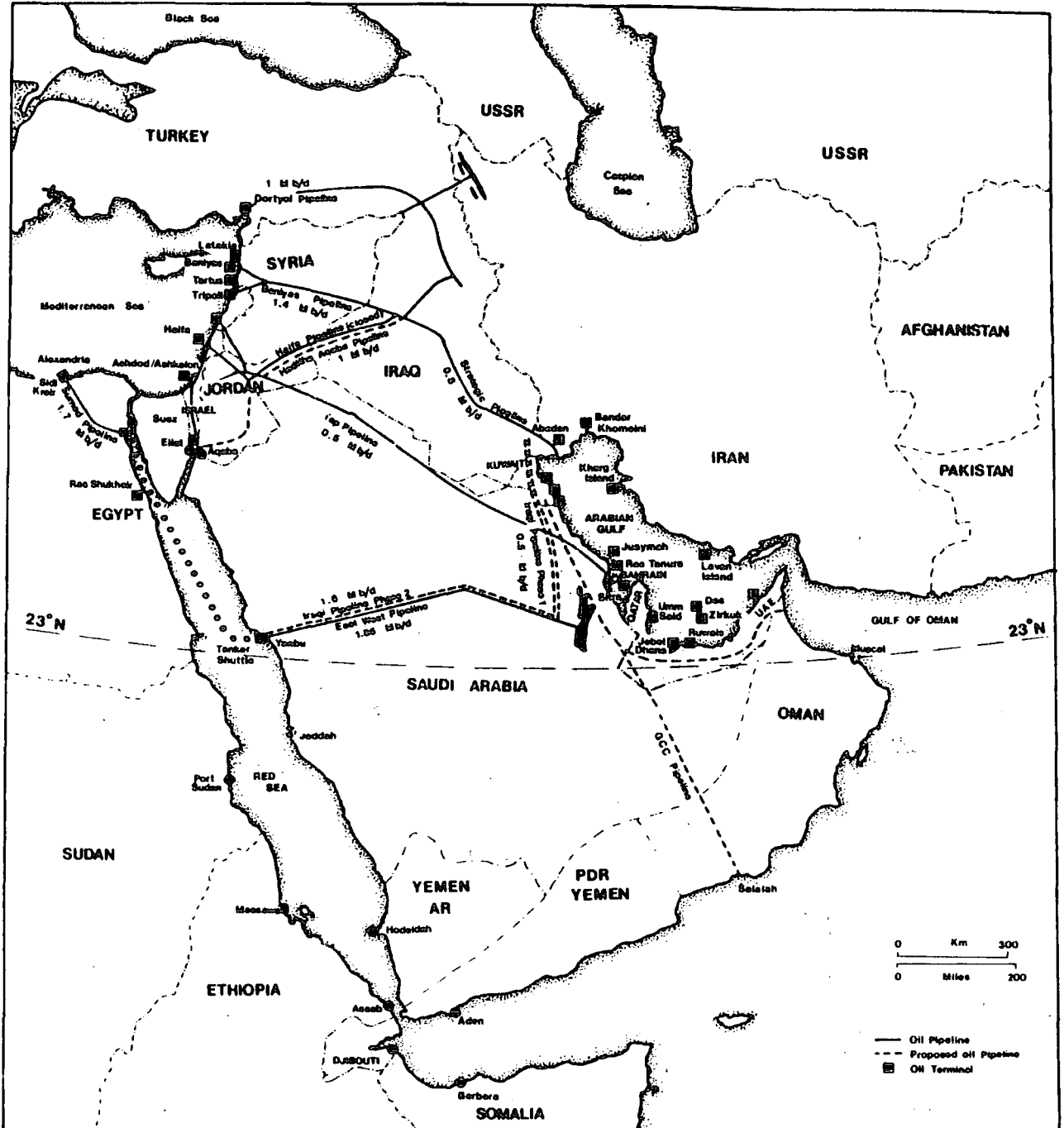


FIG. 5.5 DIVERSIFICATION OF GULF OIL OUTLETS BY TRUNK PIPELINES

Egypt and brought it closer to the US and Israel, so US involvement in the construction of pipelines in the Middle East has resulted in more leaning by one of the most anti-American elements in the Middle East, ie Iraq, towards America, as this will become clear later. Hereafter discussion of existing and proposed pipelines that terminate on the Red Sea coast will follow. Figure 5.5 shows the network of these lines. Also discussion will include vulnerability of and geopolitical development associated with these pipelines.

Tapline

Built in 1950, the 30m diameter and 1,213km Trans-Arabia Pipeline (Tapline) traverses Saudi Arabia, Jordan, and Syria to end in Aramco's Nahar Zahrani terminal in Sidon (Lebanon) on the eastern Mediterranean (figure 5.2.2). Laid with a maximum capacity of 0.5m b/d, the line was designed to lessen the cost of shipment of oil supplies to Western Europe by avoiding the long voyage around the Arabian Peninsula.⁽⁸⁷⁾ Although a route through Israel would be more direct and cheaper, Arabian American Oil Company (Aramco) avoided laying the line across Israel, adding a diversion of about 30 miles around Israel to end in Lebanon.⁽⁸⁸⁾ For a long time, the Tapline functioned as one of the significant arteries through which Gulf oil was carried to consumers in Western Europe. Compared to shipment of Gulf oil by VLCCs, the line is considered uneconomic; but its economic viability was

exacerbated by the lack of modernization and service due to continuous differences between Saudi Arabia and Lebanon regarding transit dues and protection of the line.⁽⁸⁹⁾ Growing dependence upon huge crude carriers and the continued political turmoil in Lebanon, besides other difficulties, caused Saudi Arabia to close the line in April 1975.

Israeli intransigence over the Palestinian question and US unrestrained backing of Israel, led to the blowing up of sections of Tapline before 1973, by pro-Palestinian guerrillas.⁽⁹⁰⁾ Although some miles of this line run through Israeli occupied Syrian territory, Odell (1983) wonders that Israel did not disrupt its operation, while such an action was taken by Arab commandos, apparently acting against an Arab State.⁽⁹¹⁾ However, the blowing up was clearly meant to harm backers of Israel who were using Tapline supplies. Continued, sometimes intensive, conflict in Lebanon has not allowed re-opening of the line only for a brief spell in 1978, nevertheless the line's operation continued to be tenuous due to the fragile state of peace in Lebanon.⁽⁹²⁾ Between 1979 and 1982 intermittent supplies of the line ranged between 50,000 to 60,000 b/d, a total of 20-29 m/b or 0.26-0.83% of the Kingdom's crude output during that period. The Lebanese connection was sabotaged in 1981. However, the line continued until May 1982 to carry some 36,000 b/d of Saudi oil to Jordan to feed a refinery at Zarka. The Israeli invasion of Lebanon in June 1982 effectively shut the Tapline down even for local

use. Since 1975 losses caused by the line are put at \$250m. The fact that even as a local supplier the line has become uneconomic, has cast doubts upon resumption of its activity. Therefore the owners of the line - the US partners in Aramco were reported to be completely closing down Tapline installations at the end of 1985.⁽⁹³⁾

Just a few months after this announcement, the Saudi authorities declared its resurrection - according to the Petroleum Economist (July, 1984).⁽⁹⁴⁾ However, the Gulf war was not wholly responsible for the reactivation of the line. Security problems which continue to surround the line at its western end in Lebanon are described as 'even more insuperable' when compared with the Iranian threat. But still the line is perceived to:

"play a major role in Saudi domestic plans while also supplementing export capacity of the much bigger Petroline outlet".⁽⁹⁵⁾

Saudi switch in policy to resume operation of the line has been explained by the Kingdom's need to feed the 160,000 b/d refinery planned for al-Qasim province, 400m west north-west of Yanbu. Repercussions of the Gulf war also resulted in an idea to maximise the capacity of the Petroline (1.85m b/d) for export in case the Strait of Hormuz was put at risk; therefore the Saudis decided that the almost-defunct Tapline could be used instead (Petroleum Economist 7/84)). Diversion of the northern end of Tapline to a Red Sea exit has been thought of

to feed the planned Saudi refineries at al-Qasim and Shuqayq⁽⁹⁶⁾ on the southern Red Sea, about 60m from Jizan and 90m from the Saudi Yemeni coastal border. However, security problems have been the major issue throughout the life-span of Tapline leading to its closedown in 1975 and its intermittent disruptions. There is a view that if Saudi Arabia could get Syria's cooperation, this could help reactivation of the line, because Syria has been supporting Iran against Iraq.⁽⁹⁷⁾ It is obvious that Syria cannot guarantee the security of the line because the major threat comes firstly from Israel and secondly, possibly from radical Palestinian and Islamic groups. Thus, without improvement of security, it is difficult to envisage an uninterrupted export of Gulf oil through the Tapline.

SUMED

The inauguration of the Suez-Mediterranean pipeline (SUMED) early in 1977, marked a major new departure in the role of the Red Sea. The 320 km pipeline extends from Ain al Suphna - an Egyptian port south of Suez, to Sidi Kreir terminal near Alexandria. It consists of twin 42-inch diameter pipes. Tankers move crude from the Gulf, round the Arabian peninsula, through Bab al Mandeb and north to Ain Sukhna. Alternatively, oil is shipped in tankers from the terminal at Yanbu in Saudi Arabia from Suli Kreir, the oil is carried by large tankers to refineries in Western Europe and the US. The

loading and unloading of large tankers has been made easy due to facilities associated with SUMED at both terminals on the Red Sea and Mediterranean. The intention of building the line was partly to bypass the Canal in order to offset problems of ships too large to transit the waterway and secondly to evade transit restrictions of the latter. (98)

Since its initial conception SUMED has been viewed by the US as an important development. During the 1974 Congressional hearings on the US role in reopening the Canal, the Americans held the view that the pipeline - coupled with the Canal - would

"increase maximization of the economies of scale in petroleum logistics by offering a vast flexibility in choice of product-crude movement alternatives, and size of carrier dictated by the ultimate destination *via* single tanker or in a tanker-pipeline tanker combination". (99)

Regarding Egyptian interests, the economic motivation for the construction of the line is related to the country's financial needs resulting from the loss of revenues during the eight year closure of the Canal, and to some extent from rivalry with the Cape route following the 1975 reopening. During the early stages of the operation of the line after 1977, Egypt's annual revenue from SUMED was put at \$80m; this income is expected to rise to \$120m when its current capacity (see below) increases by some 50%. (100)

SUMED started with an initial capacity of 800,000 b/d; this was doubled in early 1978 to the present level of 1.6m

b/d. Indicating the 78m tons of crude oil moved by the line in 1981, some 1.57m b/d, Blake (1984) points out that it was the completion of Saudi east-west pipeline in that year which brought SUMED to near capacity use. Odell (1983) also confirmed that the prospect for the line has been substantially enhanced by the building of the Saudiline.⁽¹⁰¹⁾ According to the Journal of the Arab Maritime Academy (1977), SUMED is designed to carry an annual amount of 80m tons; and that this capacity could be increased to 117m tons per year (2.4m b/d) if the need arises. Also Odell (1983) indicates the possibility of increasing the line's annual output to 125m tons, approximately 2.5m b/d. Compared to that of the Canal (1.75m b/d of crude and products) the line's capacity is only 0.15m b/d less than the former. Being concerned about protecting Europe from shortages of oil, the Americans consider the current capacity of the line as significant to boosting the amount of Europe's oil from the Gulf.⁽¹⁰²⁾ Table 5.11 shows the current capacities of Red Sea pipelines.

The line is owned by a consortium of the following Arab States: Egypt, Saudi Arabia, Kuwait, Abu Dhabi and Qatar. On 29 September 1973 these states signed a contract for the formation of what came later (21 January 1974) to be known as the Arab Company for Oil Pipelines with capital of \$400m. Being built by Arab money, the line is seen by the Arabs as:

"the first project of investment of Arab money for the benefit of Arab people. The Company will serve both the interests of Gulf producers and consumers in Western Europe, besides the line's revival of international trade and East-West linkage". (103)

The cost of the construction, \$500m, was paid by the owners. The life-span of the company is 27 years during which the former should pay Egypt transiting charges of 27.78% from the company's income. Failure of Western European firms to reach an agreement with the Company regarding the cost of building the line, enabled Bechtel Corporation of the US to win the construction deal, by paying \$354.4m. Construction started in April 1974. Exxon Company was the first to sign a contract (until March 1988) with the Arab Company for Oil Pipelines to use SUMED, and the former agreed to pay the latter an annual sum of \$10 to \$12m. In early 1977 Mobil Co. concluded an agreement with SUMED's owners. Also other Western firms, like Amoco, Greek Petrofina, and other French and Spanish companies, negotiated deals with the owners to use the line. (104)

Some American experts in the oil industry and oil politics perceive SUMED as an alternative to the Suez Canal and that it is going to compete directly with the waterway once the latter's deepening is completed. They also see the line as having negligible effects on tanker demand. Closure of SUMED is not expected, by these experts, to have much effect on world oil transportation, except that it enhances the mood of many tanker owners. In contrast to what is mentioned above

about oil companies interests in SUMED, it is believed that the prolonged Israeli-Arab hostility, despite partial peace between Israel and Egypt, is the main reason why

"no major oil company has been prepared to put all its eggs into this particular basket". (105)

However, although the American-sponsored peace between Israel and Egypt has hitherto had no impact on the flow of oil through SUMED, Admiral Hanks (1981) anticipates that further 'unhappiness' of the Gulf Arab leaders, especially the Saudis, could end in an embargo which might obviously stem the supply of petroleum to the line.⁽¹⁰⁶⁾ Considering what has been going on in the Gulf since 1982 with the tanker war and the increasing interests of the Arab Gulf producers as well as Egypt in finding alternative outlets in the Red Sea through pipelines, the Admiral's assumption may not look correct. Compared with the Israeli line of Eilat-Ashkelon (see below), SUMED is considered to be relatively free from the political problems that stopped the former's operation, specifically due to the stoppage of the flow of Iranian oil to Eilat, but it is still vulnerable to the same threats that endanger activity in the Canal, namely, another Israeli-Arab conflict in which Egypt is involved. However, other views argue that the route the line follows, south and west of the Nile delta, distances it from the vulnerable Canal.⁽¹⁰⁷⁾ Clearly, in any Israeli-Arab war the line could be an Israeli target since a considerable part of it falls within the Canal zone; moreover

threats to this part of the line could stop the tanker shuttle between Yanbu and Ain Sukhna (figure 5.5).

The Journal of Arab Maritime Academy (7/1977) points out that SUMED has achieved the following objectives:

- (1) participation of Arab capital in joint ventures which could consolidate the bonds of Arab solidarity and unite Arab ranks;
- (2) an increase in the GNP of the Arab Gulf States and Egypt;
- (3) a stabilization of Egypt's role in the transport of oil to the West;
- (4) the passage of part of the Arab oil through Arab land, hence, Egypt which minimizes the dangers that may threaten the safety of this oil shipped via the Cape route;
- (5) a guaranteed flow of sufficient amounts of oil to the Egyptian refineries and petrochemical installations on the Mediterranean;
- (6) an increase in the activity of ports on the Red Sea and Mediterranean;
- (7) a contribution to causing the slump in the Israeli Eilat-Ashkelon pipeline; and
- (8) an ability to supply Europe with about 30% of its total oil imports, and covering about 43% of the amount handled by European ports. (108)

The East-West Pipeline

Apprehension about the vulnerability of loading facilities

in the Gulf or sabotage or strikes has also been associated with the Israeli-Arab conflict, especially after the Israeli invasion of Lebanon (June, 1982) and its bringing the Tapline activity to an end. Moreover, such worries have been compounded by the five year old Gulf war. Fears of the Arab Gulf States about disruption of their oil transportation moved these states, Saudi Arabia in particular, to seriously contemplate the reduction of their dependence on the Gulf's export installations, according to John Anthony (1981), who was appointed by the Department of State as Chairman of the Advanced Area Studies Programme in 1980 for the Arabian peninsula and Iran. Anthony adds that before the Iraq-Iran war, the Kingdom of Saudi Arabia planned to utilize the Red Sea as a substitute route in the future to lessen the possibility of disruption to its oil exports.⁽¹⁰⁹⁾

The East-West crude export pipeline (formerly known as Petrolinè) extends from the Ghawar oilfield (the largest in the world) on the Gulf to the Port of Yanbu on the Red Sea (figure 5.5). The line extends for about 1,170km (731 miles). The laying of the line started in November 1978 and was commissioned in July 1981, with great fanfare (The Economist, 2/82).⁽¹¹⁰⁾ The east-west pipeline is the key factor in the establishment of the industrial complex at Yanbu. This complex as well as its counterpart at al-Jubail on the Gulf are considered:

"the brightest stars in the Kingdom's industrialization galaxy". (111)

Until the inauguration of the line, all Saudi oil exports - at least 40% of total OPEC output - were shipped from Ras Tanura and Ju'aymah and passed through the Strait of Hormuz. The completion of the East-West pipeline has enabled Saudi Arabia to shift substantial amounts (see capacity below) to Yanbu, from which shuttle tankers carry the crude for about 400nm to Ain Sukhna. Thereafter, responsibility for moving oil from there rests on SUMED. Built by the US Mobil Oil Corporation, the line cost \$1.6 billion. (112)

Theoretically, the capacity of the East-West pipeline is put at 2.35m b/d. In 1981 the line moved 0.5m b/d, or something in the region of 5.3% of total Saudi output. By the close of 1981 the line's throughput was rapidly increased to its full capacity of 1.85m b/d and continued so till 1982. But in early 1983 its entire throughput dropped to only 400,000 b/d, obviously owing to the world oil glut, then it grew to 600,000 b/d late in the same year. Until mid-1985 the line's output was 700,000 b/d. In 1982 and 1983 the increase of the 1.85m b/d capacity of the line to 2.45m b/d was anticipated. This has recently come to fruition - according to the Petroleum Economist (9/84). The Saudi Gazette (8/84) indicates that about 20% of total Saudi crude production is now carried via the line. The Saudi decision to reactivate Tapline will enhance the throughput of the East-West line by a further

160/000 b/d of export throughput needed for the Qasim refinery. It is indicated that the amount extracted from the former will pass through a spur to be tied in the latter. However, no map to date has shown where such connections will take place. A future increase in the capacity of the east-west pipeline to 3.6-4m b/d could occur by laying another parallel line which is currently being considered.⁽¹¹³⁾ Regarding storage facilities associated with the line, construction at Yanbu of a \$7 billion storage facility complex with a 1.5 billion barrel capacity has been planned, scheduled for completion by 1990. The storage could hold 6 months' output at a rate of 8.3m b/d. Between 1981-1983 the US Chicago Bridge & Iron Co. built 14 overground storage tanks each holding 1m/b in the vicinity of Yanbu in order to take crude oil transported by the East-West pipeline.⁽¹¹⁴⁾

With respect to the objectives of building the line, the Economist (2/1982) indicates two major reasons:

- (1) to diversify Saudi export outlets from the potentially dangerous Gulf; and
- (2) to cut transport costs, particularly for Mediterranean customers.⁽¹¹⁵⁾

Disruption of Saudi exports via the Tapline is considered as a factor that prompted the Kingdom's decision to lay the east-west line.⁽¹¹⁶⁾ The importance of the line has been enhanced by the intention of other Gulf States, namely Iraq (see below), to connect their oilfields with it in order to avoid

traffic hazards created by the Gulf tanker war and the Iranian threat to blockade Hormuz. The Financial Times (10/83) says that in the event of closure of Hormuz the line could contribute to offset the shortfall; certainly this cannot be attained with the line's current output. Without being transited through the Canal or pipeline, Saudi oil supplies to Western Europe via the ^East-^West pipeline cannot be economically viable, argues Odell (1983). Therefore, Saudi-Egyptian cooperation is crucial especially to the Saudis. (117)

Besides attack or sabotage, the line could be vulnerable to other factors that may affect its operation. The world oil glut is one of the crucial causes that could affect the line. In early 1982 the Economist anticipated that the slump in world demand for oil could precipitate the shutting down of the line because exports from Yanbu declined from 1.2m b/d to just 300,000 b/d, or 75%. Another view contends that the line 'has hardly been a commercial success', since its opening four years ago. Despite its saving of 3,600km compared to the sea route round the Arabian peninsula, still the overland pipeline is rivalled by tankers whose price rates have become lower owing to recession in the world shipping industry. Also transit dues constitute a deterrent to use of the line. At first, a 60 cent was charged by the Saudis as a premium for

loading oil on the Red Sea. Negotiations by Aramco partners and Petromin customers against this rate resulted in a 10 cent cut, but this did not satisfy the customers who continued to believe that:

"the gains from loading oil in the Red Sea are still outweighed by the depressed demand for oil". (118)

Therefore, oil exports through the Red Sea were expected to be suspended. However, owing to a general decline in oil demand, the Saudis have cut their exports via the Red Sea, a step that has been linked to a Saudi strategy of allowing its oil output to be determined by market forces as the Kingdom's oil Minister, Sheikh Ahmed Zaki Yamani, stated in 1982. (119)

With regard to physical threat, such as attack or sabotage, in 1984 Cordesman argued that Saudi expansion of facilities, such as those at Yanbu, will

"require new air defense coverage and increase Saudi Arabia's defense problems". (120)

Because storage and loading facilities at Yanbu are many and of the same kind, they are dangerously exposed to the extent that:

"a single air strike could paralyze a plant costing several hundred million dollars for up to two years". (121)

Being greatly concerned about the growing network of pipelines to the Red Sea, especially to Yanbu, the US

"is planning to develop a military facility across from Yanbu at Ras Banas", (122)

on the Egyptian coast. Thus Yanbu will be only 240km away from the potential American base. Quandt (1983) perceives the location of Ras Banas, in relation to the port of Yanbu, to be capable of threatening or defending the industrial complex there. (123) To Cordesman (1984) the ^East-^West pipeline

"will open up new opportunities for sabotage and long range air ^{ke2}strips that bypass Saudi Arabia's radar system along the Gulf". (124)

Moreover, this new Saudi industrial complex will burden the Kingdom's air defence with a logistically difficult task because it will

"force the small Saudi Air Force to defend two coastal areas more than 1,000 miles apart". (125)

However, just one year later (1985), Cordesman's proposal for the protection of those Saudi facilities directly contradicted his 1984 analysis of the reasons that make those facilities vulnerable. In 1985 he argued that protection of Saudi petroleum and gas facilities could be facilitated by building more installations in various locations:

"The gas and oil facilities should be dispersed, rendered more superfluous to Saudi needs through duplicate facilities elsewhere, and so become less vulnerable to attack." (126)

Cordesman thus supports the idea of a second east-west pipeline (see below).

Political factors that could threaten the east-west pipeline have also been identified by the Americans who think that the viability of the line is too subject to the policies of Egypt which controls the Suez Canal.⁽¹²⁷⁾ However, the Americans should remember that the line is of value to Egypt because it has created a tremendous impact on the enlarged Canal by causing a dramatic increase in northbound tonnage of oil tankers. As a result the Canal witnessed a 50% increase in its handling of tankers between 1980 and 1982, despite an overall world oil glut. Saudi Arabia's opposition to the partial peace between Israel and Egypt, as demonstrated by the Kingdom's participation in the 1977 Baghdad Conference, in opposition to Sadat's visit to Israel, and the Saudi view that Israel is the major source of insecurity to the Kingdom is well known. One wonders, therefore, how Odell (1983) can claim that the peace accord between Israel and Egypt 'persuaded' Saudi Arabia that the east-west pipeline/Yanbu/Suez Canal route was a safe proposition.⁽¹²⁸⁾ The consequences of US involvement in Red Sea and Gulf affairs have been demonstrated in various anti-American actions, for instance, 'the mines of 1984', which was claimed by an Islamic fundamentalist group, was announced as an action against the US (chapter 6).

A Second East-West Pipeline (Proposed)

The most recent developments in Saudi Arabia's system of oil transportation are represented by the looping of the east-west crude export pipeline to take in 500,000 b/d via Iraq's spur (see below), and the plan to build a second east-west pipeline.⁽¹²⁹⁾ American concern about the security of Gulf oil supplies and acceptable oil prices have been the reason behind US interest in the new line, as is clearly shown by Cordesman (1985). He points out that a few Iranian attacks on the Kingdom's oil complex might increase the price of oil and halve its flow. He therefore emphasizes the importance of the second east-west line which would enable Saudi Arabia to maintain exports

"so that Iran does not have leverage to cause a major crisis by hitting existing facilities and shutting down the flow". (130)

The second pipeline would be 56 inches in diameter, running parallel to the 48 inch first east-west line (figure 5.5), and would raise the latter's throughput to 3m b/d. Such large capacity, equivalent to nearly 20% of OPEC's combined production in the spring of 1985, is important when it is linked to the increasing impact of the Gulf war on oil production and/or transportation. Since mid-1984 it has been clear that the Gulf tanker war demonstrated to both oil

producers and consumers

"a clear need to maximize crude throughput for export should Gulf outlets be put at risk". (131)

The possibility of linking the new line with Saudi Arabia's grandiose scheme for underground storage in the vicinity of Yanbu, has already been mentioned. The scheduled date for the commissioning of the line is 1987 at a cost estimated at \$500m. (132)

Besides Saudi Arabia, beleaguered Iraq will also benefit from the project which will help the transportation of all the oil to be exported through Iraq's 500,000 b/d spur by tying in the latter with the new line. Quandt (1985) views the line as providing a useful substitute in case the situation in the Gulf becomes unmanageable; besides it avails Iraq a 'useful facility for exporting', and in relation to the Red Sea, Quandt adds that the line

"provides the capability of putting a substantial amount of oil into a part of the Middle East likely to be more stable than the Gulf, namely the northern Red Sea". (133)

Preoccupation with the Gulf war and its threat to disrupt oil transportation has created a general agreement between the US and Saudi Arabia about the execution of the line which is perceived by both countries of fundamental long-term strategic importance. The line

"makes good sense, and in the long-term it enhances stability and energy security in the region. Even now, with a relatively low demand for Saudi oil it makes considerable sense to embark on such a major long-term measure to reduce the need to ship crude through the Strait of Hormuz". (134)

MEED (5/85) indicates that most observers are convinced that the decision to build the line has been

"a purely political move, a form of insurance against the Gulf being closed to shipping" (135)

as a consequence of escalation in the Gulf war and possible future hostilities in the zone of oil routes.

Due to American apprehension over interruption of supplies, especially since 1982, the project has become appealing to the US and Western allies. Such interest has been typically expressed by Christine Helm, a Middle East and energy analyst at the Brookings Institution, thus:

"It diversifies vulnerability, so it will be welcomed by the US and West European states." (136)

The relative ease and costs involved in protecting such a line, compared to the defence of a whole oilfield zone and associated sea routes is considered by Cordesman (1985) as an important criterion in support of the laying of the line. In his words - according to MEED (5/85):

"Investment in pipelines by Saudi Arabia and other states is a far better form of defence than investment in any defence system or missiles. It takes a very high investment to improve military

systems even marginally - particularly one to defend the entire Gulf, since you have to protect a whole range of installations and shipping lanes over a wide area. But a pipeline to the Red Sea is relatively easy to defend, using Saudi Arabia's existing air force and defence capabilities." (137)

Although the decision to build a second line came from the highest level (a reference to King Fahad), the \$500m cost of the project has stirred up criticism - especially as it has coincided with Saudi public spending cuts and a decline in government payments. The increase in throughput has also created understandable argument against the scheme due to the lack of any commercial need to increase crude oil export capacity:

"Aramco and the technocrats were against the line because it is unattractive commercially ... They would have preferred to have scrapped the new line and carried on with the Qasim refinery", (138)

MEED (5/85) - with reference to an oil executive close to Aramco.

Eilat-Mediterranean Pipeline

Soon after the second Israeli-Arab war in October 1956, Israel laid the first 8-inch diameter trans-Negev oil pipeline extending from Eilat to Ashdod and Haifa. In 1960, with the flourishing of Eilat and increase in Israeli oil supplies from Iran, a 160 inch line replaced the previous one. With persistent Israeli increase of oil consumption, which jumped from 3m/b in 1948 to 25m/b in 1967, and to about 60 m/b in

1983, Israel built a new 42-inch pipeline from Eilat to Ashdod in the early 1970s, with a potential capacity of 60m tons per year. The line's current capacity is 0.9m b/d.⁽¹³⁹⁾

Israel was not expecting that Arab oil would be allowed to pass through the line. Odell (1983) argues that as long as the Arabs do not recognize Israel or allow it to benefit from its favourable location the economic viability of this line would be in doubt. No Arab state has ever consented to transport its oil through the line, and until 1978 Iran continued to be the only country to utilise the line to export moving large amounts of oil. Because most Iranian oil was produced and shipped by companies with large interests in the Arab world, the line's throughput was limited since these companies clearly did not want to antagonise the Arabs. Pre-Khomeini Iranian oil carried through the line from Eilat to Ashkelon availed Israel of badly needed hard currency earnings.⁽¹⁴⁰⁾

Since the downfall of the Shah in February 1979 and the Iranian Islamic Revolution, Iran has ceased cooperation with Israel; and the revolutionary Iran became

"more vociferous and active in its opposition against Israel".⁽¹⁴¹⁾

Consequently the line ceased to be used in moving Iranian oil, according to Odell (1983) who concludes that unless a comprehensive settlement to the Israeli-Arab dispute is achieved, neither a major expansion of the line's capacity or the full use of its current capacity (40m tons a year) will

be possible.⁽¹⁴²⁾ At present, the line may be transporting some Israeli supplies provided by Egypt in pursuance of the peace between the two in 1979. However, if the line's activity grows, it can only enhance Israeli interest in the Red Sea.

Iraq-Arabia-Red Sea Pipeline (Proposed)

The Israeli-Arab dispute and tensions associated with it have affected oil supply and transportation in the Middle East directly and indirectly. This has been demonstrated in the oil embargo of 1973, and relevantly in the intermittent closure of the Iraqi network of pipelines to the Mediterranean. At present, the only secure outlet left for Iraq is the 700,000 b/d line ending at Ceyhan in Turkey, but differences between the two countries over transit tolls has led to occasional interruptions in the line. The capacity of this line was later increased to 1m b/d.⁽¹⁴³⁾

The need to find a substitute to the hampered Mediterranean exits and the loss of export facilities on the Gulf, due to the effective Iranian blockade forced Iraq to search for alternative outlets for its oil exports. It seems the best solution for the beleaguered Iraq will be through the Red Sea. Iraq thus concluded two deals with Saudi Arabia and Jordan in 1984. The line through Saudi Arabia will carry oil from Iraq's southern oilfields to a new port refinery on the Saudi Red Sea coast. The line consists of two phases,

with an entire length of 970km. Installation of the line and its associated facilities are estimated to cost \$2b. The whole project will be completed in two years time (MEED 5/85).⁽¹⁴⁴⁾ Scheduled to begin in October 1984 the first phase will extend for 630km and include the building of a 48-inch diameter pipeline linking Zubair depot no.1 in southern Iraq with the pumping station no.3 of the Saudi east-west pipeline. The first phase will be completed by September 1985, according to MEED (10/84). The Iraqi oil Minister, Mr Qasim Taqi, has indicated Iraq's desire to accomplish this phase in a very short time. The contract for the construction of the entire line has been won by an Italian-French consortium. The first phase of the project will cost \$508m which will be covered by the delivery of 35,000 b/d of Iraqi oil for 'slightly over a year' to Italy's Agip. The US company Brown & Root has become the project consultant.⁽¹⁴⁵⁾

Initial capacity of the line will be 500,000 b/d during the first phase; and this will be upgraded to 1.6m b/d by the execution of the second phase which will be an independent line extending from Iraq to a new terminal on the Saudi coast on the Red Sea. The ultimate capacity will help Iraq regain export levels close to its pre-September 1980 maximum export of 3.5m b/d. In early 1984 only slightly more than one fourth of that amount was carried through Iraq's line via Turkey to the Mediterranean.⁽¹⁴⁶⁾ The execution of the second phase will include construction of twelve pumping stations between

Zubair and the Red Sea, where storage tanks and, on and offshore loading terminals will be constructed, somewhere south of Yanbu. However, until about mid-1985 there has been no mention of a construction programme for the second phase, which could mean that the entire line may not come to fruition at the scheduled time, 1986. (147)

Haditha-Aqaba Pipeline (Proposed)

The proposed Haditha-Aqaba pipeline from Iraq to Jordan is the other solution sought by beleaguered Iraq. The Iraqis are very concerned about finding a safe export route that could enable its economy to keep up even if

"its lines through Syria and Turkey and its Gulf loading facilities were damaged". (148)

Neither the Iraqi line via Jordan or through Saudi Arabia is expected to be complete before 1990. Both Iraq and Jordan are desperate to go ahead with the scheme. For Jordan the project is seen as helping alleviate domestic unemployment problems besides boosting the port of Aqaba. As in the case of Saudi Arabia's second east-west line, the Iraqi line to Jordan procured support from the highest level of authority; according to the International Herald Tribune (3/84) the scheme

"long regarded a rank outsider, now has the support of Iraq's top leadership". (149)

The two countries have initialled the scheme in principle according to International Saudi Report (7/84). Both countries are reported to be

"determined to implement what they describe as a 'vital' project" (150)

despite difficulties surrounding it. To enable Iraq to export oil from its northern and southern oilfields, the line will begin at Haditha, 200km northwest of Baghdad, and extend west until the Iraq-Jordanian border then southwest across Jordan to Aqaba. Its total length is 900-1,000km. The line may be preceded by the Iraq-Saudi line - formerly mentioned - and planned and built by the American construction firm Bechtel Inc. The line's capacity will be about 1m b/d. (151)

From the start, however, the proposed line has become subject to possible Israeli attack, because it will run close to Israel's frontiers. It is worth mentioning that Iraq already suffered Israeli aggression when the former's nuclear reactor was destroyed by Israel in 1982. With regard to the line, Israel objected to its construction informing Washington that oil spills from the pipeline and the refinery associated with it would 'pollute the Red Sea Bay', and could 'pollute the port of Eilat'. To ensure the safety of the line against Israeli threats, the Petroleum Economist (9/84) reported that

"Iraq ... insists that the scheme will not go ahead unless there is major US participation in the project, either from Export Import Bank other banks,

with Chase Manhattan Bank as lead manager, and that US companies involved in construction of the \$1 billion line agree to repay the cost of damage incurred in the event of an Israeli attack." (152)

Iraq, once one of the most radical and fiercest opponents of the US has been leaning somewhat more towards the US recently, recognizing the latter's political leverage. In pursuance of seeking assurances for the line Iraqi Deputy Prime Minister, Mr Taha Ramadan has indicated that, according to Saudi sources, the line must be built by an American firm because

"the US is the only power that can deter Israel from attacking a project executed by a major US company". (153)

The Iraqis are convinced that unless they set strong conditions they might lose; therefore they wish to link payment for construction work with revenues from the operation of the line, in the hope that this may curb Israeli threats to the line. This view was articulated by the Iraqi Oil Minister, Qasim Taqi, reported by the BBC Summary of World Broadcast (8/84) as saying that:

"to guarantee that the pipeline will not be attacked by the Zionist entity, Iraq had stipulated that it would not finance implementation of the pipeline except through the oil exported through it. ... Iraq would withhold payment should oil exportation be suspended as a result of intervention by a third party". (154)

The Minister believes that such firm stipulations will oblige

"the interested states to put pressure on the Zionist entity to prevent it from interfering or attacking this pipeline". (155)

The Minister emphasized that his country's condition in this respect was 'basic, firm, and principled' and that Iraq has communicated this position to the construction firm and the financiers. (156)

What Iraq is looking for is political and military guarantees that Israel will not interfere with the operation of the line.

With reference to the US official view the International Herald Tribune (3/84) points out that the US Government

"played a major role in secret negotiations over the Iraqi pipeline ... across Jordan ..." (157)

The US, with no diplomatic ties with Ba'athist Iraq, assured the latter that:

"Israel will not interfere with the pipeline". (156)

Interestingly, The Guardian (5/84) discloses that the decision to announce the go-ahead for the scheme was taken by the Iraqis who had, previously, the negotiations in silence, after Baghdad was embarrassed by a speech from the Israeli Minister of Energy, Mr Modari, who promised that the proposed line would not be attacked. The Minister gave the guarantee, as he said, adds The Guardian, in response to Washington's request following an appeal to do so by Baghdad. (159)

However, the Iraqi Oil Minister denied that his government had sought such assurance. Drawing on the aforementioned official Iraqi approach toward the project, it would be possible to believe that such a guarantee has been sought. Al-Sharq al-Ausat (8/84) says that the Jordanian Minister for Trade and Industry has announced that the building of the line is a pressing necessity for Jordan, and that they

"had guarantees that Israel would not attack it". (160)

However, no mention about the nature of these assurances was made. Iraq seems dissatisfied with what its partner, Jordan, has said about these guarantees because the former believe that

"this is a strategic pipeline, therefore it must obtain guarantees at least for a convenient period of time", (161)

according to the Iraqi Deputy Prime Minister, quoted in Asharg Al-Awsat (8/84). Israel is seen by the paper as trying to rob Iraq and Jordan through the issue of guaranteeing the security of the line. Interestingly, the paper links this Israeli behaviour with that of 1979 when it tried to capitalize on the Jordanian-Syrian agreement regarding the waters of the Yarmuk River (in N.W. Jordan). The agreement indicated that Jordan would build the Muqaran Dam under an American guarantee that Israel would not interfere with the project. Later Israel indicated taht unless a water quota were to be allotted to

Israel there would be no safety for the scheme. Consequently, Jordan dropped the project.⁽¹⁶²⁾ Although the Israeli government gave assurances that it has "no plans for a sabotage operation" still "fears over Israeli intentions exist".⁽¹⁶³⁾ The Middle East (10/84) perceives Israel as attempting to "score a political point" similar to the Muqaran Dam episode, because Israel proposed that:

"the line be linked with its own oil pipeline from Eilat to Ashkelon". (164)

The financing of the project is thus critically linked to the issue of guaranteeing the security of the line. American geopolitical manoeuvres in the matter will be critical. After a 17-year interval of severed diplomatic ties between them, Iraq and the US started a rapprochement some time after the beginning of the Gulf war, and poised to re-establish diplomatic relations (MEED 11/84). Baghdad is apparently satisfied with President Reagan's attitude with regard to the Iraq-Iran war because his 'policies ... towards the Gulf war have been fair'. MEED (11/84) declares this to be the general belief in Iraq. The magazine argues that Iraq benefits from a US desire not to see Iran emerge as victorious; therefore Iraq

"makes much of the fact that an Iranian success in the war could pose a threat to US and Western interests in the region. (163)

However, the fact is that the Americans want neither belligerent to come out successful (chapter 7). Growing

American pro-Iraqi orientation has been evident since August 1984, for example, in a report prepared for the Senate Foreign Relations Committee, indicating that US policy has tilted towards Iraq. Generally speaking, the American stance toward Iraq is embodied in

"economic and political matters, rather than through military assistance". (166)

It is this economic policy pursued by the US that has created an influential US role in the Haditha-Aqaba pipeline scenario. To help Iraq economically, is seen as helping it in its costly 5-year-old war. Israeli threats to the line have hampered discussion on the finance of the line. The story of Israeli threat has made 'financial institutions cautious' especially when Iraq demanded that it should be permitted to suspend payments of construction should the line be disrupted by sabotage. Bechtel, the constructor, rejected Iraq's condition of security guarantees, because such assurances would be a

"bitter and unprecedented pill for international banks to swallow". (167)

In June 1984 reports said that due to 'pressure from the White House' the American Export Import Bank (Eximbank) - which gives insurance to US exporters, expressed its willingness to provide \$500m, to help the construction of the Haditha-Aqaba line. Thus, US official involvement in the matter could be

related to

"US willingness to help to ease Iraq's economic plight - and thus aid its overall war effort". (168)

Other sources of finance have been sought in Britain and France. Britain's Export Credit Guarantee Department (ECGD) seems to be considerably interested in the scheme. Although no formal deal so far has been reached between the institution and the Iraqi-Jordanian delegation, the ECGD's spokesman indicated that they would

"give serious consideration to approaches from exporters for this scheme". (169)

It was reported, however, on 14 August 1984 that Iraq announced that it had suspended the pipeline project until proper guarantees were obtained. MEED (10/84) reports that negotiations between Western companies, headed by Bechtel, and an Iraq-Jordan team over the issue of guarantees against Israeli political or military interference with the operation of the line had reached a deadlock. Thus, the Israeli potential threat has compelled Iraq and Jordan to stop short of executing the project, which is also hampered because the

"US government could not provide guarantees that Israel would refrain from attacking the line". (170)

Early in 1984, some analyses of Arab oil politics expressed pessimism that the line would ever be built. However, though unhelpful about the line, the same analysts emphasize the

importance of US manoeuvre in support of Iraq.⁽¹⁷¹⁾ Despite the tremendous problems surrounding Haditha-Aqaba pipeline, the project is said to be still under discussion with the US Bechtel Group.⁽¹⁷²⁾

In sum, if proposed Iraqi pipelines via Saudi Arabia and Jordan materialize, they will give Iraq considerable export capability when added to the Dortyol line, even if its war against Iran continues. Iraq's exports through these avenues could exceed 3m b/d by late 1986, according to the Petroleum Economist (9/84).⁽¹⁷³⁾ Both proposed lines have created important regional and geopolitical developments which have clearly given the US some unexpected geopolitical leverage in the area.

Other Proposed Pipelines

Middle and southern Red Sea zones are seen as becoming increasingly vulnerable, therefore Cordesman (1984) sees dependence on ports south of Yanbu, as terminals for pipelines, to be dangerous. However, to bypass the Strait of Hormuz, discussions of laying more pipelines have begun among the six members of the GCC since the beginning of the Gulf tanker war in 1982. Middle and southern sectors of the Red Sea are seen as becoming increasingly vulnerable to disruptive activities - the Eritrean conflict on the western side, the revolutionary PDR Yemen, and hostilities in the Horn on the southwest extremities of the Red Sea region are some sources

of such fears, especially when Soviet influence in these areas is linked to the latter's endemic instability. As a result dependence on any port south of Yanbu as a pipeline terminal is considered by Cordesman (1983) as dangerous. He sees pipelines through Oman as being less vulnerable to interdictions at Hormuz and Bab al Mandeb.⁽¹⁷⁴⁾ Such a line, via Oman, has already been scrutinized by the GCC, with Salala, on the Arabian Sea, being chosen as its future terminal. A feasibility study of this project is reported to have begun. The proposed line would start in Iraq and continue southward through Kuwait, Saudi Arabia, and southern part of the UAE, with branch lines to Qatar and possibly the northern part of the UAE. The line's capacity would be the same as first East-West pipeline, namely 1.85m b/d. Phase two of this line would be a branching of the line to Muscat or Masirah Island. However, Salala is in Dhofar Province and it is just 60-70km from the PDR Yemen-Oman land boundary.⁽¹⁷⁵⁾ Should hostilities resume between the revolutionary PDR Yemen and monarchical Oman, such a line could be vulnerable to sabotage.

There are several other possible pipelines within the Gulf area. The Arab Gulf producers have an idea of extending a line from the Gulf to Aden's refinery. The scheme is seen as an important device to enhance Arab security, easing economic difficulties in a strategically located oil-dry Arab country. It could also help bridge the gap between the 'haves' and 'have-nots',⁽¹⁷⁶⁾ or between oil producers and transit states.

Trans-Africa Pipeline

The Trans-Africa pipeline is an idea conceived by some American business circles in 1973 to move oil from the Red Sea to the Atlantic. The Israeli-Arab war of October 1973 and its impacts on guaranteed flow of oil supplies were the major reason behind the idea at that time. Ten years later, the same American investors feared that a spill-over of the Gulf war or any new eruption of an Israeli-Arab round of confrontation might cut the flow of oil to the West. Therefore the idea about the line was revived in 1983. In July 1984, the Trans-African Pipeline Company (TAPCO), an American firm, signed an agreement with Sudan to use the latter's territory for the construction of the line.⁽¹⁷⁷⁾ Two objectives have revived the long-shelved idea;

- (1) an economic aspect conceived in an expected surplus in Gulf oil transported via the line instead of tankers; and
- (2) a strategic aspect, as the line would help to by-pass strategic complications in the Gulf area.⁽¹⁷⁸⁾

The project includes the building of a new port facility, somewhere near Port Sudan, to hold 30mb. A 3,600km two-fold line of a 56-in diameter and 4m b/d capacity would run from the new port to the port of Douala on the Atlantic. Construction of the line is scheduled to be commissioned. The official Sudanow (8/84) reports the cost of the project as \$10 billion, but Tapco sources indicate a higher figure of \$12 billion, and even \$15 billion - according to MEED (8/84).⁽¹⁷⁹⁾

However, again the idea of the Trans-Africa pipeline has been muted due to:

- (1) the difficulty of securing oil supplies for the operation of the line, although Tapco was hoping that Saudi Arabia would supply 2.6m b/d and Iraq 1.4m b/d, but neither of the two states so far have indicated their willingness to supply the oil;
- (2) failure to find finance: this factor is closely associated with the former;
- (3) corruption allegations which have surrounded the signing of the project, and led to the 'start of investigation by the US senate ethics committee. (180)

However, the issue of safety of such a line traversing three countries, where instability, especially in Sudan since 1984, has led to the stoppage of oil explorations, must be one of the main reasons behind the reluctance of both oil suppliers and financiers to be involved in the project. It could be maintained that basically, had it not been for the issue of security the building of the line could be useful to both consumers and suppliers, and not least to countries of transit in royalties and services. If it were to materialize the line could contribute to the promotion of Afro-Arab ties. Port activity at Yanbu and especially at Port Sudan could increase substantially. However, one important country might not welcome the project, that is Egypt, because the line could have considerable impact upon the Suez Canal and Sumed pipeline.

5.3 Conclusion

Rapidly declining reserves and production in the US, Western Europe and Japan, combined with a rising curve of consumption, growing instability in the main sources of dependence, especially the Middle East and Central America, all indicate that the fundamental oil equation will continue to have important implications for US interests. While Western sources of oil are depleting, those of the Middle East, particularly the Gulf, are growing. Oil has long been an important component of US military strength, and the 1973 embargo established deepseated concerns about oil cuts - especially whenever conflict in the Middle East flares, as during the Iranian cutoffs in 1979 and the ongoing Iraq-Iran war. Use of force to obtain oil during crisis times is considered a poor option combining great military risks, and likely damage to US interests. The American-designed peace between Israel and Egypt has not removed the possibility of disruption of oil supplies to the West. The Red Sea will play an important role in transporting oil supplies to the West, especially if rise in demand takes place. Moreover, the completion of the network of current and proposed pipelines could enhance the role of the Red Sea. Also, if the shelved second phase of development of the Canal is to be reconsidered, this may increase the importance of the Red Sea.

The crisis situation in the Gulf has created for the US a geopolitical platform in the Red Sea and, to some extent,

soothed a long-rooted anti-American attitude in the northern Red Sea region. Such development has been mainly remarkable in the tilting by both the US and Iraq toward each other. American geopolitical influence in that part of the region has opened up economic opportunities for US companies through the involvement of the latter in the building of pipelines to the Red Sea.

Chapter Five

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PART III:

THREATS TO UNITED STATES INTERESTS

CHAPTER 6

SECURITY OF SHIPPING: PHYSICAL AND LEGAL THREATS

6.1 Physical Threats

Much has been written about "threats" to shipping in the Middle East, particularly the Gulf region, with much of it in popular newspapers and journals. It is worth noting that in the Red Sea region both the opportunities and the motives for threats to shipping can be said to exist (appendix 3). The opportunities are presented by a number of geopolitical characteristics, five of which deserve mention.

First, the Red Sea is narrow and long, with fairly restricted shipping lanes.

Second, it has thinly populated coasts which are flanked on both sides by mountains and/or high lands facilitating the activities of saboteurs or armed groups.

Third, it contains numerous islands, some of which are strategically located in the middle or at the entrance of straits and gulfs. Many are uninhabited and could provide temporary bases from which to attack shipping.

Fourth, most of the riparian states are caught up in inter-state and/or regional disputes, a situation which renders each party's territorial waters a potential target for sabotage or attacks. The "spillover" effect of such attacks has been seen in the Gulf since 1982.

Fifth, superpower competition has led to the acquisition

Table 6.1Tankers hit and damaged by air attack in the Gulf: 1982-1984 *

Ship	Tonnage	Flag	Cargo	Attacker	Date
Atlas I	142,806	Turkey	Ballast	Iraq	May '82
Rover Star	50,000	Panama	Laden	Iraq	18.4.84
Safina al-Arab	357,100	S.Arabia	Laden	Iraq	25.4.84
al-Ahood	117,710	S.Arabia	Laden	Iraq	7.5.84
Umm al-Casbah	79,999	Kuwait	Laden	Iran	13.5.84
Bahrah	26,000	Kuwait	Ballast	Iran	14.5.84
Tabriz	69,000	Iran	Laden	Iraq	14.5.84
Esperanza	62,000	Panama	Ballast	Iraq	14.5.84
Yanbu Pride	214,992	S.Arabia	Part-laden	Iraq	15.5.84
Chemical Venture	29,427	Liberia	Ballast	Iran	24.5.84
Buyuk Hun	153,274	Turkey	Ballast	Iraq	4.6.84
Kazimah	294,739	Kuwait	Ballast	Iran	10.6.84
Alexander the Great	152,372	Greece	Laden	Iraq	24.6.84

* Note: The above thirteen are those clearly confirmed as attacked and damaged. Known to have been attacked but not damaged are: Ras al-Zourer, Atlanticos, Barcelona and Arizona. Others may have been attacked but, because most of these attacks are at long range, never knew it since missiles missed their target.

Source: Petroleum Economist, Vol.I, no.7, July 1984, Petroleum Press Bureau Ltd, London 1984, p.261.

of bases or facilities in the Red Sea, heightening maritime strategic and tactical thinking in the region.

It should be remembered that the Red Sea is located near other spheres of potential maritime conflict in the eastern Mediterranean and Gulf, and conflict in these spheres could spread to the Red Sea.

Physical threats to shipping could be carried out by non-government groups, such as resistance movements, or terrorists, representing extremist organisations. Their motives may be to achieve short-term publicity, long-term political change, or merely to damage the interests of a third party such as the United States. Their methods could include planting small mines, rocket attacks from land or from small ships at sea, hijacking, or sabotage of ships in port. The use of mines and rockets has already occurred in the Red Sea, so that the idea of threats to shipping is quite real. As the Gulf tanker war has demonstrated, many ship-owners will be deterred from using particular ports and routes as long as the risk of attack is posed, even though shipping lanes may not be physically blocked. Table 6.1 gives details on tankers hit and damaged in the Gulf. Governments, with conventional armed forces at their disposal on land, sea, and air, are in an even stronger position to pose threats to shipping than non-government organisations. The mining of deepwater channels, attacks from the air, the deployment of missiles, and naval blockade are all in their repertoires. On the other hand, the risks of a state

attacking shipping are far greater. Retaliation would be almost certain, and as we have seen, there are few states which stand to gain much by stopping the free movement of ships. Equally, the Gulf War has demonstrated the willingness of states to attack the ships of states not directly involved in hostilities. In this case, the possibility of drastic retaliation by the United States air force has been seriously discussed.

There are, unfortunately, a large number of states and non-state organisations who could have some motive for attacking or threatening to attack Red Sea shipping. These are briefly considered in the following paragraphs. It is argued that if both opportunity and motive are present, sooner or later ships in the Red Sea could be seriously at risk. The United States might then consider some form of intervention because of its perceived interests, both direct, and indirect on behalf of her allies.

Israel's powerful air and long-reach naval strength could threaten navigation in the Red Sea⁽¹⁾ as far south as Bab al Mandeb, or in the vicinity of Sinai. In 1967 Israel occupied Sharm al Sheikh and controlled shipping through the Strait of Rian; such action could be repeated if a fifth Israeli-Arab war took place - especially if Egypt repeals its peace agreement with Israel and reinstates its leading position in the Arab world. In its 1982 invasion of Lebanon, Israel damaged the Tapline which carries Arab oil to terminals in the eastern Mediterranean, and it has threatened

to attack the proposed Iraqi pipeline to Aqaba claiming that the line may pollute Eilat port. Iraq has been seeking American protection of the future line⁽²⁾ (chapter 5).

The five-year old Iraq-Iran war has already affected the Red Sea states mainly due to the role of the Gulf states, especially Saudi Arabia as the main financial backer of Iraq, and Egypt because of its support for Iraq. The shooting down of an Iranian plane by Saudi jets, backed by US surveillance aircraft and refuelling planes in the Gulf in June 1984,⁽³⁾ and the mining of the Red Sea in July-August 1984, which was claimed by the Islamic Jihad, are evidence of this. Thus, as long as such important Red Sea states as Saudi Arabia, Egypt and Jordan continue to support Iraq, Iran, or a pro-Iranian organization could retaliate in the Red sea, using pipelines or ships as targets. The mining of the Red Sea represents a striking example of the spill-over of the Gulf conflict. It indicates the

"guerrilla-like harrassment against shipping at sea", (4)

a scenario which is most feared by countries lacking strong seapower.

Frustrated Palestinians, with possible support from PDR Yemen, Libya, Syria or Iran may threaten navigation, especially at Bab al Mandeb, as they did in 1971. They could carry out attacks on oilfields, installations and routes in the Gulf or the Red Sea as an indication of their disenchant-

ment with the Gulf rulers and the US. There is no doubt about their willingness or ability, as was shown by the blowing up of Tapline on many occasions.⁽⁵⁾

The endemic conflict in the Horn of Africa could also endanger shipping in the Red Sea, especially if Somalia managed to annex Djibouti and cut Ethiopia's supply line through the strategic pocket state. In 1976 a Senatorial testimony expressed American worry about the threat to the Red Sea from Somalia - backed by the Arabs and the Soviet Union, which was expected to indulge in its

"aggressive intentions ... including conceivably the annexation of Djibouti and the constriction of the flow of traffic in the Red Sea".⁽⁶⁾

The most radical and the only Marxist State in the Arabian peninsula, occurs in the southern Red Sea, that is PDR Yemen. The Marxist state, with the upper hand over Bab al Mandeb, is in a good position to hamper shipping through the Strait especially perhaps Israeli vessels, or ships bound for Israel, or even American ships.

Soviet-American rivalry in the region could cause one of the two giants, especially in crisis time, to interfere with shipping in the Red Sea, especially when one recalls America's strategic gains from the closure of the Suez Canal during the US predicament in Vietnam, as indicated earlier. Superpower contention over the Indian Ocean has gradually included the Red Sea.⁽⁷⁾ Therefore, it may be impossible to

isolate the latter from what is going on in the former, especially in the northwestern quadrant, where Soviet-American military competition is greatest. Buzan (1978) points out that the major and maybe the only conflict potential in the Indian Ocean region with regard to the Law of the Sea will be interference with shipping in the Red Sea.⁽⁸⁾ Past and current Western/American preoccupation with oil disruptions emanate from a US perception of Soviet thrust toward the oil resources and routes in the Middle East, including Red Sea shipping lanes. Therefore, it may be instructive to highlight such preoccupations.

Since the late 1960s, the time which signalled the first Soviet naval presence in the Indian Ocean, while the Americans were entangled in Vietnam, the US was preoccupied by the spectre of conflict at sea with the USSR. Robert McNamara, then Secretary of Defence emphasized that:

"there is one possible contingency which is a war at sea with the Soviet Union not involving land battle". (9)

In 1982 Captain Moore wrote that:

"Of all the areas in which the Soviet Union has expanded its capability none has created such a general impression in the West as that of Soviet Navy ... the Soviet Navy is now the second most powerful in the world." (10)

Political-strategic concerns remain as the major objectives of the Soviet navy in the Indian Ocean and adjacent waters

that include the Red Sea. In these waters this navy has political and military tasks assigned to it.⁽¹¹⁾ In 1967 the Admiral of the Fleet of the Soviet Union, Sergei Gorshkov, declared that his fleet was "fully capable of offensive operations". But recently the Admiral has been quoted as saying:

"The Soviet Navy is a powerful factor in the creation of favourable conditions for the building of Socialism and Communism, for the active defence of peace and for strengthening international security." (12)

Thus, ideologically as well as strategically, Soviet maritime policy would be in clear conflict with that of the US, especially in waters that are part of or close to areas of American interest as in the Red Sea and Gulf regions.

In 1972 the US became anxious over the USSR enjoying a dominant presence in the Suez-Red Sea area, believing that the Soviet presence:

"will remain so at least while Arab-Israeli tension is high". (13)

However, the Israeli-Arab conflict is not yet over, despite the US sponsored peace between Egypt and Israel in 1979. Directly or indirectly, the US was able to pull Egypt out of the Soviet camp after the death of President Nasser and the takeover by the late~~d~~ President Sadat, in 1980. As a result of political differences with Moscow and owing to the redirection of the course of Egyptian policy toward the US,

Egypt expelled the Soviets in 1971,⁽¹⁴⁾ after some 18 years there. Even before their ejection from Egypt the Soviets were already establishing their political and military presence in the southern sector of the Red Sea, at Hodeidah (1963-79), Aden since 1969, Berbera (1962-1978), Socotra since the 1970s, and at the Ethiopian ports of Assab and Massawah (chapter 4), and the islands of Dahlak on the Eritrean coast since 1978. Linkage of Soviet facilities in Angola and Mozambique with those in the lower Red Sea region could enhance the range of Soviet activities along the sea routes through which oil supplies needed by Western Europe pass. However, when the Americans consider the growing Soviet presence around Bab al Mandeb and link it with Soviet involvement in Afghanistan and Libya, they perceive all this as a threat to the interests of the US and its Western allies. George Lenczowski (1979) envisages such a presence as

"an encircling movement stretching in a broad arc from Afghanistan to the southern reaches of the Red Sea". (15)

American intelligence sources, according to Ashard Al Awsat (3/1982), reported the transfer of Soviet floating dry-docks from the former Soviet base at Berbera to Dahlak. These sources add that:

"Ethiopian Nocra island has been developed to a full Soviet base for provisions and repairs". (16)

Moreover, the intelligence reports indicate that the number of Soviet naval units that use Nocra base monthly ranges

between 25 and 30 units, which include nuclear submarines and destroyers, and although the Ethiopian authorities deny that they have an agreement with the Soviets over the base, they do not object to the arrival of those naval units and use of the base. (17)

After the ousting of Haile Selassie of Ethiopia in September 1974 and the takeover by the Marxist military, the US became seriously concerned about the development of events in the lower Red Sea region. A Senatorial reaction to those events was that:

"the Soviet Union has occupied all the strategic points held by the British in the region of the Red Sea and the Gulf of Aden". (18)

The Senatorial remarks added that American friends in the region, named as: Iran, Israel, Saudi Arabia, Egypt, Sudan and Ethiopia, were all interested in the freedom of navigation through the Red Sea, but they fear

"an expansion of Soviet power in the Red Sea and Gulf of Aden region". (19)

In those Senatorial discussions, the former Chief Adviser to the Ethiopian Ministry of Foreign Affairs, Mr Spencer, emphasized that the Soviet control over the Horn of Africa is

"a terrible threat to the lines of communication through the Red Sea, the Indian Ocean and the line of oil tankers from the Persian Gulf around the Cape to the ports of Western Europe". (20)

Thus, American apprehension about the Soviet threat to US shipping interest in the Red Sea started in the late 1960s and has continued throughout the last decade and still exists. In the early 1980s some US experts on the impact of oil on American foreign affairs perceived that during the 1980s, the Soviet Union could interdict vital Middle Eastern oil supplies to the West from several places where it exercises military and political control. Moscow's areas of movement to interfere with oil supplies to the West include Iran, Iraq, Kuwait, the Strait of Hormuz, the entrance to the Gulf, Oman and

"either end of the Red Sea, Egypt and the Suez Canal, either flank of the Strait of Bab al Mandeb at the southern entrance to the Red Sea"

or from Libya in the southern Mediterranean. (21)

In 1977 the operational area of the MIDEASTFOR of the US included the Gulf, the Red Sea, and the Indian Ocean from the Cape of Good Hope to the Strait of Malacca. One of the missions assigned to the force in this area was to deter the activity of the USSR and that of potentially hostile forces in the operational area, and to counter the

"threat of hijacking by radical or terrorist elements, of American or friendly merchant ships". (22)

However, contrary to extreme American views about an imminent Soviet danger to Western oil routes, some Israeli

political/strategic analysts, namely Yodfat and Abir (1977) do not expect the Soviet Union to take a direct step in disrupting the flow of oil to the West since such a scenario would be

"completely incompatible with Soviet detente policy and is far beyond their occasional brinkmanship policy", (23)

but they caution that the USSR would make its utmost effort to eradicate the position of Western oil firms and Western interests in the Gulf area. According to Sterner (1984), being within convenient striking range of the tanker routes, Soviet naval units could threaten the life-line of the Western economies, however, like Yodfat and Abir (1977) he does not seem to anticipate a Soviet strike because:

"Moscow knows that any attempt to interrupt the flow of oil to the West would be a *casus belli* "

and that the West could not only "protect tanker routes" but has the

"capacity to respond against Soviet interests in other theatres". (24)

Not only direct Soviet threat worries the US, but possible threat from Soviet allies in the region also concerns Washington. Mr Sterner expects "Soviet surrogates ... to interfere with shipping." (25)

Although it may be true that attacking oil installations

on land is the simplest option⁽²⁶⁾ the events of the Gulf tanker war since 1982 have demonstrated that attacks on shipping in the Red Sea/Middle East waters are no more difficult than on land, not least because it is almost impossible to get hold of the culprits.

It is worth emphasizing that as indicated earlier, threats to the national security of coastal states may also impair freedom of navigation especially in such narrow waters as the Red Sea. Coastal states have the right to legislate for the protection of their waters from threats posed by foreign vessels and other factors. Such rights could lead to restrictions on shipping. After surveying the types and sources of interruption of shipping it may be instructive to look at the fresh and classical example of a threat to shipping in the Red Sea, the mines of 1984.

The Mines of 1984

A mysterious spate of blasts occurred in the Red Sea in July-August 1984. These most dramatic events were followed by political rows and military manoeuvres. These underwater detonations were the first since the 1974-1975 scouring of mines from the Suez Canal by combined American, British and French forces with Japanese financial aid. Although no ship was sunk by the explosions, eighteen vessels were damaged, according to Lloyd's list (Appendix 4). The first explosion occurred on 9 July 1984 and the last was on 15 August

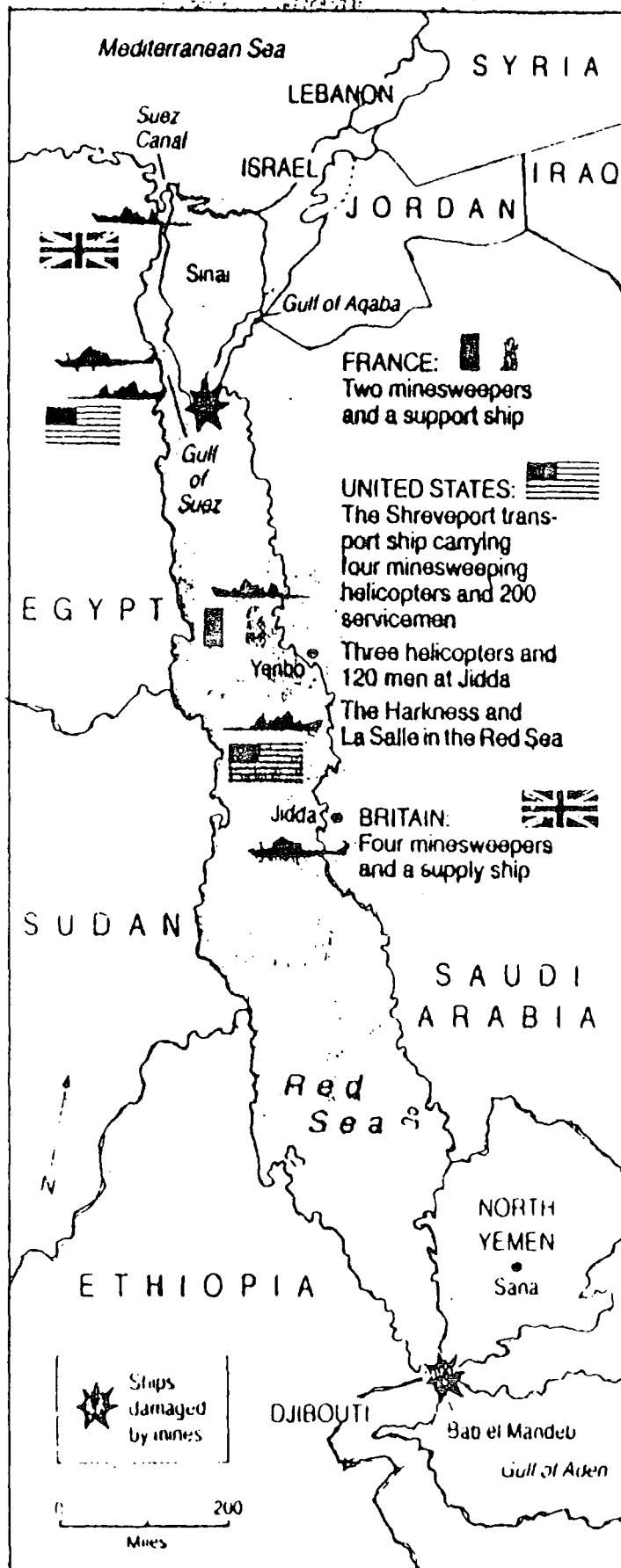
1984.⁽²⁷⁾ As the security of the Canal is so important to Egypt, it took the latter some weeks before admitting that there had been a crisis in the Red Sea. However, President Mubarak eventually disclosed that Egypt requested the help of the US, Britain and France to sweep the affected areas. Saudi Arabia and the states bordering the Red Sea also requested help,⁽²⁸⁾ (fig, 6.1.)

Following the explosions, there was a flurry of charges and counter charges over who laid the mines. Although the Lebanese-based, shadowy and extremist Islamic Jihad Organization had boastfully claimed the planting of 190 mines along the Red Sea, Egyptian and American suspicions were centred on Libya and Iran, but without solid evidence. The US insisted that it was not possible for such a group to plant the mines unless it was aided by a maritime nation.⁽²⁹⁾ The same pro-Iranian group claimed credit for the truck-bomb operation which left 241 US servicemen dead at the Marine headquarters in Beirut in October 1983.⁽³⁰⁾ American sources think that the mine-operation was designed to achieve the following objectives.

- (1) to punish Egypt, an ally of Iraq, by threatening to disrupt the Canal revenues of about \$1,000 million;
- (2) to weaken the Kingdom of Saudi Arabia, also a supporter and financial backer of Iraq which transports much of its oil via the Red Sea; and
- (3) to foil the Iraqi scheme of laying two pipelines across

TROUBLED WATERS

Ships, choppers and divers fan out for action



Source: Newsweek/
August 27, 1984

FIG. 6.1 THE WESTERN MULTINATIONAL
CLEARANCE OPERATION OF MINES
IN THE RED SEA (1984)

Saudi Arabia to the Red Sea, in order to "bypass Iranian guns that overlook the Persian Gulf". (31)

Because the first two target states are close friends of the US and thus their instability concerns the latter politically, strategically and economically, Washington promptly responded to their request and came to help in the mine-clearing operations in the Red Sea. In addition, the proposed Iraqi pipe- lines involve American interest (chapter 5.2).

While President Mubarak's Chief of Staff indicated that Egypt's "suspicions are almost confirmed" that Libya laid the mines, the President said:

"We have no definite answer, but we have big suspicions since the first Libyan ship passed through the Canal on July 6 and the first explosion was reported on July 9". (32)

Although without conclusive proof, Mr Rombert, the spokesman of the American Department of State emphasized that:

"... There is persuasive circumstantial evidence indicating that Libya was involved in mining the entrances of the Red Sea". (33)

The Pentagon spokesman, Michael Burch, also openly accused Libya by saying that "Libya is suspect"; but he added that the Defence Department was "not willing to go as far as the Egyptians" in accusing Libya and without additional proof

"We are not willing to say who the possible culprit or culprits are". (34)

US hesitation in directing open accusation at any state or organization has been related to the politically critical situation that the US was involved in when it mined the Nicaraguan ports. The Kuwaiti daily, Al Ray Al Aam (8/84) quoted the Washington Post as saying that planting of mines anywhere is an act of war.⁽³⁵⁾ Apart from denying any involvement in mining the Red Sea, Libya accused the US of planting the mines, and branded the allegations as

"a campaign of lies spread by imperialist and reactionary circles."

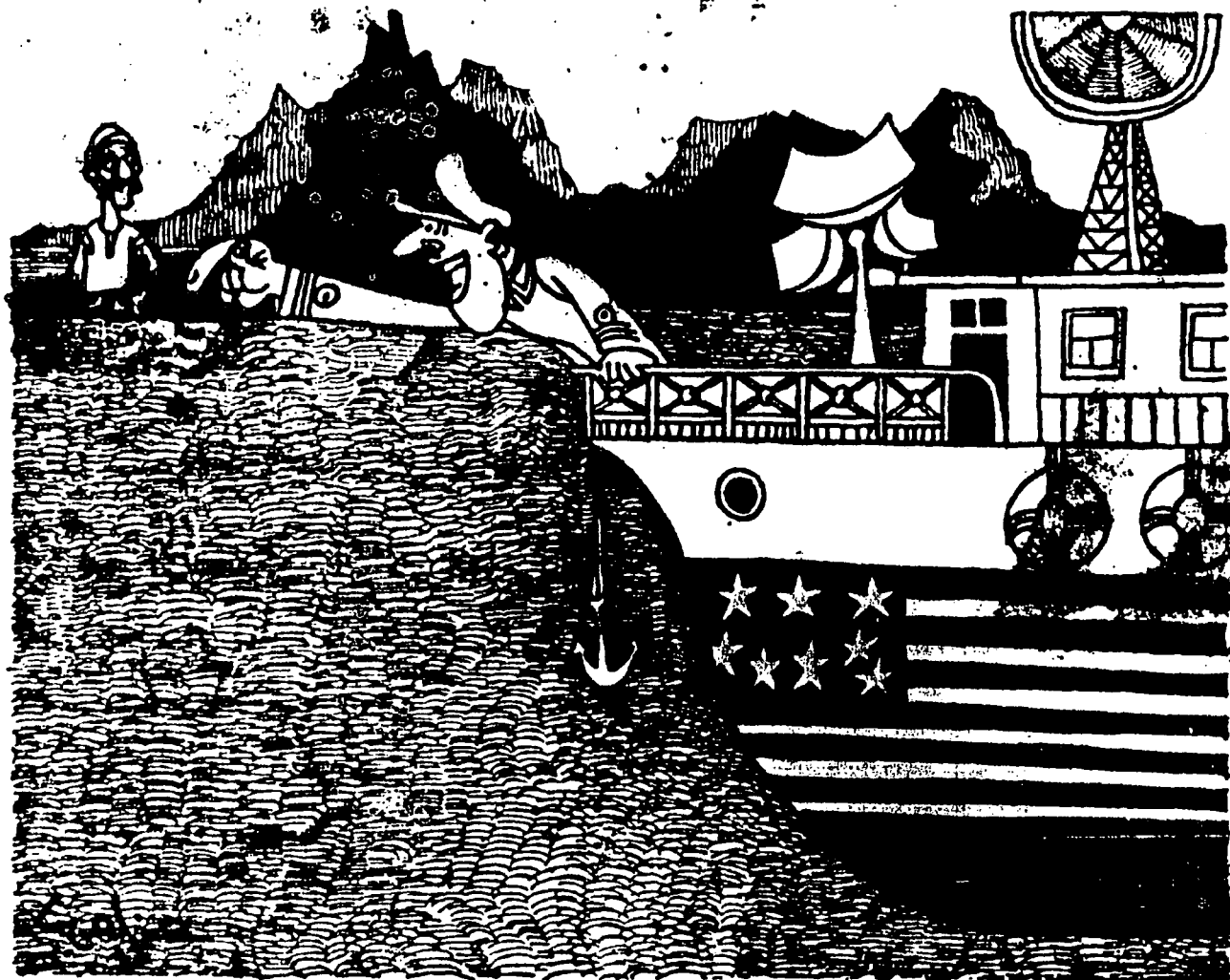
The former Chief of Staff of the Jordanian Army, Lieutenant General Al Majali argued that the mining must have been carried out by an advanced state because the operation needed advanced technology which could not be obtained by terrorist groups. He accused the US and Israel of the incident (plate 6.1). On the other hand, Israel named extremist Palestinians as the culprits. However, Israel was the only state asked by the US to give information about previous minelaying in the Gulf of Suez.⁽³⁶⁾

In spite of the apparent picking up of dozens of minelike objects on the various sonar screens of the multinational flotilla, thorough investigation has revealed only empty oil drums, garbage, or coral. American sources intimated that no mine could be found. Indicating their fading hope in retrieving mines, in spite of the 18 ships

PLATE 6.1

THE UNITED STATES SEARCHES FOR RED SEA MINES

امريكا تبحث عن الغام البحر الاحمر



- اطمئن.. ح ادور على اللغم، واد ما لقيتهوش ح احط لك واحد ناني ..

"Don't worry. I will look for the mine; if I don't find it,
I will plant you another one."

Al-Ahali 29 August 1984, Cairo

operation by an international minehunting force, Egyptian naval sources and Western diplomats suggested that the mines might have been set with time fuses that would have made them self-destructive before they could be recovered for identification.⁽³⁷⁾ In the absence of hard evidence over who was to blame, a high Pentagon official summed up events in the Red Sea region by saying that "the whole thing is just weird". Thus, the saga died a quiet death which greatly relieved officials in Cairo, who have subsequently been making every effort to prove that the area was safe for shipping.⁽³⁸⁾

Egypt drew attention to the 1888 Constantinople Convention which entitles the former to inspect ships passing through the Suez Canal and impose bans on vessels if she perceives a danger to its security, or the security of the Canal.⁽³⁹⁾ Regarding possible sanctions against whichever state may be found responsible for planting the mines, the idea has been distasteful to Western countries. The issue is particularly critical for the US which found itself in a

"particular quandary since it had recently indulged in a bit of its own mining in Nicaraguan harbours".⁽⁴⁰⁾

The mining fiasco was immediately followed by a call from Sudan for a conference on Red Sea security. Sudan's Foreign Minister announced that all the states of the Red Sea would participate at the meeting; and the Kingdom of Saudi

Arabia accepted an invitation by Sudan to attend. A spokesman for the Israeli Ministry of Foreign Affairs indicated that Israel had also been consulting with other governments about the mining of the Red Sea. The spokesman added that:

"We are a state fronting the Red Sea and our interests would be affected by these explosions."
(41)

The Egyptian minister of State for Foreign Affairs, Butros Ghali pointed out that the absence of any solid proof about who sowed the mines was probably the reason for the apparently lukewarm reception to Egypt's call for a conference on Red Sea security.⁽⁴²⁾ It is also clear that both Sudan and Egypt did not show any inclination to exclude Israel from such a conference. In fact, it was not the absence of proof that caused the unenthusiastic reception to Egypt's call for the meeting as the Minister maintained, but it was more likely the severance of diplomatic relations with Egypt by the Arab States following President Sadat's peace with Israel. However, no conference was held and the initiative died out. France proposed the convening of an international conference to safeguard navigation in the Red Sea, and the conclusion of an international agreement similar to that of the Contadora states in Latin America.⁽⁴³⁾

One of the repercussions of the mining incident was that the sight of Western minehunters steaming down the Suez Canal brought back painful memories to the people of the Canal zone

whose livelihood depends on the waterway.⁽⁴⁴⁾ The episode has established a dangerous and tempting precedent of deliberate action to disrupt shipping in the Red Sea which the US regards as one of the world's busiest waterways. The incident could easily repeat itself.⁽⁴⁵⁾ Following the leading role of the US in scouring the Red Sea from mines the International Herald Tribune (8/84) emphasized that:

"No nation ... has a greater interest in the general freedom of the Seas than the United States." ⁽⁴⁶⁾

Regardless of the objectives of the persons planting the mines the question of why the Red Sea was chosen for the mining operation, is of interest. The geological/physical formation of the Red Sea may have been a helpful factor in the considerable effect of the mines, as the Chairman of the Suez Canal Authority suggests. Because the Red Sea is narrow and with limited sea lanes, a few mines placed along one of these channels means that some vessels are bound to be hit.⁽⁴⁷⁾ Other seas have less confined sealanes and consequently mines would be less effective in those seas. Ironically, the regional attitude that followed the mining episode was directed against the US because both Red Sea radical and Gulf moderate states, as well as the Soviet Union, all considered that American intervention in the Red Sea would threaten the security of Arab and Red Sea states.

6.2 Legal Threat

The future application of the 1982 UN Convention on the Law of the Sea would place international straits of 24nm or less in the territorial waters of states bordering the Straits. Article 3 of the Convention entitles every state to extend its territorial sea to 12nm. The Article states that:

"Every State has the right to establish the breadth of its territorial sea up to a limit not exceeding 12 nautical miles, measured from baselines determined in accordance with this Convention."

Apart from the Suez Canal which is subject to a special regime the other Red Sea waterways would be affected by the Convention, namely the straits of Gubal, Tiran and Bab al Mandeb. Moreover, the introduction of the EEZ has increased the area of state jurisdiction of Red Sea states. This situation is bound to intensify navigational problems, particularly through Arab waters. With escalating tensions and suspicions such as that surrounded the mining of the Red Sea in 1984, further interference with Western, especially American, shipping could be anticipated.

The legal regime of straits has long been debated between the riparian states and maritime powers. Coastal states generally seek a regime of territorial sea in which transit is subject to the coastal states' jurisdictions and serving their economic and security interests. Maritime powers have been inclined to press for a separate regime

allowing unhindered passage through straits.⁽⁵⁰⁾ Article 17 of the Convention stipulates that:

"Ships of all States, whether coastal or land-locked, enjoy the right of innocent passage through the territorial sea." (51)

Such passage should be "continuous and expeditious" except in 'force majeure' distress or emergency situations, as for example to assist people, ships or aircraft in danger or distress, where stoppage or anchorage might be considered as part of a continuous passage. According to Article 19 passage would be innocent if

"it is not prejudicial to the peace, good order or security of the coastal state". (52)

However, the problem will be who is going to decide whether a passage is innocent or not? And how will this be decided without being influenced by an already established attitude between coastal and non-coastal states, for example the Arabs and Israel. Obviously, the decision would be at the discretion of the coastal state; hence, problems are bound to arise especially with regard to Israeli shipping or ships bound for Israel, as well as ships flying the US flag, either due to US refusal to sign the Convention or with regard to its support for Israel. Maritime powers fear that their strategic and commercial interests might be prejudiced by the principle of 'innocent passage'. These major powers, with particular reference to the US, were greatly concerned by the

right of coastal states to interpret 'innocent passage'.⁽⁵³⁾

Article 19 also indicates that passage will not be innocent if in the territorial water the foreign ship undertakes:

- (1) any threat or use of force against the sovereignty, territorial integrity or political independence of the coastal state, or in any other manner in violation of the principles of international law embodied in the Charter of the United Nations;
- (2) any exercise or practice with weapons of any kind;
- (3) any act aimed at collecting information to the prejudice of the defence or security of the coastal state;
- (4) any act of propaganda aimed at affecting the defence or security of the coastal state;
- (5) the launching, landing or taking on board of any military device;
- (6) the loading or unloading of any commodity, currency or person contrary to the customs, fiscal, immigration or sanitary laws and regulations of the coastal state;
- (7) any act of wilful and serious pollution contrary to this Convention;
- (8) any fishing activities;
- (9) the carrying out of research or survey activities;
- (10) any act aimed at interfering with any systems of communication or any other facilities or installations of the coastal state;

(11) any other activity not having a direct bearing on passage.⁽⁵⁴⁾

Although foreign ships are allowed 'innocent passage' through territorial seas, "submerged submarine and other underwater vehicles" cannot enjoy that right unless they "navigate on the surface" and "show their flag".⁽⁵⁵⁾ Article 45 stipulates that the regime of innocent passage should be applicable in the Straits⁽⁵⁶⁾ excluded from the regime of transit passage. The regime of transit passage was introduced to strengthen freedom of navigation in international straits beyond the rights contained in the concept of "innocent passage". International straits are defined as straits:

"which are used for international navigation between one part of the high seas or an exclusive economic zone and another part of the high seas or an exclusive economic zone." (57)

Article 38 guarantees the right of transit passage through international straits where:

"all ships and aircraft enjoy the right of transit passage, which shall not be impeded ..."

except under certain circumstances elaborated in paragraph 1 of the Article. Transit passage is defined as:

"... the exercise ... of the freedom of navigation and overflight solely for the purpose of continuous and expeditious transit of the strait ... However, the requirement of, and expeditious transit does not preclude passage through the Strait for the purpose of entering, leaving or returning from a State bordering the Strait, subject to the conditions of entry to that State." (58)

In exercising the right of transit passage, ships and aircraft are obliged by Article 39 to observe specific duties similar to those in Article 19 such as not to threaten the security of the coastal state, or cause pollution. Aircraft are required to comply with the regulations set by the International Civil Aviation Organization.⁽⁵⁹⁾

According to Article 40 prior authorization of the State bordering on strait may be needed by foreign ships to "carry out any research or survey activities", and Article 41 entitles states bordering on straits to "designate sea lanes and prescribe traffic separation schemes" for shipping in straits where they are important to "promote the safe passage of ships". During transit passage, vessels are obliged to abide by those navigational systems.⁽⁶⁰⁾ Coastal states may also prevent fishing and any activity contravening their customs, fiscal, immigration or sanitary laws and regulations. While exercising the right of adopting laws and regulations related to transit passage states bordering straits, should understand that such legislations, according to Article 42,

"shall not discriminate in form or in fact among foreign ships or in their application have the practical effect of denying, hampering or impairing the right of transit passage".⁽⁶¹⁾

On the other hand, foreign vessels enjoying the right of transit passage are required to comply with those rules.⁽⁶²⁾ However, with regard to the Red Sea, as well as to other Arab

waters, it is debatable whether Israeli ships or vessels en route to Israel will be seen as having the right of transit passage as stated above. If denied, it could lead to conflict involving the US, which is in agreement with Israel regarding the latter's rights in navigating Red Sea straits. Denial of transit passage to US ships by some Red Sea states bordering on straits, such as Bab al Mandeb, could then be expected.

Some coastal states emphasize that the passage of certain type of ships is inherently non-innocent. Quoted in Marston (1984) the delegation of Yemen AR said in its final speech at the UN conference on the Law of the Sea at Montego Bay that:

"The passage of foreign warships and nuclear-powered vessels in the territorial waters near the coast of small developing states is difficult to describe as innocent, whatever justifications may be used. The governments and people of those states cannot view favourably the presence of foreign warships in their territorial waters without prior notification or knowledge of their intentions and purposes. Similarly, it is difficult to say that such passage does not infringe the sovereignty of these small developing coastal states." (63)

Ambassador Elliot Richardson, the Special Representative of the US President at the Law of the Sea Conference indicated in 1980 that his country had traditionally seen its military and commercial interests as requiring maximum freedom of mobility for its ships; and that any extension of the territorial sea would potentially impair such freedom. He added that all the world's most important straits would be

subject to the limitations of innocent passage. Among these straits he specifically referred to Bab al Mandeb. He maintained that these restrictions could profoundly impede the flexibility of the US conventional forces as well as its fleet of ballistic missile submarines since they depend on complete mobility in the oceans and unimpaired passage through international straits.⁽⁶⁴⁾ The former US Defence Secretary, Donald Rumsfeld (1977) said that:

"we must be vitally interested in the freedom of the seas and the narrow waters that connect them". (65)

Three years later, the former American president, Mr Nixon was quoted as saying that:

"The United States is an island country ... As an island sea power, dependent on ocean going commerce and on sea lines of communication with our allies, the United States must insist on decisive superiority on the waterways of the world." (66)

Since assuming office in 1981, President Reagan's naval policy has been: "full steam ahead on a build up", and the essence of his naval strategy has been: "offensive power, ready to steam toward a crisis", according to the International Herald Tribune (4/84). The paper adds that shortly after taking office (1981), the President declared that:

"Maritime power for us is a necessity. We must be able in time of emergency to venture in harm's way, controlling air, surface and subsurface areas to assure access to all the oceans of the world." (67)

Since that time, the President has remained committed to his country's domination of the seas. Consistent with the attitude quoted above, the US which has retained a 3nm territorial sea since 1973 while the USSR has adopted a 12nm territorial water since 1921. Significantly, however, the USSR has maintained the same position as the US regarding straits. (68)

With regard to potential legal problems in the Red Sea Marson (1984) argues that conflict between Arab Red^{Sea}/riparians could be solved by resort to local customary rule or bilateral agreements. But difficulties would arise in a dispute between these states and non-Red Sea states whose vessels traverse the Red Sea. Rules of general customary international law may not be practically applicable owing to the rejection by developing countries of laws adopted by Western countries at a time when most of the developing states did not exist. (69) Before the 1982 Convention, the area beyond territorial sea, was considered as 'high sea', where no state could claim jurisdictional rights, and where any state could fish, carry out scientific research, lay pipelines and cables, and practise overflight. At that time a great part of the Red Sea fell in this category. But since the introduction of the 1982 Convention which entitles every coastal state to claim a 200nm EEZ those freedoms have been restricted. High seas rights are still applicable beyond national jurisdiction (Article 87), but no high seas area

exists in the Red Sea because of its narrowness.

Nevertheless, in spite of their rights in the EEZ, maritime powers feel some sort of uneasiness about "creeping" coastal state jurisdiction that might impede freedom of shipping. Riparian states are equally disturbed by the passage of huge oil tankers, nuclear powered ships, vessels loaded with noxious cargo passing through their fishing grounds, zones of mineral resources, and close to their tourist beaches. Consequently, littoral states wish to:

"subject such vessels to their own regulations rather than those of the state whose flag the ship flies - particularly since there may not be a genuine link between the flag and ownership". (70)

As Marston (1984) indicates, apart from the 1982 Convention, it is probable that a coastal state now has a customary right to make such a claim.⁽⁷¹⁾ The Americans feel that if the riparian states increasingly seem to regard the EEZ of 200nm as subject to their sovereignty for purposes of regulating navigation and overflight and related activities, the result could be a drastic curtailing of "the sovereign right of communications".⁽⁷²⁾ The US and its allies have always firmly stated that any recognition of riparian state sovereignty over the resources of adjacent waters must preserve the high-seas freedom of navigation and overflight in and over such waters. The US clearly needs such unchallenged rights of navigation and overflight for "access to the Gulf, the Red Sea and the Indian Ocean".⁽⁷³⁾

Al Hakim (1979) points out that at a session of the Third United Nations Conference on the Law of the Sea (UNCOLSIIII), held in December 1975, the Arab view opposed Article 16(4) of the 1958 Territorial Sea Convention because the Articles treated all straits alike. The Arabs, spoken for by Kuwait, stressed that the term 'strait' should be strictly confined to straits that link two parts of the high seas, and should not include territorial waters. Both Al Hakim (1979) and Marston (1984) agree that the Arab view obviously had in mind Tiran Strait, which the Arabs wanted to deny to Israeli shipping.⁽⁷⁴⁾ The definition of what constitutes an international strait eventually adopted covered this point.

Marston (1984) argues that since the Strait of Bab al Mandeb is not governed by the 1958 Convention because neither Yemen AR, PDRY Yemen, nor Djibouti was a signatory to the Convention and the 1982 Convention is not yet in force, passage through the waterway is left without an internationally recognized regime. He adds that the regime of Customary International Law cannot be applied because it has been rejected at Law of the Sea Conference debates by developing countries since 1982. Regarding Israel's right to use the Strait, Marston (1984) says that the Arab Red Sea states do not comply either with what the International Court of Justice stated in the Corfu Channel Case in 1949, or with the 1958 Convention on the Territorial Sea and Contiguous Zone.⁽⁷⁵⁾ However, regardless of Israeli-American insistence

on a liberal regime for Bab al Mandeb, as indicated earlier in the 'Memorandum' between the two countries the Red Sea Arab States may not allow Israeli shipping through their waters, despite what the 1982 Convention demands in this respect.

Between December 6-10, 1982, the UN Convention on the Law of the Sea was signed by 119 states;⁽⁷⁶⁾ by 11 December 1984, the closing date for signature, the number of signatories of nations and organizations had reached 159.⁽⁷⁷⁾ From the start the US followed by the UK and West Germany were the only states to deny the Convention their support.⁽⁷⁸⁾ The treaty needs to be ratified by 60 states before entering into force. By December 1984 only 14 states had ratified. A decade could be needed to complete ratification of the treaty. In 1980 Ambassador Richardson declared the US conviction that the absence of any internationally binding treaty to assure freedom of navigation and overflight through Straits and EEZs, could complicate relations between the US and its allies. He added that:

"even the friendliest state is subject to its own set of indigenous political constraints and pressures, and especially during a crisis time it is inevitable that these constraints and pressures ... lead to perceptions of national interest divergent from ours".⁽⁷⁹⁾

He referred to such incidents during the Israeli-Arab war of 1973 when

"some of our allies denied us the use of their bases and airspace". (80)

Despite Richardson's emphasis that the US was keen to see a universally adopted treaty, and in spite of the fact that President Reagan found that most provisions of the 1982 Convention

"are consistent with US interests and serve well the interests of all nations",

he declined to sign the Convention because of objections to provisions regulating sea-bed mining.⁽⁸¹⁾

According to Payne (1983) and Ayubi (1984) American opposition to the treaty rests on the basis that US firms pioneered the technology for the exploration and recovery of seabed mineral nodules and that they are not adequately protected by the treaty. Specifically, US objections are that the convention impedes the exploitation of manganese nodules and sets production limits, creates a decision-making process unfavourable to the US, provides for the transfer of mining technology and benefits to developing countries, and contains provisions concerning national liberation movements (like the PLO) and their eligibility to obtain a share of the revenues of the Seabed Authority. Mining arrangements moreover, could be amended without US approval.⁽⁸²⁾ Thus, while UN diplomats regard the treaty as the

"most significant event in the history of peaceful cooperation",

US commentators describe it as "history's greatest rip-off". (83)

The Secretary-General of the UN commented that:

"Such overwhelming support for a convention of this universal character is unprecedented ... It has indeed irreversibly transformed the political map of the world." (84)

However, US refusal to sign the Convention may jeopardise American interests in the Red Sea region, with special reference to oil tankers and warships flying the US flag, and overflight.

Maritime claims of the Red Sea states (Appendix) indicate that except for Jordan and Israel which claim 3nm and 6nm respectively as territorial waters, seven Red Sea states demand a 12nm territorial sea, and one, Somalia, demands a 200nm territorial water. Regarding nuclear-powered vessels and warships wishing to traverse the Red Sea territorial waters, they may face difficulties since the most strategically located states in the Red Sea region, (especially Egypt, PDR Yemen, Djibouti, Yemen AR, as well as Sudan and Somalia) have made it conditional for warships, nuclear-powered vessels, warplanes and ships carrying noxious substances to give prior notification of transit. Such requirements could clearly complicate the situation for US military shipping in Red Sea waters especially when US

alignment with Israel against the Arabs is considered. In fact, an outright objection to prevent Israeli ships or vessels bound for Israel from traversing Arab territorial waters is already maintained. However, since its peace treaty with Egypt in 1979, Israeli ships have continued to enjoy free passage through Egyptian territorial seas in compliance with the accord, as indicated earlier.

By refusing to sign the Law of the Sea treaty, the US lost an important opportunity for harmonious global sea management because the Convention handles much more than the issue of seabed mining. The Convention also deals with military and commercial navigation, over flight and communications, rights over living and non-living resources, prevention of pollution, marine scientific research, and settlement of disputes.⁽⁸⁵⁾ These issues are undoubtedly of considerable interest to the US. When President Reagan rejected the Convention he said that:

"Deep-sea bed mining remains a lawful exercise of the freedom of the high seas, open to all nations." (86)

Mr Tommy Koh, the Singapore diplomat who chaired the UN Conference on the Law of the Sea warned the US that:

"any companies trying to mine outside the treaty will be challenged in the international courts". (86)

The Suez Canal, Bab al-Mandeb, Tiran Strait, as well as

the Red Sea gulfs could prove to be significant and also strategic troublespots in a vital route located in the oil arc in particular and in the politically volatile area of the Middle East in general. These waterways could be regarded as major strategic flashpoints which no doubt are associated with national, regional and international security circles. Therefore, conflict over any of these water passages could threaten peace. All trading nations, particularly Western maritime powers, led by the US, with large trading and military activities will wish to have unimpeded transit through these waterways. Militarily rapidity in mobilizing naval forces is particularly important to the US - as Sterner (1984) emphasizes because it needs to fulfil

"global maritime responsibility with a very finite number of ships", (87)

in the face of a larger Soviet Indian Ocean fleet compared to that of the US. Thus, to meet such obligations the US has to

"put a premium on rapidity of movement and flexibility of deployment". (88)

Owing to the vast distance of about 12,000nm separating the US from the Indian Ocean, the remotest body of water from the former, America has no choice but to concentrate the deployment of its naval forces in the Atlantic and Pacific Oceans as well as in the Mediterranean Sea. In order to offset potential Soviet threats, the US is in need of "surge

capability";⁽⁸⁹⁾ and this could be achieved at its best level only by using the Suez-Red Sea route.

6.3 Conclusion

The general situation of unrest in the Middle East has already impinged upon the Red Sea in the form of physical and legal interference with shipping. Threats to Israeli and Western shipping have increased due to the number of radical forces who maintain an uncompromising position with regard to Israeli and American interests in the Middle East. Insecurity of shipping in the Red Sea is not necessarily derived solely from within the region, as the geopolitical links of the Red Sea with other areas have clearly shown.

Since the early 1970s possible threats to shipping through Red Sea Arab waters, especially in the Straits of Bab al Mandeb and Tiran, have never escaped the Israeli and American vision. Only through the growing influence of the US upon Egypt, and the American formulation of peace between Israel and Egypt, has Israel been able to enjoy the right of passage through northern Red Sea waters. But Bab al Mandeb has continued to be a problem both for Israel and the US. While the US insists that the Soviet Union is the principal source of insecurity to shipping in the Red Sea, the Arabs, specifically the Saudis, are convinced that Israel is the major source of such threat.

Regarding legal threats, the surprising US refusal to

sign the Convention on the Law of the Sea, and American insistence that they will follow their maritime interests despite what the Convention provides for, could result in conflict at sea between the US and anti-American elements in the region, notably members of the 1981 Aden pact linking Libya, PDR Yemen and Ethiopia (chapter 7). Moreover, the controversy surrounding the discretion of the coastal state to decide whether passage is innocent or not, and the introduction of the 200nm EEZ, and the right of the coastal state to protect its resources in this zone, could all involve the US in disputes in the Red Sea, as elsewhere. The Soviet Union's signing of the Convention could place the Soviets in good standing with coastal states, giving them confidence to apply the Convention to the disadvantage of US interests. The US does not wish to see any challenge to its global power, but the Convention appears to be such a challenge as long as the US does not sign it.

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CHAPTER 7

REGIONAL STABILITY: POLITICAL AND MILITARY THREATS

7.1. An Overview

The Arabian peninsula is bounded to the east by the Gulf which separates it from Iran; while the Red Sea represents its western flank and separates it from Africa. Iraq and Jordan to the north constitute the only land border of the peninsula. The Arabian peninsula is seemingly surrounded by radical states which display anti-monarchist and anti-American attitudes, and cause great anxiety to the oil states of the peninsula. In the north there is Iraq, with a pro-Soviet socialist system since the revolution in 1958. To the east lies Iran. Prior to the coming to power of Khomeini in 1979 the Shah's Iran was viewed by the Gulf States as an ambitious country striving for domination over its neighbours. After the Iranian Islamic Revolution, Iran has been perceived both by the peninsular states and the US as an exporter of revolution, as well as an external destabilizer, especially since the launching of Iraq's war against Iran in 1980. Also to the east, through Soviet intervention in Afghanistan in December 1979, the USSR has drawn physically nearer to the Arabian peninsula, only 450km away. To the south, on the margins of the peninsula itself, lie PDR Yemen and Yemen AR. Both Yemens have been in conflict with each other, since the late 1960s, mainly over borders. Both states

Table 7.1Area and Population of the Arabian Peninsula* States

Country	Area (000 Km ²)	Population*** in thousands mid 1982
Bahrain	0.62	371
Kuwait	18**	1,565
Oman	212	1,079
Qatar	11	270
Saudi Arabia	2,150**	10,025
UAE	84**	1,132
Yemen AR	195**	6,085
PDR Yemen	333**	2,093
Total	3,003.62	22,620
Iran*	1,648	40,777
Iraq*	435	14,161

Source: * Iran and Iraq are included for comparison. ** These areas are from The Arab World: An International Statistical Directory, Wilson R. Westview Press, Boulder, Colorado, 1984, Wheat-Sheaf Books Ltd, Sussex, 1984. Table 1 basic data indicators. The rest are from Geographical Digest, George Philip and Son Limited, London, 1981, p.

*** Population data is taken from: Statistical Papers/Series Vol. XXXVI, No. 2. Population and vital statistics report, UN, New York 1984.

have had disputes with Saudi Arabia; Yemen AR since 1934, and PDR Yemen since its independence in 1967. Moreover, PDR Yemen has been hostile towards Oman since the former's independence, and only in 1982 did they reach a peace agreement. On the African shore of the Red Sea, specifically in Ethiopia, Soviet, Cuban and East German forces have also been the source of near panic to the oil states of the peninsula.

In addition to all these troubled surroundings, the presence of Israel, the most implacable enemy, has been a major factor of anxiety for the peninsula states, especially Saudi Arabia.

As table 7.1. shows, the total land area of the Arabian peninsula is more than 3km², and over 71% of this area is occupied by Saudi Arabia. Contrary to its vast area, the peninsula has a small population, estimated at 22.62m (mid-year, 1982). Excluding the population of the two Yemens (8.178m) the population of the other six oil states is only 14.442m. Compared to that of Iraq 14.161m or Iran 40.777m, the population of the oil states of the peninsula is clearly outnumbered by the Iraqis or the Iranians. The paucity of population in these states has created problems in various sectors of activity, governmental and private. It has led to dependence on foreign labour (table 7.2). Such important dependence is clearly shown in the following statement:

Table 7.2

Migrant workers in the oil states of the Arabian Peninsula by sending country and country of employment, 1980.

Sending Country	Country of Employment					
	Saudi Arabia	United Arab Emirates	Kuwait	Qatar	Bahrain	Oman
Egypt	155,100	18,200	85,000	5,750	2,800	6,300
Yemen (YAR)	325,000	5,400	3,000	1,500	1,125	120
Jordan & Palestine	140,000	19,400	55,000	7,800	1,400	2,250
Yemen (PDRY)	65,000	6,600	9,500	1,500	1,125	120
Syrian Arab Republic	24,600	5,800	35,000	1,000	150	600
Lebanon	33,200	6,600	8,000	750	300	1,500
Sudan	55,600	2,100	5,500	750	900	620
Maghreb	500		300			120
Oman	10,000	19,400	2,000	1,150	900	
Iraq	3,250	1,200	40,000		310	
Somalia	8,300	5,000	500			400
All Arab	820,550	89,700	243,800	20,200	9,010	12,030
All Non Arabs	202,700	321,300	134,900	60,050	58,710	84,770
Total	1,023,350	411,000	378,700	80,250	67,720	96,800

Source: Birks, J. and Sinclair, C. 'The Socio-Economic Determinants of intra-regional migration', in Internal Migration in the Arab World, proceedings of an ECWA population conference. Nicosia, Cyprus, 11-16 May 1981, Vol. II. UN. Economic Commission for Western Asia Beirut 1982.

"If non-Kuwait Arabs suddenly left our country, Kuwaitis would be forced to leave their cars in the street and walk, because they would not even know how to change the points in their cars." (1)

Although expatriates are desperately needed by these states, the question of security takes priority, because foreign workers could create an important catalyst of internal insecurity, as happened in the siege of the Grand Mosque in Makka in November 1979. The worry about dangers emanating from foreign labour has become so strong as to override the imminent need of certain development schemes. The Saudi Interior Minister, Prince Naif (1980) was quoted as saying:

"we realize that foreign labour is crucial for development, but the demands of internal security must come first". (2)

The scarcity of population in the Gulf States has become a difficult problem, especially with regard to security. These states are concerned about modernizing and expanding their defence systems; but they are faced with the problem of finding the required personnel who can operate these systems. Besides the shortage of manpower, the number of nationals who are willing to enter military service is limited, because it is not as lucrative as business activities, and most nationals find civilian life more attractive. Apart from other technical problems, the limited availability of manpower creates problems with regard to the assimilation and maintenance of sophisticated weapons, such as the AWACS system. (3)

7.2. The Importance of the Arabian Peninsula to the United States.

The importance of the oil states of the Arabian peninsula to the US and its Western and Japanese allies lies mostly in the vast oil resources of these states, with particular reference to the Kingdom of Saudi Arabia. The 41.3 billion tonnes of proved oil reserves possessed by those states in 1984 represent about 43% of total world reserves; about 64% of OPEC's; over 900% of the USA's; and 1,251% of Western Europe's reserves.⁽⁴⁾ However, earlier chapters (especially 5) have indicated the importance of these energy resources and how the US and its allies will be depending more and more on the resources of these states, with particular reference to Saudi Arabia, for the survival of their Western technologically advanced civilization. Trade, recycling of the petro-dollars and arms sales from the US in particular, and from its Western allies in general, constitute the other significant factors that make the US concerned about these states. In 1980 the imports of the six oil states of the peninsula from the US, Western Europe and Japan amounted to about \$9 billion, which makes over 50% of the value of the entire Arab imports then.⁽⁵⁾

The oil crisis of 1973 and its ensuing price rises created a sudden financial boom in the oil exporting countries, with particular reference to the Arabian peninsula states. According to a Congressional Report (1981) the

peninsular oil states have acquired official foreign reserves of over \$100 billion, which represent about 20% of the Western total.⁽⁶⁾ In the American perspective, this huge wealth bears significant weight because much of this money is being held in American securities. To convert this abundant wealth into economic, military and political power, these small rich Arab States, especially Saudi Arabia, have recycled those petro-dollars into the US economy and also purchased huge amounts of Western, especially American, sophisticated weapons and other military hardware; also other Western products have found their way to these states.⁽⁷⁾ In 1976-82 US military sales to Saudi Arabia, Kuwait, Oman and Bahrain reached over \$22 billion.⁽⁸⁾ The growing international importance of the financial power of the peninsular oil states has been considerably welcomed by the Americans because of the strong relations that bind Western, especially American, strategic, economic and political interests with these states. Mr Nicholas Veliotis (1982) greatly appreciates the increasing importance of these states in international finance and welcomes

"constructive investment by Gulf countries in our (US) own financial markets and economy".⁽⁹⁾

With regard to the Arabian peninsula, in particular, and the Middle East in general, the US is preoccupied with three political matters: first, the perpetuation of stability (*status quo*), second, the survival of the moderate Arab

regimes, and third, the prevention of the establishment of revolutionary systems and the spread of radical tendencies. Strategically, the Americans have two immediate concerns in the area. First, to counteract Soviet penetration in and ward off its potential threat to the peninsular states, especially Saudi Arabia; and, second, the security of Israel and the independence of the US friends in the Middle East. Thus, Mr. Komer, (1980) Under Secretary of Defence, states that the Americans have "... longstanding interest in the security of Israel", an interest which has been

"advanced ... substantially with the peace treaty between Egypt and Israel".

He adds that the independence of other sovereign states and their freedom from Russian domination are also vital American concerns. (10)

Owing to their deeply rooted Islamic beliefs, the countries of the Arabian peninsula, especially the oil States led by Saudi Arabia, are the staunchest opponents of Communism, and other ideologies that reject or disregard religion. They have therefore become concerned about resisting radical influences externally and internally. These countries also share a common interest in the continuity of monarchical or traditional rule and strong connections with the West, especially the longstanding Saudi-American relations. This relationship is not new, it has been promoted since 1970 by Senator Henry Jackson among others. Apart from

Libya and Iraq, he argues that:

"... the major oil producing and exporting countries of the Middle East are politically moderate, and commercially aligned with the West and inclined to view with disfavour the growth of Soviet influence among their radical neighbours". (11)

A flood of books has been published containing material which explains the unique and special bonds which link the US to Israel. Thus it is hardly necessary to elaborate on this issue here. But reference should be made to the Congressional Report of 1981 which states that the US is convinced that it shares with Israel a common interest in "blocking Soviet inroads in the Middle East", the Report adds that they have mutual interests in the stability and continuity of the moderate Arab states and the prevention of their falling under radical forces. (12)

Political moderation in the Arabian peninsula is crucial for the US, the guarantor of Israel's security, because of the existence of a considerable number of Palestinians in the oil states of the peninsula, especially in Kuwait, and who may stir up troubles there. Also, political moderation there is regarded as being important because the peninsular oil states are the major financial backers of the Palestinian cause. (13) These states have considerable influence both in the Arab and African worlds, which could be used against Israel as happened after the 1973 war. The US mediated between Egypt and Israel in 1978 for the restoration of

peace. It succeeded in bringing both parties together in the US where they signed the Camp David Peace agreement in 1979, designed to perpetuate peace and stability in the region. The US hoped that the accord would block any Arab tendencies toward support for the frustrated Palestinians. The US feels that such support would be more serious if it comes from Saudi Arabia whose eminence bestows upon it a critical role in the Israeli-Arab conflict.⁽¹⁴⁾

Thus, the Arabian peninsula represents the very centre of strategic US and allied interests, and hence its security is crucial. The Kingdom of Saudi Arabia is the key to our treatment of the security of the Arabian peninsula.

7.3. Saudi Arabia: the Lynchpin

Saudi Arabia is considered by Lee Hamilton, the Chairman of the US Subcommittee on Europe and the Middle East (1982), to be the heart of the 'Persian Gulf' mentioned by the Carter Doctrine.⁽¹⁵⁾ The US perceives the geographical relationship of any state to Saudi Arabia as an important factor which may affect the security of the Kingdom; because if turbulence occurs in that contiguous state it may spill over to the Kingdom, or if such country was attacked and conquered, the conqueror might be tempted to attack Saudi Arabia. Thus, with reference to the other oil states of the peninsula, the Department of State emphasizes that any

"attack or a threatened attack on any of these states would be the equivalent of an attack on Saudi Arabia when you look at the geography". (16)

Saudi Arabia considers itself as the leader of the Arab world for two basic reasons: firstly, it holds Makka, the holiest of Muslim cities, within its boundaries, and secondly, it is the wealthiest state in the Arab world. The Kingdom enjoys supremacy over the other oil states in the area and has been accepted as the major force of stability there. Shaikh Zayid, the ruler of Abu Dhabi and President of the UAE has emphasized the crucial role of the Kingdom in maintaining stability in the area:

"Saudi initiative is required to assure stability and security in the Gulf". (17)

Knowing that the Kingdom is the major oil producer in the Middle East, the wealthiest state in the area, and the most important regional power, the US recognizes such Saudi leadership of the Arab world. The US has accordingly adopted a policy of:

"encouraging intra-Arab stability in the region under Saudi leadership". (18)

The Americans view the Kingdom as the lynchpin of the international petroleum business, therefore its stability as well as the continuity of its friendly relations with the West are seen as the major safeguard against a renewed energy

crisis such as that of 1973,⁽¹⁹⁾ particularly when the Kingdom's vast oil resources are considered. According to BP (1984) the Kingdom's proved reserves at the end of 1984 were 169.0 billion barrels, which make up 42.42% of the total Middle East reserves of 398.4 billion barrels for the same year.⁽²⁰⁾

Politically, the US appreciates the Kingdom's moderate orientation and resistance to radicalism. The Israeli-Arab war of 1973 introduced the oil weapon, used by the Arabs to influence US foreign policy with regard to the American commitment to Israel. The reduction in production, and price rises were both tough measures taken by the Arab oil states against the US and its Western allies, partly related to the dispute and partly for economic reasons seen by the producers. If the Kingdom were to heed the call of the extreme Arab states to cut back its oil production, adopt a price rise policy and reduce its surplus funds in Western banks, particularly American, then the world would experience a substantial price rise, and consequently, grave economic and political problems would occur, according to Kuniholm.⁽²¹⁾ However, strategically, politically, and economically, the Kingdom has increased in importance in American Middle East policy since the oil crisis of 1973-4.⁽²²⁾

After the outbreak of the Iraqi-Iranian war on September 22, 1980, there was a sudden halt of oil exports from the two countries. The stoppage took 3.5 million barrels a day off

the world market. In response, Saudi Arabia made up the shortfall and decided to increase its oil production by about 1 million barrels to 10.3 million barrels per day.⁽²³⁾ Kuniholm (1981) sees the Kingdom's decision as an intention to repay the Americans for their support during the conflict between the two Yemens in February-March 1979.⁽²⁴⁾ Also, it is important to refer to the Kingdom's resumption of oil exports to the US after the Arab oil embargo of 1973-4 which lasted only five months; the Saudi initiative was followed by the other oil states of the peninsula. Concerning oil prices, the Kingdom has also pursued a policy of moderation and gradual increase to help consumers. In September 1974 the Saudi Oil Minister, Shaikh Ahmed Z. Yamani stated that:

"... Saudi Arabia has always felt the need for moderate and gradual price increase to cope with market conditions and to which consuming countries' economies can always be adjusted". (25)

And in April 1981, he declared that his country would

"not raise oil prices or reduce production until other OPEC members significantly reduce their prices".

He was reported to have said that the "rise in oil prices had gone too far... "⁽²⁶⁾ The same policy of restraint continued in the following four years.

Although the immense oil resources of Saudi Arabia constitute the major factor behind US interest in the Kingdom, nevertheless the Americans are worried that these very resources render the Saudi Kingdom a potential target

for outside threat. (27)

The US has determined to do its utmost to protect its vital interests in Saudi Arabia through an informal commitment which has existed effectively since World War Two. In 1979 the Deputy Assistant Secretary of State, William Crawford, emphasized that:

"the maintenance of the integrity of the Kingdom of Saudi Arabia is vital to American interests in the Middle East and that we should be prepared to act in implementation of that consideration". (28)

However, in spite of the absence of a 'formal' American commitment to defend the Kingdom, Mr Crawford asserted that all American Presidents since Mr Truman have

"in word and deed made it clear that that is of vital concern to the US and that the integrity of the Kingdom was of importance to, and would be protected by, the United States". (29)

National Security Adviser Brezinski said in Riyadh in January 1980 that:

"... for the defence of Saudi Arabia we will do anything". (30)

That 'anything' has been interpreted by Alvin Cottrell (1983) as "We are ready to fight for Saudi Arabia." (31)

The foregoing pages have shown that Saudi Arabia is a regional power, in the eyes of the States of the Arabian peninsula as well as the West, especially the US. Also, we have seen how the Kingdom represents vital Western economic,

strategic and political interests. The US makes no secret of its determination to defend the Kingdom against any danger that may threaten the latter's security and stability.

7.4. Perceived Threats to Stability - General

Owing to its vast oil resources and fragile political systems, the Arabian peninsula may represent the 'Achilles heel' of the Western world. Although the Americans perceive the Soviet Union as the direct and major threat to the Arabian peninsula, nevertheless they do consider some other factors as actual sources of insecurity to the area. These factors are:

- (1) regional unrest resulting from interstate and regional conflicts;
- (2) revolutionary changes; and
- (3) domestic troubles.⁽³²⁾

Hurewitz (1979) emphasizes the potentiality of external rather than internal subversion as a factor of danger to the area.⁽³³⁾

While the Carter doctrine (1980) identifies Soviet military adventurism as the greatest threat to the oil states of the Gulf, US Secretary of Defence Harold Brown (1980) maintains a different argument. He perceives a greater danger emanating from regional turbulence. Whether Soviet intervention was probable or not, the Secretary argues that:

Table 7.3.
Regional threat perceptions of the Arabian Peninsula states

Country	Immediate	Long-term
Saudi Arabia	Israel Iran PDR Yemen Insurgency	Israel Iran PDR Yemen Iraq
Yemen AR	PDR Yemen Tribal rivalries	PDR Yemen Tribal rivalries Saudi Arabia
PDR Yemen	Saudi Arabia Yemen AR Tribal rivalries	Saudi Arabia Yemen AR Iran Tribal rivalries
Oman	Iran Insurgency PDR Yemen	Iran PDR Yemen Iraq Insurgency
UAE	Iran Insurgency	Iran Iraq Insurgency PDR Yemen
Qatar	Iran Insurgency	Iran Iraq Insurgency PDR Yemen
Bahrain	Iran Insurgency	Iran Iraq Insurgency PDR Yemen
Kuwait	Iran Iraq Insurgency	Iran Iraq Insurgency

Source: Adapted from: Streedhar, 'Buying Security in the Persian Gulf' in DSA Journal; January 1982, New Delhi, India, 1982. p.359.

"the threat of violence and the use of force remains widespread". (34)

According to a Congressional report (1981), factors of instability prevail in each of the Arabian peninsular states, especially the oil rich ones. But it is difficult to make accurate predictions of immediate unrest; nevertheless abrupt shifts of balance between stability and turmoil can easily occur.

Lee Hamilton (1982) specifies five sources of threat as perceived by the Gulf States. They are:

- (1) Marxism and Communism;
- (2) Israeli expansionism;
- (3) colonialism, or superpower hegemony;
- (4) would-be aggression by neighbours, through either external aggression or internal subversion sponsored by neighbours; and
- (5) internal rebellion. (35)

One could argue that the immediate threats to the Arabian peninsula are more likely to originate from regional and domestic factors than from superpower intervention, although the regional/domestic sources of danger could be a feedback of superpower contention over the Middle East. Table 7.3 shows regional threat perceptions of the Arabian Peninsula states.

7.4.1. Threats from the Red Sea Region

Since Colonel Nasser led the Egyptian revolution in 1953 the Saudi Kingdom experienced threats from Egypt. Between 1953 and 1961 Nasser's threat to the Saudis took the shape of

a cold war in which he overtly called upon the Arab masses to overthrow traditional rule and to establish democracy and socialism, and ultimately reach Arab unity. Also Nasser demonstrated anti-Western attitudes, mainly as a reaction to Western support for Israel. Moreover, he was the first Arab and African leader to initiate friendly attitudes toward, and to open the door for the Socialist bloc, especially the Soviet Union. The Americans were very concerned to find a counter-force in the area to resist Nasser's radical revolutionary activities, and entrusted Saudi Arabia with the mission. According to Robert Lacey (1982)

"under the aegis of the 'Eisenhower Doctrine', Sa'ud would act as a force for moderation among his neighbours, generally elevating himself as an alternative influence to the troublemaking radicalism of Nasser". (36)

The US policy of considering the Kingdom as a counter force to Nasser led the latter to expand his challenge southward to the Red Sea region, right into the heart of American ground interests in the Arabian peninsula. By involving himself in Yemen (1962-63), thus outflanking Saudi Arabia from the southwest, Nasser made his challenge against the American-Saudi alliance more imminent. Hence, the US found itself dragged into the Red Sea region for the first time to manoeuvre politically and militarily in order to safeguard its vital interest in the Arabian peninsula.

Nasser's call for revolution and radicalism first

materialized in the southwestern corner of the peninsula when Colonel Abdullah Al-Sallah led a military revolution against the regime of the monarch Imam Ahmed, and a republican state was established in September 1962. This was the third republic in the Red Sea region after Egypt (1953) and Somalia (1960). Since then the Yemen has come to be known as Yemen Arab Republic (YAR). The Americans maintain that direct Egyptian intervention and extensive Soviet military assistance to Yemen AR took place.⁽³⁷⁾ whatever the truth, the Yemeni revolution gave Nasser a foothold inside the Arabian peninsula and close to his key target, Saudi Arabia. According to Alvin Cottrel et al (1980), Nasser "deployed 70,000 Egyptian troops to Yemen"⁽³⁸⁾ in defence of the revolution against the Saudi-backed royalist forces. The US viewed the Saudi-Egyptian conflict over Yemen AR as an external threat which might jeopardize the national security of Saudi Arabia, because Egyptian forces had bombarded Saudi towns in the southern part of the Kingdom, and the royalist supply bases on Saudi territory.⁽³⁹⁾ Nasser's attacks were motivated by his conviction that the Kingdom was working to topple the Republican regime in Sana'a,⁽⁴⁰⁾ which was undoubtedly true.

Due to American apprehension over the security of Saudi Arabia, and lack of confidence in the United Nations to resolve the crisis, the Americans determined to

"ensure Saudi integrity against threats from the Yemen conflict". (41)

Hence, the US pledged military support if necessary to deter outside aggression against the Kingdom. Saudi Arabia naturally perceived Nasser as a "chief rival for influence over the Arab world". In response, the Kingdom espoused the royalist cause in Yemen AR. Apart from their own cause, the royalists were perceived by the US to play a significance role in defending the Saudi territory against invasion "openly threatened by Egyptian forces in Yemen".⁽⁴²⁾ The US regarded Nasser's "Yemeni-based Egyptian air and naval units" as a direct threat to the security of the Saudi Kingdom because this threat shifted to the Saudi borders and involved military conflict and heightened tensions.⁽⁴³⁾

In February 1963 the US seriously began to worry about its interest in the peninsula, embodied in the security of Saudi Arabia. Accordingly, the US started to mediate between Nasser and the Saudis, in what was known as Bunker's mission, or, as termed by the US National Security Council 'Operation Hard-Surface', a plan for disengagement between the Egyptian and Saudi troops.⁽⁴⁴⁾ While McMullen (1980) maintains that it was an American decision to intervene, a Congressional Report (1977) states that the initial American involvement in Yemen took place at the urging of the Saudis, but over the years American as well as Saudi relations with Yemen AR had sought similar goals.⁽⁴⁵⁾

In fact, all American manoeuvres in the Egyptian-Saudi contention over Yemen between 1962-1963 were caused by US interest, according to McMullen to

"forestall a dangerous all out Yemen AR-Saudi war which might have imperilled Western security interests in that strategically important region". (46)

Also, the US hoped that its efforts were to demonstrate the American interest, to reassure the Saudis of continued US backing and to encourage them to carry out internal development and reforms in order to enhance the stability of the Royal House of Saud. But the foremost American objective in the whole business was to reduce tension in the Middle East for the ultimate objective to "preclude the opportunity for Soviet gains"⁽⁴⁷⁾ in that sensitive region.

However, Robert Stookey (1978) argues that all US, UN and Arab League "efforts at mediation ... failed" to resolve the Saudi-Egyptian hostility over Yemen. The withdrawal of the Egyptian forces from Yemen happened only as a result of the Egyptian losses in the 1967 Arab-Israel war, when it became clear to Cairo that its position in Yemen AR became untenable. He refers to a final royalist attempt, in 1968, financed by Riyadh, to seize power from the republicans; but with financial support and arms aid from the Soviet Union, Syria and Algeria, Sana'a was able to withstand the attack.⁽⁴⁸⁾ Since the rise of a radical government in PDR Yemen to the south, the royalists became a liability to Saudi

Arabia, impeding its cooperation with Sana'a "against the revolutionary movement in the south".⁽⁴⁹⁾

As noted before, the American mission for the resolution of the Yemeni civil war was unsuccessful in achieving a comprehensive resolution to the Yemeni crisis which endangered the centrepiece of US interest in the peninsula, Saudi Arabia. McMullen (1980) appraises the mission as only 'palliative', nevertheless, he admits that it was able to 'de-escalate' the situation and to lead to its control, though sporadic fighting continued until 1967.⁽⁵⁰⁾ Finally, in early 1970 national reconciliation "under Saudi auspices" was reached in the Yemen AR, and the differences between the royalist opposition and the republican government came to a head.⁽⁵¹⁾

The US perceives the decade of hostility between Riyadh and Sana'a as a consequence of the revolutionary orientation of Yemen AR, escalated by territorial disputes, which finally led to an open conflict which made the Kingdom worried about its small dynamic neighbour. However, Stookey argues that Saudi Arabia abandoned the royalist cause for two strategic reasons: as a short term objective, it might "forestall the rise of an aggressively hostile" regime in Sana'a; and as a long-term strategy it might enable Riyadh to gain an ally in Sana'a for joint military action against the trouble-making southern neighbour of both countries, the radical leftist regime of Aden.⁽⁵²⁾

In fact, despite the end of the Egyptian factor, Yemen AR itself has been a continuous source of problems for Saudi Arabia.

"The good or evil for us will come from the Yemen" (53)

(King Abdul Aziz of Saudi Arabia, 1940s)

The Yemen AR can be seen as a source of insecurity to Saudi Arabia for a number of reasons. The regime is still socialist orientated, while it maintains relations with the Soviet Union and still keeps Russian military advisers. Yemen AR also has cordial diplomatic relations with progressive Arab regimes, such as Libya, Iraq, and PDR Yemen. Perhaps above all, Yemeni workers in Saudi Arabia, numbering over half a million may engage in subversive actions against the Kingdom, such as during the insurrection of the Great Mosque in Makkah in November 1979. Historical factors are also relevant since Hollen (1982) argues that Yemen AR is still:

"not fully reconciled with the Kingdom regarding the former's loss of the fertile Asir region to Saudi Arabia during their 1934 war". (54)

The US perceives Saudi ambivalence over how best to deal with Yemen AR as arising from the Kingdom's position of "how strong and united it wants the Yemen AR".⁽⁵⁵⁾ For this reason the US perceives this populous state as "a source of Saudi envy and suspicion".⁽⁵⁶⁾

However, by the late 1970s the Americans felt that the

regime in Yemen AR had slowly "moved to the left", and consequently they feared that the National Democratic Front (NDF) might take over. The NDF is a combination of political and military movements in Yemen AR founded in 1978 with its headquarters at Aden, and has estimated forces of between 5,000 to 10,000 men. According to Hollen (1982):

"much of the territory in south eastern Yemen AR adjacent to PDR Yemen's border was controlled by the NDF, whose low-level attacks have been fuelled by PDR Yemen and by Libya and Syria"; (57)

therefore the Americans feel that if the NDF assumes power "US interests will be jeopardized" while the Saudi Kingdom will face enhanced danger.⁽⁵⁸⁾ In fact, Saudi-American worries about Yemen AR is mostly caused by the latter's relations with its radical neighbour PDR Yemen, a Marxist state in the peninsula, with strong Soviet connections. The PDR Yemen creates a source of insecurity in the Arabian peninsula and disturbs both the Saudis and the Americans.

Nasser's period in Yemen AR helped the spread of radicalism in southern Arabia. In February 1966, the British Labour Government decided to withdraw from southern Arabia. The British decision paved the way for the National Liberation Front (NLF) to assume power triumphantly. The NLF is a socialist organization. Backed by the army, the NLF was able to defeat its rival and succeed the British in ruling southern Arabia, which since independence in 1967 it has taken the name of PDR Yemen. Started as a socialist party,

the NLF gradually adopted Marxism. But after independence, also Maoism from communist China, found some adherents in the new strategically located socialist state. Nevertheless, since 1969 a further shift toward Moscow has taken place.⁽⁵⁹⁾

With regard to the Arab world, PDR Yemen aspires to four objectives:

- (1) the expulsion of colonial military bases;
- (2) an end to the dominance of monopolistic capitalist companies;
- (3) overthrowing of reactionary Arab regimes; and
- (4) unity of the Palestinians under the PLO to bring down the Zionists and recover Palestine.⁽⁶⁰⁾

Despite the fact that all the aforementioned goals of PDR Yemen do concern the US, the objective of bringing down the reactionary Arab regimes seems to receive more American concern, especially when Soviet cooperation is considered. The Americans perceive the Marxist regime in Aden as being overridden by a strong desire to "subvert traditional regimes" in the bulk of the Arabian peninsula.⁽⁶¹⁾ Although the Saudis perceive radicalism, directly or indirectly associated with Moscow, as the primary threat to their security, some Americans consider instability in Yemen AR and Oman as the main source of insecurity to Saudi Arabia. The US is convinced that "indirect but more immediate threats have revolved around" PDR Yemen with regard to Yemen AR and Oman.⁽⁶²⁾ Because both states are seen by some Americans as allies and clients of the Kingdom, their stability is

considered crucial to that of the Saudis. If it could be true for Oman to be counted as a Saudi ally or client, it is definitely untrue for Yemen AR, which is politically different from the Kingdom, and entered into war with it in 1934 and 1962. Moreover Yemen AR continuously represents a dilemma for Saudi policy.

Strategically, the US views the importance of Yemen AR as based upon three major factors:

- (1) the geographical proximity of the Yemen AR to Saudi Arabia;
- (2) the post Yemen-Iraq relationship, because Iraq has been a major antagonist to the Kingdom; and
- (3) with regard to Saudi Arabia's "regional buffer state policies", Yemen AR represents a buffer zone between the Kingdom and the radical Marxist PDR Yemen.⁽⁶³⁾

In mid-1972 serious conflict between the two Yemens occurred along their common borders. In that incident PDR Yemen accused Yemen AR of invading its territory and warned that it would retaliate by using the Soviets. In September a cease-fire was arrived at by the Arab League, and in November an agreement was concluded at Tripoli by Aden and Sana'a for merging the two States. But in spite of the Tripoli accord, as Stookey (1982) maintains, PDR Yemen continued to launch subversive actions against Yemen AR; by training, arming and financing insurgents from Yemen AR. The events which took place in Sana'a in September 1973, were considered as a proof

of PDR Yemen's role in destabilizing Yemen AR.⁽⁶⁴⁾ Although the Israeli-Arab war of October 1973 gave the two Yemens a chance to ease tension, nevertheless frequent hostility became a characteristic of the relations between Yemen AR and PDR Yemen. After the assassination of Yemen AR's President, Mr al-Hamadi, in October 1977, relations between Sana'a and Aden rapidly deteriorated. PDR Yemen accused Yemen AR of the murder to end al-Hamadi's policy of accommodation with PDR Yemen.⁽⁶⁵⁾

Two American reports in late 1977 and early March 1981 have emphasized that the only significant outside danger to the stability of Yemen AR originates from PDR Yemen in the form of "periodic terrorist and subversive activities"⁽⁶⁶⁾ such as the infiltration of groups to engage into border skirmishes against Yemen AR. For three important military reasons the US feels that the security of Yemen AR is vulnerable to threats from PDR Yemen. Firstly, although Yemen AR has adequate armed forces, some 40,000 men, nevertheless this sound picture is "hampered by inadequate and obsolete equipment" besides shortage of spare parts and "a poor logistic system". Secondly, PDR Yemen's armed forces are enhanced by "an extensive array of Soviet armour, artillery, aircraft..." Thirdly, although sources vary over the number of Cuban, East German and Soviet military advisers and technicians in PDR Yemen, yet all emphasize the military presence of the three Communist powers in that country.⁽⁶⁷⁾

The Congressional report of arms sales in the Gulf and Red Sea regions (1977) maintains that the military personnel of these Communist countries serve in PDR Yemen as military advisers and indoctrinators in ideological training centres. What the US fears is that if PDR Yemen forces engage in conflict with Yemen AR's army, and the former are to be reinforced by the Communist troops stationed there, the security of Yemen AR could be seriously imperilled.⁽⁶⁸⁾ The worries of the US about Communist forces in PDR Yemen are based upon the American belief that if hostility sparks between the two Yemens, the Cubans might repeat the same scenario they enacted in Angola.⁽⁶⁹⁾

American worries about the security of the Yemen AR have been augmented by the formation of the National Democratic Front formed in 1976, with headquarters at Aden. One of NDF's several objectives is the weakening of relations with Saudi Arabia. In 1978, the intensified activities of the NDF against the regime in Yemen AR included military measures.⁽⁷⁰⁾

Owing to their better military capability and the help they obtained from the NDF, PDR Yemen's forces crossed Yemen AR's borders, penetrated 32km and seized three towns. The fight continued for several weeks before a cease-fire was reached by the Arab League on March 23rd 1979, and followed by the normalization of relations.⁽⁷¹⁾ However, the critical events of the late 1970s, namely Sadat's initiative toward

Israel and the signing of the Camp David accords, have caused disarray within the Arab League, and therefore its mediation was not effective because sporadic border incidents occurred between the two Yemens.⁽⁷²⁾

However, between late 1979 and the autumn of 1981, hostility between the two Yemens came to a halt. During that period internal circumstances in both countries dictated an improved atmosphere of friendly understanding. Two significant developments took place in Yemen AR. First, the regime followed a reconciliatory approach towards the NDF; also negotiations for the participation of the Front in the government occurred. Secondly, Saudi influence was minimized when Sana'a concluded an agreement with Moscow in 1979, by which the Soviet Union was to supply Yemen AR with arms on long-term credit.⁽⁷³⁾ On the other hand, there was an important development in PDR Yemen. In April 1980, Mr Abdul Fattah Ismail, a strong ally of Moscow, was deposed from the leadership of the State. His ousting was ensued by some degree of

"circumspect posture toward the promotion of revolution in Yemen AR ...", ⁽⁷⁴⁾

and by more flexible policies in handling PDR Yemen's differences with other conservative regimes in the peninsula. By the autumn of 1981 according to Stookey (1982), the entente came to an end when the NDF, with full support from PDR Yemen, led an insurgency in Yemen AR's border districts.

All in all, the characterization of relations between the two Yemens by periodic hostility seems to confirm that the entire south western flank of the Arabian peninsula is plagued by endemic conflicts. Moreover, one could argue that the three-sided Saudi-American-Russian interaction in the area might have contributed to the regular recurrence of hostility between the two Yemens.

However, PDR Yemen's disturbing activities as seen by the US and Saudi Arabia extend eastward from Yemen AR to the Sultanate of Oman and other regimes in the peninsula. Since its independence, and through its support for the Popular Front for the Liberation of Oman (PFLO), PDR Yemen has continued a sustained effort to bring down the regime in Oman and establish a revolutionary system in the strategically located sultanate. PDR Yemen's role in destabilizing Oman, will now be discussed.

The Sultanate of Oman is located on the southeastern corner of the Arabian peninsula. It is an important state with regard to the security of the Arabian peninsula and foreign military presence in the area, due to its strategic location, its long-lasting hostility (15 years) with PDR Yemen and, most important, its persistent pro-American orientation, especially since 1979, as a result of the fall of the Shah and the Russian involvement in Afghanistan. Compared to Saudi Arabia, Oman is more enthusiastic and more unequivocal about the American military presence in the

peninsula. When we consider American definitions of the Red Sea and the Gulf regions (see chapter 1.3) it becomes obvious Oman is directly included in the geopolitical network of the Red Sea region, as perceived by the US. One of the geographical factors that render the Sultanate of Oman strategically significant, is its 1,600km coastline, stretching along the Arabian Sea and Gulf of Oman. The strategic island of Masira is located on this coastline. Also of great importance, especially to the US, Oman has a commanding and key position on the vital Straits of Hormuz, where every eleven minutes a loaded oil tanker passes into the Indian Ocean. (75)

Militarily, Oman is important to US policy in the Arabian peninsula; because throughout the 1970s Oman supported the American military presence and activities in the area, without reservation. It has offered the US bases and facilities. For example, in early 1977, on Masirah Island, the US has acquired

"landing rights for P-3 flights originating in Diego Garcia and covering the northern Indian Ocean and regions near the Horn of Africa". (76)

Masirah facilities were used by the British who vacated them by the end of March 1977. Other Omani facilities have been made available to the US. According to Robert Harvey (1981) Oman has hinted that if the US asks for a fully-fledged military base, Oman might be willing to respond. Harvey adds

that some Omanis were reported to be welcoming an idea of "asssociated" membership of NATO.⁽⁷⁷⁾

Politically, Oman is a strong Western ally and staunch opponent of communism. Qabus, the Sultan of Oman since 1970, has been in line with the US policy towards the Gulf in particular, and the Middle East in general. Therefore, he welcomed the Camp David agreement and became the only other Arab head of State, besides President Numeiry of Sudan, not to break with President Sadat over Camp David.⁽⁷⁸⁾ Qabus' visit to Cairo in 1982 was seen by the Department of State as an effort to explore the chances of maintaining Egyptian-Gulf Arab rapproachment. In this context, the Americans

"would welcome the re-establishment of diplomatic relations between Egypt, Saudi Arabia, and all of the other Arab States that broke, particularly the Gulf".⁽⁷⁹⁾

The Arab Gulf states have reservations about Qabus' policy of such close relations with the US but he feels that his Arab Gulf partners try to evade the reality that:

"the Soviet Union has a growing interest in the natural resources of the Third World countries. Therefore the other superpower must come to the rescue".⁽⁸⁰⁾

Since it started in 1965, the rebellion in Dhofar province has been the biggest internal threat to the Sultanate; as well as being an element of trouble-making in the peninsula. Before PDR Yemen's independence, the Soviet Union was the

direct supplier of weapons to the movement. But later, the regime in Aden became the main channel of Russian arms supplies to the rebels, according to Ghebhardt (1975).⁽⁸¹⁾ In 1969 except for Salalah and its surroundings, all the province of Dhofar came under the control of the rebels. In 1970 the rebels attacked areas near the Omani oilfields.⁽⁸²⁾ Oman has a constant preoccupation with 'advance communism', accordingly, it perceives the Soviet presence in PDR Yemen as a potential support for insurgency in Dhofar province. In response, and since the British withdrawal in the early 1970s, Qabus has brought himself too close to the West, especially the US, seeking military help to withstand a potential thrust from PDR Yemen. However, in 1975, Iranian troops, units from the Jordanian Air Force and British army officers assisted Qabus in warding off the rebellion in Dhofar.⁽⁸³⁾

In fact, throughout the 1970s, the US has been greatly concerned about PDR Yemen's destabilizing activities toward Oman. The Americans maintain that the Marxist regime in Aden has been offering sanctuary, training and soldiers to the Popular Front for the Liberation of Oman (PFL0) to subvert Qabus' regime in Muscat.⁽⁸⁴⁾ A revolutionary take-over in Oman could threaten American strategic as well as economic interest in the Arabian peninsula. Such a regime might align itself with PDR Yemen; this would mean a wider zone of sanctuary and more facilities could be available for

insurgent groups in other peninsular states, especially the oil-rich ones, like UAE and Kuwait, as well as Bahrain: not rich in oil, but of strategic importance. Owing to the geographical interplay between the peninsular states, potential for revolutionary upheavals might be enhanced by such development in Oman. With external support, Western and regional, Qabus' regime plays an important role in protecting Gulf oil shipment against outside interference, at least in or near Oman's territorial waters. If Qabus goes, interdiction of oil movement in this area could take place.

Both Saudi Arabia and the US have been considerably concerned about PDR Yemen being a Soviet base for subversion in the peninsula. Equally, they have been worried about PDR Yemen's renewed efforts in the late 1970s to overthrow the regimes in Yemen AR and Oman.⁽⁸⁵⁾

To sum up, Aden's subversive activities against Oman and Yemen AR have created a great deal of anxiety to Saudi Arabia and the US as well. They fear that if PDR Yemen were to succeed in its intentions, this might consolidate a communist foothold and enhance radicalism in the Arabian peninsula. Consequently, the security of the Saudi Kingdom could be in danger, and its leadership to the moderate regimes of the peninsula might be disrupted. It is the Saudi leadership that the US perceives to provide immunity to the peninsula against Soviet intrigues and subversion. To end the apprehension caused by PDR Yemen's threat to Oman in particular and the

peninsula in general, the Kuwaiti Deputy Prime Minister and Minister of Foreign Affairs, Shaikh Sabah al-Ahmed was able to bring both Oman and PDR Yemen to Kuwait to sign a peace agreement on October 27, 1982. The Shaikh hopes that the agreement will "bring stability to the Gulf" and "protect us from outside evil".⁽⁸⁶⁾ Although the agreement is seen as a removal of a big mine laid in the Arabian peninsula, it does not mention anything about superpowers' presence in both states. Therefore, it could be argued that as long as both Oman and PDR Yemen remain under external influence, the agreement may run its course after a short period.

It has been shown how PDR Yemen has created a serious threat to the security of the peninsula through Aden's attacks or subversive activities against Yemen AR and Oman. Now, it is important to investigate the direct Saudi-PDR Yemen relations, their perspectives on each other, and conflicts between them. The Saudi-American view about PDR Yemen's role as a Soviet surrogate in the peninsula, and the conflicting policies of both Saudi Arabia and PDR Yemen towards the Red Sea and towards each other.

Recalling PDR Yemen's commitment to the liquidation of 'reactionary' systems in the Arab world, with special reference to Aden's neighbours in the Arabian peninsula, no doubt the Kingdom of Saudi Arabia represents the first and foremost target in this respect. The long Saudi abstention from having diplomatic relations with PDR Yemen (only in

1975), and the Kingdom's offer of asylum and help to several deposed rulers from PDR Yemen, with the intention of toppling Aden's regime,⁽⁸⁷⁾ might have contributed to the creation or escalation of the ~~hostile~~[§] hostile attitude in Aden toward Riyadh.

While Saudi Arabia perceives the

"entrenched Soviet position in South Yemen as a menace to regional security and stability"

let alone the security of Saudi Arabia itself, PDR Yemen regards the

"nature of the Saudi regime and its "close ties with the US and other Western countries with undisguised distaste". (88)

Consequently, the regime in Aden opposes Riyadh's monarchical regime openly. The Americans are concerned that the Saudi "feeling of weakness" strongly influences their perceptions of being "encircled by hostile forces". Therefore, the US shares with the Saudis their serious concern that their armed forces would encounter a serious problem in hostilities with radical neighbours, including PDR Yemen.⁽⁸⁹⁾ Moreover, the US has been greatly concerned about the Saudi feeling that their "southern borders are strategically vulnerable" and that they have been

"apprehensive over the intentions of the Marxist regime in south Yemen". (90)

However, in addition to the ideological opposition that

PDR Yemen maintained against the Kingdom, the armed forces of the radical government in Aden carried out two attacks on the Saudi borders, in 1969 and 1973.⁽⁹¹⁾ According to Stookey (1982) some incursions were carried out from Saudi Arabia against PDR Yemen in 1971 and 1972. He adds that Aden has described the attacks as an action by "mercenaries directed by American officers". To him the attackers were 'irregulars' from PDR Yemen, 'armed' by Saudi Arabia, and "stiffened by a few Saudi personnel".⁽⁹²⁾ As for Saudi Arabia's role in destabilizing the regime in Aden, Fred Halliday (1977) maintains that for several years after PDR Yemen's independence, the Saudi Kingdom supported dissidents across PDR Yemen's borders, but it failed to undermine the Marxist regime.⁽⁹³⁾ Stookey (1978) points out that the Kingdom sought military cooperation with Yemen AR as a means to bring down the leftist regime in Aden. When its strategy of coercion did not succeed, the Kingdom resorted to a more "subtle and flexible approach"⁽⁹⁴⁾ towards its troublemaking neighbour. In 1976 the new policy led Riyadh to establish diplomatic relations with Aden, for the first time since the latter's inception in 1967.⁽⁹⁵⁾

The Saudi policy in the diplomatic handling of its crisis with PDR Yemen has been enhanced by an active petrodollar approach. In 1976 the Kingdom extended \$100 million in grant aid to the regime in Aden. The Saudi counterpart's oil rich states of the peninsula, especially Kuwait, also have

given economic assistance to PDR Yemen. In fact, the ultimate objective of the peninsular conservative camp was to manoeuvre the PDR Yemen towards a moderate orientation.⁽⁹⁶⁾

In 1976 and 1977, the US felt that the Saudis had been moderately successful in bringing about regional cooperation in the Red Sea region; because in addition to normalization of relations with PDR Yemen, the Kingdom was able to bring the two Yemens to the Ta'iz conference in March 1977, although the Saudis did not attend. President Numeiry of the Sudan as well as Siyad Barre of Somalia also participated in the Conference.⁽⁹⁷⁾ At the Ta'iz meeting there were two conflicting views with regard to the status of the Red Sea. Aden advocated that the Red Sea should be considered a "zone of peace". The view of the conservative camp, chiefly represented by Sudan and Somalia, supported the concept that the Red Sea should be considered as 'an Arab Lake', in which case the defence of the Red Sea would rest on the shoulders of its littoral states. In the end, PDR Yemen's concept was upheld at the expense of the Saudi formula.⁽⁹⁸⁾ The PDR Yemen's view was seen as a Soviet idea. However, the Saudi-PDR Yemen entente was seen as the first signs of a US-PDR Yemen rapprochement.

In fact, due to both Saudi and PDR Yemen involvement in developments in Yemen AR, in 1978 rapprochement between Riyadh and Aden came to a halt, but diplomatic relations were not totally severed.⁽⁹⁹⁾ According to Congressional sources

since late 1979, PDR Yemen's leadership has paid a number of visits to Riyadh to discuss improvements in the relations between the two countries. However, Aden's manoeuvres have been negatively received by Washington. The sources mention that the US still has considerable suspicions of the intentions of the Marxist southern neighbour of the Kingdom, because of the presence of more than 5,000 Soviet, East German and Cuban military personnel in PDR Yemen. Moreover, Washington has been concerned about the support Aden used to offer to a number of "dissident and terrorist groups" who have been receiving "arms and training within South Yemeni territory".⁽¹⁰⁰⁾ Also, the communist activities in PDR Yemen's Red Sea ports and islands has been perceived, both by the US and Saudi Arabia to endanger the security of the latter.⁽¹⁰¹⁾ More American allegations about PDR Yemen being a crucial base for the USSR come from Stookey (1982). He maintains that after their eviction from naval and air installations in Berbera, the Russians were able to offset the loss by reconstructing their presence in PDR Yemen, and to reconsolidate their facilities in Aden and Socotra, an island belonging to PDR Yemen. The Marxist Republic has thus become "a key logistical base" for Soviet and Cuban "military operations" in the Red Sea region. However, because of this position, Aden has parted company with most of the Red Sea

Arab States regarding the "security of the Red Sea", according to Stookey.⁽¹⁰²⁾

With regard to Aden's sponsorship of internal troubles in the Kingdom, the Americans maintain that "Democratic Yemen" has headed the Saudi list of the accused outside sources that supported the insurgents who carried out the insurrection of the Great Mosque at Makka on 20 November, 1979.⁽¹⁰³⁾ In a testimony before the US Senate Committee on Foreign Relations, Richard Foster (1980) has pointed out that the insurrection of the Mosque was well orchestrated, and the troops included Yemen guerillas. He added that the insurgents were well trained and disciplined and "the arms and training were Soviet-supplied in South Yemen".⁽¹⁰⁴⁾ Exploiting the siege of the Grand Mosque for political attack on enemies, Mr Foster has tried to blackmail PDR Yemen and the Soviet Union. However, according to Jim Paul (1980) the US has preceded the Soviet Union in the list of the accused external enemies of Saudi Arabia. He also points out that Egypt and Israel were on the list.⁽¹⁰⁵⁾

Stookey (1982) argues that the flexible policy followed by Saudi Arabia towards PDR Yemen since 1976 has been based on a determined undertaking to minimize tension among the Arabian peninsula states, and to make efforts for co-ordination of "policies and actions" between these states. He adds that nevertheless PDR Yemen has shown very little response; but this has not driven the Kingdom to its previous

"active hostility and punitive actions". In fact, according to Stookey, Riyadh has continued its cooperative policies towards Aden's Marxist regime. He believes that the friction inevitable between the two states could be kept within manageable bounds through Saudi Arabia's policy or patience. (106)

Finally, instead of breaking away when the radical leftist NLF assumed power in PDR Yemen, the Americans promoted the status of their consulate in Aden to an Embassy. This American attitude was not positively received by PDR Yemen; because in 1969 when the more radical and anti-American elements in the Front took over and thus more orientation towards Moscow occurred, the regime in Aden severed its diplomatic relations with the US. (107) However, the opening by PDR Yemen of diplomatic relations with Saudi Arabia ensued by the sending out of feelers towards the resumption of American-Yemeni diplomatic relations, all have signalled to some Americans the intention of Aden's regime to embark on a relatively flexible foreign policy. (108)

The foregoing pages have explained, analysed and assessed the perspectives that Saudi Arabia and the US have had on PDR Yemen and vice versa. Saudi Arabia's perceived threats from PDR Yemen were also explored. Also the conflicting regional views over the status of the Red Sea, from the security point of view have been discussed. The various policies followed by the monarchical regime in Riyadh

towards the progressive regime in Aden were considered. It has been clearly pointed out that there is an inherent American-Saudi distrust in PDR Yemen.

However, a far more concrete source of threat has emanated from the most northern tip of the Red Sea, from Israel, and continued for more than thirty years. The Arabs, some American officials and academic circles, as well as some other Western views, all have recognized that Israel does constitute a real source of danger to the security of the Arabian peninsula. The exploration of this issue will be the task of the following pages.

As mentioned, Lee Hamilton, the Chairman of the Subcommittee on Europe and the Middle East has ranked Israeli expansionism as an immediate perceived second source of threat to the peninsula, just after the Soviet Union. Kuniholm (1981) a former State Department's Policy Planning Staff member, emphasizes that the rulers of the Arabian peninsula perceive "Zionism and Israeli expansionism" as a direct threat to their security and stability.⁽¹⁰⁹⁾ But the US is not worried about threats from the peninsula against Israel, and it appreciates that Saudi Arabia has never declared war upon Israel. The Americans consider the Saudi moderation towards Israel helpful to the US in its commitment to the security of the latter. But contrary to American relaxation about Saudi moderation, Blake (1984) holds a different view. He maintains that the Kingdom "takes a

strongly anti-Israel stand".⁽¹¹⁰⁾ The Americans are concerned about the feelings of the Saudi leadership that their increased involvement in the protracted Israeli-Arab conflict and inter-Arab affairs, in addition to their military modernization strategies, all might render their country an Israeli target in any potential hostility between the belligerent groups.⁽¹¹¹⁾ In fact, the Saudis may be right because they could threaten ships plying to Israel through the Strait of Tiran from their major air base at Tabuk,⁽¹¹²⁾ just over 200km from the Strait as well as from the Israeli port of Eilat.

However, the US feels sensitive about the fact that the vulnerability of the Saudi military and oil facilities to the superior Israeli Air Force has been a serious concern among the Saudis.⁽¹¹³⁾ Nevertheless, some sources point out the unlikelihood of an Israeli attack on Saudi Arabia in spite of the fact that Israel's aircrafts "do fly teasing sorties over Saudi soil".⁽¹¹⁴⁾ Blake (1983) calls attention to the Israeli navy at Eilat as another source of potential threat to the Kingdom.⁽¹¹⁵⁾ Kuniholm (1981) indicates that the Saudi leaders have been aware of their exposure to the Israeli threat because Israel had once occupied Saudi Arabia's Tiran Island, and also used to mount frequent flights over Saudi territory.⁽¹¹⁶⁾ The Department of State ⁺ recognizes that the peninsular states have been apprehensive over the Israeli threat to their security, particularly after Israel's bombing

of the Iraqi nuclear reactor and its atrocities in Lebanon in 1982.⁽¹¹⁷⁾ With regard to Israel's interests in the Red Sea, Saudi Arabia occupies the key position among the Red Sea Arab States which advocate the concept of transferring the Red Sea into an 'Arab Lake'. If the latter concept were to materialize, no doubt it would jeopardize Israeli interests, especially when Israel continues its persistent intransigence over the Palestinian predicament. Thus, in relation to its interests in the Red Sea, Israel may view Saudi Arabia as hostile, and consequently Israel may consider the Kingdom as a potential target.

The Department of State stresses that the countries of the peninsula are not exactly worried about Israeli "troops marching to Jeddah", but their real concern is how they view the "festering Palestinian issue, the radicalizing Palestinians ...". They are very concerned that such a situation may pose a threat to their stability, because of two factors: first, there are a considerable number of Palestinian communities residing in the peninsula; and second, the support given to the Palestinian cause by the oil states of the peninsula.⁽¹¹⁸⁾ On the other hand, the Americans view the unresolved Palestinian problem as a threat to their interests in the peninsula, as well as to regional stability in the area.⁽¹¹⁹⁾ Also, they have indicated their awareness that the leadership of the Arabian peninsula perceives the Palestinian issue and the continued occupation of Arab territory and East

Jerusalem as the most important factors for radicalization, and a catalyst for the overthrow of "traditional^a and moderate regimes"⁽¹²⁰⁾ in the Arabian peninsula, and elsewhere in the Arab world.

The Americans have understood that the states of the peninsula believe that the Camp David accord stopped short of achieving a comprehensive settlement to the prolonged dispute because the agreement has not recognized the Palestinian right of self-determination to establish their homeland as an independent state.⁽¹²¹⁾ The rulers of the peninsula have made it clear that they regard Camp David as a

"separate settlement that failed to consider adequately the Palestinians, and that handed over the holy city of Jerusalem to perpetual Israeli control".⁽¹²²⁾

The Department of State is well aware of the Arab's unequivocal and persistent conviction that a "comprehensive, just and long-standing settlement" to the conflict is central to long-term "security and stability".⁽¹²³⁾

In Saudi Arabia as well as in the other parts of the Arab world, Camp David has been viewed as an incomplete and inadequate response to the Arab demand. Accordingly, the Americans have become concerned about the Saudi conviction that such an incomplete settlement would "polarize the Arab world even more ..."⁽¹²⁴⁾ and the Arabian peninsula would "face increased internal and external threat".⁽¹²⁵⁾ Saudi Arabia, the leader of the moderate states of the peninsula

has associated itself with the Arabs in condemning President Sadat's capitulation policies that ensued the Camp David agreement. The Kingdom's stand was a surprise to the Carter administration, which, unrealistically, expected that the Saudi leadership could and would support the agreement.⁽¹²⁶⁾ Such an active Saudi opposition to Camp David, as appeared in the Kingdom's alignment with the Arab radicals, was not anticipated by the US Government. The association of Saudi Arabia with the radicals was demonstrated in the Kingdom's attendance at the Arab Summit in Baghdad in 1977 and its endorsement of the Summit's resolutions.

After emphasising that the oil states of the peninsula recognize a genuine US interest in maintaining peace in the area, the Department of State (1982) concedes that there has been

"general disagreement with the US approach through the Camp David process".⁽¹²⁷⁾

Mr Veliotes, the Assistant Secretary, Department of State (1982) argues that the US is convinced that Saudi Arabia is not supporting Camp David, but nevertheless is not "opposing the Egyptian treaty with Israel".⁽¹²⁸⁾ The US is concerned about the assertion of the Saudi rulers that they are acknowledged guardians of Islamic and Arab rights.⁽¹²⁹⁾ Therefore the Saudis believe that they are "responsible for the Muslim holy places".⁽¹³⁰⁾ Accordingly, they feel obliged to seek ways to secure the "return of East Jerusalem to the Arab-Muslim fold",⁽¹³¹⁾ otherwise, as the Mullahs have warned, the

"surrender of Al-Quds (Jerusalem) would be like abandoning Mecca". (132)

In this respect, when the Israeli Knesset passed a resolution in 1980 declaring a united Jerusalem as the 'eternal' capital of Israel, Crown Prince Fahad (now king) announced, the possibility of "jihad against Israel" to restore Muslim rights⁽¹³³⁾ that Camp David failed to protect. Also in Makka, in June 1981 the Islamic Summit asserted that

"the primary mission of the present generation would be to prepare for jihad" (134)

for the liberation of East Jerusalem and all other Arab territories occupied by Israel. And as leader of the Muslim states the Kingdom has endorsed the Summit's declaration.

However, with regard to both the Palestinian tragedy and Jerusalem, Camp David has faced the Saudi leadership with the problem of reconciling the 'inherent conflict' between close Saudi-American relations and the Saudi-Arab-Islamic world.⁽¹³⁵⁾ Saudi-American perceptions of the sources of threat to the security of the Arabian peninsula vary considerably. As we have seen Israeli expansionism has been considered by official American sources as a second source of potential threat to stability in the peninsula. In December 1977 Gold and Conant prepared a report for the Senate Committee on Energy and Natural Resources in which they argued that Israel is not a threat to Saudi security. The

fundamental threat according to them, is "Arab radicalism and subversive organizations".⁽¹³⁶⁾ Thus they do not believe that resolution of the Israeli-Arab conflict would bring peace and security to the Middle East, especially to Saudi Arabia, because, even if the dispute is ended the Americans "would be extremely important to Saudi Arabia's security, perhaps even more important",⁽¹³⁷⁾ due to the US conviction that Arab radicalism is the real danger. In respect of this Arab extremeism, the Americans recall that:

"Nasser's charisma ... almost extended to Saudi Arabia". (138)

Therefore, an idea has developed in US circles that if the conflict between Israel and the Arabs is settled, it would not guarantee peace and security in the Saudi Kingdom because of American fear that Saudi Arabia, oil rich, with a small and sparse population and militarily unprepared to defend itself "could be an attractive target and prize"⁽¹³⁹⁾ for those radical Arabs.

The American allegation that Israel is not a threat has been rebuffed at high Saudi level. In February 1979, the Secretary of Defence, Harold Brown visited Riyadh to "assess Saudi apprehension" regarding their security during the Iranian Islamic revolution and the conflict between Yemen AR and PDR Yemen. Also, he was interested to know the Saudi desire for US support.⁽¹⁴⁰⁾ First, he was not positively welcomed and secondly, the Saudi Foreign Minister, Prince

Saud was reported to have emphasized to the Secretary that the only way to re-establish peace and stability in the Middle East is by having

"Israel agree to withdraw from the occupied territories, return Jerusalem and recognize the Palestinian people's right to self-determination". (141)

Indirectly, the Saudi Minister rejected the idea of military cooperation with the US. He stated that "we have nothing to do with international strategies". Then he came to the heart of the issue, the threat to the security of the area. He said,

"We believe that the Zionist (not the Soviet) danger is a threat to the Arab area and its stability."
(142)

Accordingly, the Minister emphasized that the Kingdom would not be part of any regional alliance "outside the Arab and Islamic frameworks".

The Saudi attitude toward Camp David has exasperated the US. The Chairman of the Subcommittee on Europe and the Middle East, Lee Hamilton (1982) has openly stated that the Saudis, at least since the sale of the AWACS, have been working against American policy in the Middle East. He accused them of being "rather unhelpful" instead of being grateful to the Americans who supply them with protective measures. He asked about the importance of the AWACS sale with regard to US interests, while the Saudis have acted

against these interests.⁽¹⁴³⁾ The Chairman considered a number of actions taken by the Kingdom after the deal as against American interest. Prince Fahad cancelled a visit to the US, and the Kingdom re-established diplomatic relations with Libya (broken in October, 1980). Saudi oil production did not increase, and then decreased, while the Kingdom continued giving very strong financial support to the PLO. The Saudis moreover continued to promote a peace plan that is in opposition to Camp David, and the Kingdom financed more Syrian arms sales from the Soviet Union.⁽¹⁴⁴⁾

As we have seen, the US considers Saudi Arabia as the centrepiece of American interests in the Arabian peninsula and the lynchpin of regional stability and resistance to radicalism and communism. Consequently, Saudi views do carry considerable weight in American Middle Eastern policy. The Department of State maintains that the US has built strong working relationships with the Kingdom through close consultations on various political issues of mutual concerns.⁽¹⁴⁵⁾ "Soviet pressures against the region" and "comprehensive, just and lasting settlement to the Arab-Israeli conflict" are considered by the US House of Representatives among the issues of common American-Saudi interests.⁽¹⁴⁶⁾ Mr Veliotes (1982) maintains that the oil states of the peninsula recognize that America is "dedicated to the pursuit of peace" between Israel and its neighbour and that the peninsula states share the US objective.⁽¹⁴⁷⁾ However, with reference to the Saudi

opposition to Camp David and their description of the agreement as a 'separate settlement' the Americans attributed the Saudi stance to Saudi feeling of being neglected because

"neither Egypt nor the United States had consulted with Saudi Arabia on the formula arrived at in the Camp David negotiations". (148)

To sum up, the past few pages have clearly argued that various Arab, American, and other Western views, are agreed that Israel constitutes a real threat to the security of the Arabian peninsula. Also the Arabs' foremost perceived threat is Israel rather than the Soviet Union. On the other hand, the US Government has made great efforts to convince the Arabian peninsular states that it is not Israel but the USSR and Arab radicals, who are the most serious and imminent source of danger to their stability. Inevitably, conflict over immediate perceived threats to the security of the Arabian peninsula has taken place between the US and its Saudi friends.

Only about 25km separate the Arabian peninsula from the horn of Africa. In the Horn, endemic territorial conflicts between Ethiopia and Somalia over Ogadan, especially since the late 1970s, and between Ethiopia and the Eritreans over the latter's demand for independence since 1962, have created disunity in the area. It is feared that a spillover of the conflict into the Arabian peninsula may affect stability in the latter. Superpower rivalry in the Horn might have been

fed by instability there. Turmoil and the communist presence in the Horn, besides the recent (1981) tripartite agreement between the Libyan Arab Jamahiriyya (LAJ), Ethiopia and PDR Yemen, all have been viewed by the US and Saudi Arabia as creating insecurity, in the very vicinity of the peninsula. How the security of the Arabian peninsula could be affected by developments in the Horn will be examined hereafter.

However, American interest in maintaining a presence in the Horn is mainly linked to US concern about the security of the Arabian peninsula. Both Saudi Arabia and the US perceive the massive Cuban military presence in Ethiopia, and PDR Yemen as well, as a potential Soviet surrogate force for subversion in the peninsula.⁽¹⁴⁹⁾ Therefore an American presence in the Horn is seen

"primarily related to US national security interest in the Persian Gulf ..." (150)

and secondarily to American interests in interjecting themselves in the question of the Horn. Thus, since the Soviet Union's entrance into the Horn in 1969, in Somalia, and particularly after the Ethiopian revolution in 1974, the US has been greatly concerned about the elimination of the Soviet presence and influence from that area. The US perceives the elimination of the Soviets from the Horn as crucial to foster regional stability which would

"provide direct and important benefits to the US national security" (151)

in the Arabian peninsula.

The US views the Horn conflict as being regionalized within the Red Sea area because most of the Red Sea littorals have been involved in the conflict either through financial support or supply of arms or even both.⁽¹⁵²⁾ The conflict, particularly during and after the Ogaden War (1977-8) has increased American concern about the question of stability in the peninsula; and it has become one of the factors that moved the US to initiate certain deterrent measures.⁽¹⁵³⁾ The Americans have been concerned that the conflict may lead to confrontation between radical and moderate Arabs: Libya and PDR Yemen against Saudi Arabia and Oman; or the first two countries against Sudan and Somalia.⁽¹⁵⁴⁾ However, in either case, particularly when the communist presence around Bab al-Mandeb is considered, the US feels that stability in the Arabian peninsula could be in jeopardy.

To the French, the Horn conflict is of a strategic nature. Chaliand (1978) argues that the Horn conflict is not ideological but "above all strategic and military". Thus, for this strategic and military dimension, the US has been worried about the proliferation of the conflicts whose central point, according to Chaliand, is "control of the Red Sea".⁽¹⁵⁵⁾ He adds that the dispute is "bound to have a major impact beyond the Horn", to the extent of affecting the course of relations between the US and USSR.⁽¹⁵⁶⁾ In their report of February 3, 1978 to the House Committee on

International Relations, Congressmen Don Bonker and Paul Tsongas emphasize that the war in the Horn is more than a conflict between two African States, but it

"involves the potential use of coastal areas and ports for military operations in and around the Red Sea and Indian Ocean". (157)

Although both Ethiopia and PDR Yemen are Red Sea Marxist states and their activities could cause apprehension in the area, the Americans are more concerned about PDR Yemen because it is located on the peninsula.⁽¹⁵⁸⁾ In August 1981 Libya, Ethiopia and PDR Yemen concluded a tripartite defence pact. The treaty has been seen as a reaction to the 1981 American Bright Star military manoeuvres,⁽¹⁵⁹⁾ according to Karen Dawisha. While Lord Avebury (1982) perceives the treaty as a "Soviet-inspired alliance", the British Government (1982) sees "no Soviet influence behind this alliance".⁽¹⁶⁰⁾ Nevertheless, Lousi Fitzgibbon (1982) contends that the agreement is neither 'African', because of PDR Yemen's membership, nor 'Arab', since it includes 'Christian' Ethiopia. Consequently, he arrives at the conclusion that the USSR was the only power able to bring Libya, Ethiopia and PDR Yemen together.⁽¹⁶¹⁾

The Libyan involvement in the Red Sea region has caused considerable stress to American foreign policy in that part of the Middle East, particularly since the Libyan leader has launched his campaign against the deployment of the AWACS in

the Saudi Kingdom in 1979.⁽¹⁶²⁾ After severing relations with Saudi Arabia in October 1980, Colonel Qaddafi asserted that the deployment of American planes had "desecrated Muslim holy places" in Makka; and he called upon the 2 million pilgrims to engage in a jihad (holy war) to "liberate Mecca".⁽¹⁶³⁾

Stookey (1982) points out that the outspoken objective of the tripartite agreement is to eliminate

"the US and other Western military presence in the Indian Ocean, Persian Gulf and the Red Sea". (164)

He also maintains that the signatories of Aden pact stand as opponents of the pro-American states of Somalia, Egypt and Oman because they offered "assistance to US strategic planning in the region". Another view maintains ~~that~~ the pact was primarily designed to isolate and encircle Egypt. And besides its reinforcement of the position of the anti-American axis in the Red Sea region, the Aden alliance according to Dawisha (1982) has enhanced the Russian presence in the region. She adds that Pravda hailed the treaty as an introduction to a "relatively new state" with regard to the relationship between Libya, Ethiopia and PDR Yemen.⁽¹⁶⁵⁾

In fact, the US has become greatly concerned about Qaddafi's objective of establishing an "Arab Islamic bloc" which would include "Muslims of Africa and the Middle East". Mr Lyman, the Deputy Assistant Secretary of State for African Affairs (1981) perceives the Aden defence alliance as an example of Qaddafi's goal. Also, Mr Lyman mentions that the

pact provides that:

"the armed forces of each of the signatories may under certain circumstances deploy in the territory of the other". (166)

Finally, the Department of State is deeply concerned about the treaty because the states of the peninsula especially Saudi Arabia and Oman have become anxious about threats from "the lower tier, tripartite threats". (167)

To sum up, whether through its own internal developments or through Yemeni/Libyan involvement, the Horn of Africa has been considered, particularly since the late 1970s, by both the US and Saudi Arabia as a further source of insecurity to the Arabian peninsula.

7.4.2. Regional Threats: Iraq, Iran, and the Gulf War

The Americans are concerned that Saudi Arabia is considering both Iran and Iraq as enemies who might threaten the security of the Kingdom. (168) Similarly, the US perceives that the two belligerent states are big regional powers with ambitions which might endanger the security of the Arabian peninsula. (169)

After its revolution in 1958, Iraq had become the second most radical power, after Egypt, in the Arab world. In September 1970 President Nasser of Egypt died and was succeeded by President Sadat. Since the latter's take over

and particularly after his ejection of the Soviets from Egypt in 1972, Egypt has taken a complete turn to the West, especially toward the US. Since then, Iraq's weight in the Arab world has increased; and it has contested regional leadership with Saudi Arabia. In fact, before 1970, Iraq was looking for a Saudi adversary to promote revolution in the peninsula against the conservative systems there. The Iraqi threat to the Kingdom has come through Iraq's relations with Yemen AR during the 1960s. Consequently, Iraq's presence in the southern Red Sea areas, Yemen AR used to receive financial, moral and diplomatic support from Iraq. (170)

Although Camp David has brought Saudi Arabia and Iraq rather closer, nevertheless Iraq's hardline attitude toward US-Saudi relations has not ceased. In January 1979 when the US decided to despatch 12 unarmed USAF F15 fighter aircraft to the Kingdom during the climax of turmoil surrounding the Shah and the developments between the two Yemens, Iraq reacted angrily and the Ba'ath Party newspaper, Al Thawra, described the American move as coming

"with efforts to readapt American policy in the region in a manner that would guarantee a US presence ... and cover for other forms of interference which might have a military nature". (171)

In May 1980, just four months before the war with Iran, Iraq harshly denounced American involvement in the Red Sea region and elsewhere in the Arab world. The Iraqi Deputy Premier, Na'im Haddad was reported to have said, "US

Imperialism was and still is the basic enemy of the Arab nations". According to E. Ghareeb (1981), Mr Haddad inveighed against America's continued support to Israel and

"plundering of Arab oil and intensifying its military presence in the Gulf region and the Red Sea". (172)

Since the late 1960s, and particularly after the Vietnam syndrome, the US has adopted the so-called 'twin-pillar' policy with regard to the question of security in the Gulf.⁽¹⁷³⁾ With that policy, the US supplied Saudi Arabia and Iran with weapons and considered them responsible for regional security and stability. In fact, the US was relying on Iran rather than Saudi Arabia in relation to policing the area, mainly due to Iran's military superiority and greater population. Thus, although neither a peninsular nor a Red Sea state, the Iran of the Shah considered the security of and stability in both the Arabian peninsula and the Red Sea region as a direct Iranian major concern and responsibility.⁽¹⁷⁴⁾

During the Yemeni civil war of 1962-3 Iranian forces fought beside the royalists against the republicans. The Iranian involvement in Yemen represented a demonstration of Saudi-Iranian cooperation with regard to the security of the Arabian peninsula. Moreover, Iran's role in putting down the rebellion in Dhofar Province in Oman (1975)⁽¹⁷⁵⁾ and its support to Somalia against Ethiopia (1977), confirm the

former Iranian wide range of involvement with regard to regional security.

Even before the Khomeini era (1979) Iran was causing discomfort to the Kingdom of Saudi Arabia because of the hegemonic aspirations of the Shah and his activities in the Gulf, with special reference to the Strait of Hormuz and the seizure of three islands there.⁽¹⁷⁶⁾ Some Americans view the Iranian revolution as the most significant threat to the political system in Saudi Arabia. They argue that the advent of Khomeini has augmented and diversified the sources of this threat. They maintain that the Khomeini regime has made geopolitical claims over Bahrain and other Gulf areas with considerable Persian and Shi'ite populations.⁽¹⁷⁷⁾ Being the most important minority sect with regard to the orthodox Sunni Muslim, the Shias (about 90 million) constitute a majority in Iran, Iraq, Bahrain and Yemen AR.⁽¹⁷⁸⁾

Although the Arabian peninsula is predominantly Sunni Muslim, it has become apprehensive about the success and influence of the radical Islamic revolution in Iran. Moreover, the war between Iraq and Iran (1980) has increased worries in the peninsula. It is argued that the presence of old-established Iranian communities along the Arab side of the Gulf added to the considerable number of the Shi'a Arab cause an anxiety for the Sunni rulers, particularly in the peninsula, who fear that fanatical fundamentalists among the Shi'a, and Sunni as well, might be encouraged by the Iranian

revolution and strive to establish similar regimes in the area.⁽¹⁷⁹⁾

After the downfall of the Shah and the immediate eviction of the Americans, US definitions of the term 'Persian Gulf' have changed.⁽¹⁸⁰⁾ Economically, politically, and strategically, Iran has not been basically included in American policy calculations regarding US interests in the area. The term 'Persian Gulf' has come to mean only the Arab states in the area. The Department of State points out that the Carter Doctrine does not include Iran; and even if it is attacked by an outside power such as the USSR, seeking the control of the Iranian oil assets, the US would not consider such an attack as an assault on vital American interests.⁽¹⁸¹⁾ However, this attitude means both sides, American and Saudi, perceive Iran as an enemy.

Since the war broke out in September 1980 between the two big regional powers, Iran and Iraq, the US had become obsessed by the fear that if the war proliferates, it may endanger American interests in the peninsula, by posing a threat to the oil states of the area. According to American sources (1984) when the war started, the main Saudi worries about it were of a domestic concern. These sources maintain that the Kingdom feared that the war might pose internal security problems arising from the Shi'ite group in the Eastern province of Al-Hasa.⁽¹⁸²⁾ To the Americans, although the war has exacerbated the problem between the Sunni and

Shi'ite Muslims, yet Iraq represents the source that frequently fuels this problem inside the Arabian peninsula, especially in Saudi Arabia.⁽¹⁸³⁾ In a testimony before the Subcommittee on Europe and the Middle East, Mr Veliotis (1982) has stressed the American worry about the danger of the proliferation of the conflict:

"We have a real concern that this conflict will spill over to threaten neighbouring friendly states." (184)

After describing the war as a dangerous situation, Mr Veliotis mentions some precautionary measures taken by the US in order to ensure the security of the Arabian peninsula.

While the risk of war spill-over has become a real fear, the Americans have also been concerned that a quick decisive victory by one of the belligerents might encourage the victorious to seek hegemony over the area.⁽¹⁸⁵⁾ By early 1983 the Gulf States had become greatly worried about the outcome of the war. Their situation has been described as:

"they were apprehensive first of Iraq pushing too far into Iran and now, with the Iranians gaining an edge, they are worried about Iran pushing too far into Iraq. The clear ascendancy of either creates panic here". (186)

Therefore, the Americans have become convinced that despite sympathetic attitudes and financial support given by the oil states of the peninsula to Iraq, particularly by Saudi Arabia, the Gulf states would like to see a kind of stalemate

in the conflict; or if the two belligerents exhaust each other, that may also calm their fears and give them a temporary respite.⁽¹⁸⁷⁾

In 1982 the Department of State maintained that there was a fear among the oil states of the peninsula that a collapse of Iraq might result in direct or indirect Russian pressure through Iran,⁽¹⁸⁸⁾ aimed at the peninsula. So, in order to enable the Iraqis to withstand the Iranians, the Department of State points out that the Saudis were paying Iraq half the cost of the war. According to Mr Veliotes who maintains that he has seen the figures, the Kingdom had paid about a billion dollars a month in loans and grants, since the beginning of the war.⁽¹⁸⁹⁾

In sum, both Iraq and Iran are considered by the US and Saudi Arabia as big regional powers with ambitions and policies that pose a threat to the peninsular states. Both Iraq and Iran maintain anti-American and anti-Saudi attitudes, in spite of the Saudi support for Iraq. The war has enhanced the worries of the US and Saudi Arabia as well in that it may involve the peninsular states. The US feels that the presence of the Shias in the peninsula, particularly in such sensitive areas as the oil fields of Saudi Arabia, represents a potential catalyst for instability in the oil rich states there. The American-Saudi interest is in having both enemies destroy the power of each other. However, bitter animosity between Iraq and Iran may continue long after the

war is over. So far the significance of the Arabian peninsula to the US has been covered economically, strategically and politically. We have also surveyed the sources of threat to the security of the Arabian peninsula, as perceived by the US and Saudi Arabia.

7.5. Conclusion

Most important points in this survey include Saudi Arabia's emergence as the centrepiece of American interest in the area. There is a clear conflict between American and Saudi views regarding the major source of threat to the security of the latter. It has been clearly shown that the Red Sea region still contains the major sources of threat to the security of the peninsula, particularly from Israel. It has been understood that the US wants to preserve the present monarchical and conservative regimes in the peninsula. It does not want revolutions or radical changes to replace those allied and/or friendly governments. Therefore, to redress threats against regimes, the US, since the late 1960s, has initiated various means to support its allies and friends in the 'arc of opportunity'. These means have included arms sales, military aid, technical advisers, bases and facilities, joint military manoeuvres by American and regional armed forces such as the exercise Bright Stars 81, 82, 83, and 85; and finally the most important development has been the US decision to establish a unilateral military

presence which is manifested by the USCENTCOM. All these steps, especially the latter, are considered by the US as deterrent measures against actual and potential dangers to the pro-American systems of the peninsula.

Chapter Seven

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PART IV

CONCLUSIONS, PROSPECTS AND RECOMMENDATIONS

CHAPTER 8

CONCLUSIONS, PROSPECTS AND RECOMMENDATIONS

8.1 Conclusions

8.1.1 The United States and Geopolitics

Twentieth century geopolitical thought is currently receiving many fresh ideas and undergoing re-assessment from academics, politicians and international relations experts. Publications in this area are becoming increasingly abundant. For example, forthcoming books on geopolitics (in 1985) include Geopolitics by the American Patrick O'Sullivan;⁽¹⁾ his book draws attention to the effect of geography on international power politics. Western Geopolitical Thought in the Twentieth Century by Geoffrey Parker,⁽²⁾ a Briton, investigating how current geopolitical thought influences the global political strategies of the superpowers; it also treats the development of geopolitical thought in the twentieth century. In an era of nuclear threat, geopolitics is also being harnessed to greater understanding of the nuclear debate. On Geopolitics: Classical and Nuclear, edited by C. Zoppo,⁽³⁾ an American; the book treats geopolitics in relation to the nuclear era. This upsurge in geopolitical thought and writing must be seen against the background of its neglect in recent decades. Immediately after World War Two, the study of geopolitics was largely discredited because

of memories of how it had been manipulated by German Fascists such as Karl Haushofer and others to "provide the intellectual rational for the Nazi drive for world domination".⁽⁴⁾

Although the German Nazi use of geopolitics caused the field to be neglected and somewhat downgraded, now once again geopolitics is becoming re-established as a valid and respectable discipline. It is therefore worth dwelling on whether past geopolitical views have any validity today. In the light of the analysis attempted in this thesis, do these views help our understanding? Certainly the geopolitical views of Sir Halford Mackinder established a sound basis for the academic development of the subject; but today his 'Heartland' concept cannot be held valid simply because the 'Heartland' power since the late 1940s has broken out and penetrated the 'Rimland' and challenged the maritime powers in every part of the sea even close to the territorial seas of the supreme 'Sea-power', the United States. The Middle East is a major rimland region where the 'Heartland' power, the USSR, has become uneasy about the military presence of the US, especially around the Red Sea region. The area is within striking distance of Moscow⁽⁵⁾ and therefore since the 1950s the Soviet Union has declared its warning to the West that the Middle East is a "sensitive" area for Russia and that the Kremlin leaders were under "no illusion" as to the purpose of Western policy there.⁽⁶⁾

However, although the Soviets justify their coming out into oceans as a counter measure to American threats to their security, the latter see the former's "expansionist policies in the 'Rimland' as an attempt to spread its territorial imperialism".⁽⁷⁾ In 1984 the Commander in Chief of the Soviet Navy declared that "The oceans that once separated the US from danger no longer do so."⁽⁸⁾

If we look at the Red Sea region in relation to the crucial marginal area between the 'Heartland' and the Maritime powers, we find that it lies right in Mackinder's 'marginal crescent' and it has indeed become a battleground for great power competition. Soviet and US bases or facilities in the region are as close as 220km to each other in Aden and Berbera. Both powers are competing to extend their spheres of influence and thus divide the region into pro-East and pro-West clients. We have on one hand Ethiopia and PDR Yemen which are strongly pro-Soviet, and on the other hand Saudi Arabia, Egypt, Jordan, Somalia and Israel which are strongly pro-American. Thus, the Red Sea region clearly demonstrates that competition between the land-based and sea-based superpowers is actually operating politically and strategically. The land power maintains its position in the region largely on the basis of excellent communications by air and by sea. It is doubtful whether Mackinder foresaw this pattern; he envisaged outreach overland using road and rail networks.

If these reflections have any value, certain conclusions can be drawn. Most would have been evident without the benefit of geopolitical theory, but the latter helps create a framework of understanding. First, the Soviet presence in the Red Sea region will remain as long as the Soviets consider this marginal area crucial to their own national security, as well as to their global status as a superpower with ideological values which are important to disseminate. According to Gavshon (1981), former US Defence Secretary Donald Rumsfeld stated America's strategic interests as being

"to maintain an international order assuring the preservation of US physical and economic security and of its political system";

and in outright opposition to this goal the proclaimed Soviet objective is

"to replace the old international order with something deemed to be better, more just and no longer dominated by the west". (9)

Secondly, from an Arab perspective, the US is not going to "go away" because it sees the Red Sea region as an area of endemic rivalry with the land-power, as Mr Nixon, former US President, indicated. This will remain true as long as the US continues to categorise the USSR as an expansionist power. Moreover, currently and especially militarily the region is important to the US because

"In the perspective of Washington, the Red Sea has gained in strategic importance with the US decision to form the RDF and to seek access to air and port facilities in certain regional states that would support the deployment and logistical supply of this force ... even with the Suez Canal closed, the US will see maritime access to Ras Banas as crucial to the protection of this facility as a staging area and supply depot for the RDF." (10)

So it is quite obvious that the Red Sea region is and will remain a strategic arena of superpower rivalry, especially from the naval point of view. The Christian Science Monitor's maps, reproduced by Larson (1985), clearly confirm that the Red Sea features centrally in the naval strategies of both the United States and the Soviet Union.⁽¹¹⁾ In other words, Spykman's rimland has become the real theatre of competition between the two major powers. The US has been unable to carry out Spykman's advice that in order to "control the destinies of the world" as an ultimate objective, the US must control the 'Rimland'. This failure, whether good or bad, must be partly due to geographical factors, in the Middle East at least, especially ease of access to the region by land and sea. Cohen's geostrategic and geopolitical views of 1964 are among the most constructive and useful ideas in relation to the Red Sea region. Yet the "shatterbelt" is a self-fulfilling prophecy in the sense that superpowers of an earlier age, Britain and France, created the mosaic of states which today's superpowers seek to win over. In 1982, however, Cohen foresaw a new geopolitical order in a world far removed

from Mackinder and Spykman. In particular, the emergence of regional powers capable of confronting the superpowers was notable in relation to the Red Sea region. Among the emergent regional powers are Egypt and Saudi Arabia.⁽¹²⁾ Such changes disturb the US because they are likely to impede its free action in future. In 1977, Ronald Reagan (now President of the United States), indicated that the challenges the US would be facing as a result of changes to the world map after World War Two would stem largely from areas where "the West in general and U.S. in particular have operated without much difficulty in the past".⁽¹³⁾

8.1.2 The Red Sea Region: Energy and Strategy

Considering the global movements of oil, the 5.1m tonnes which passed through the Suez Canal in 1983 is, on the face of it, relatively small. The Red Sea is clearly of minor concern to the United States for oil transportation, although its importance in this respect has been increasing since the reopening of the Suez Canal and the recent laying of oil pipelines. This significance has been much enhanced by conflict in the Gulf since 1980, as the Gulf oil producers have resorted to the Red Sea as an alternative outlet for their exports. Thus, an increasing amount of oil is being directed to the Red Sea, arguably from one area of instability to another, but it is still a small proportion. The amount travelling via the Cape route to the United States was

still as much as shipments via the Red Sea in 1985. However, the real US stake in the Gulf oil and its transportation lies in ensuring the flow of this vital commodity to her partners in the OECD who critically depend on it. Much of the oil that goes through the Red Sea is bound for Western Europe rather than the US. To put it into perspective, in 1983 Western Europe imported 169.2m tonnes from the Middle East;⁽¹⁴⁾ 57.51m tonnes, hence 34% of this was carried through the Suez Canal route alone.⁽¹⁵⁾ The US and Canada's imports from the area were 54.90m tonnes,⁽¹⁶⁾ 9% of which found its way via the Red Sea route.⁽¹⁷⁾ Furthermore, if SUMED's 1983 throughput was the same as its theoretical capacity of 1.7m b/d⁽¹⁸⁾ that would mean about 90m tonnes of oil was carried through various Red Sea routes in 1983. This indicates that the Red Sea route could be capable of transporting 53% of Western Europe's supplies from the Middle East.

Regarding the future, it can be speculated that this shift to the Red Sea route will increase, especially if one considers that the Cape route started to be seen as hazardous from the late 1970s due to continued instability in South Africa and Soviet influence and presence in Ethiopia, Mozambique, Angola and maybe in South Africa itself. Such Soviet influence already worried the present President of the United States in 1977; he indicated that Southern Africa might fall under Soviet control. He anticipated serious consequences to the economies of the West if the USSR

"controls all the sea lanes from the Persian Gulf around to the Atlantic". (19)

The future political environment surrounding the Cape route could make the Red Sea-Canal route more attractive. With regard to disruption of the Red Sea route, this might mean war- or peace-time disruptions. Peace-time interdiction could be at best very inconvenient; it could happen due to rocketing of ships by unidentified groups, as in the case of 'Coral Sea' in 1971, hit at Bab al Mandeb, the mining of the Red Sea in 1984 is another deterrent-type action in peace-time. Similarly, a tanker could be hit by a land-launched Exocet missile. Peace-time hazards are real, especially in the Red Sea/Middle East zone where conflict and extremism are characteristic. Such peace-time hazards, especially rocketing of ships from land would immediately attract large tankers back to the Cape route. Red Sea physical characteristics such as its long deserted coast, paucity of ports, and abundance of islands all increase the possibilities of peace-time interruptions. Moreover, regional conflicts, especially Israeli-Arab and Iraqi-Iranian are important ingredients in creating disruption scenarios. The Horn disputes are another potential element of disruption. However, recent US geopolitical manoeuvres in the northern Red Sea region are an attempt to bring stability. Such anticipated stability may help reduce potential disruptions of oil movement via the Red

Sea provided that the core problem of the Israeli-Arab dispute, ie the Palestinian question, is satisfactorily resolved. Israel will have to withdraw from Arab territories, and bridle its aggressive policy and intimidating behaviour, as it did in the case of the proposed Iraq-Aqaba pipeline and its threat to the Saudi industrial complex at Yanbu.

In time of war, the Red Sea international route would soon cease to operate. Precedence suggests that this would happen especially if Israel is a party to the war. The physical characteristics of the Suez Canal, Bab al Mandeb and the Red Sea itself, all render the former susceptible to being blocked. So in the event of war, the Red Sea may not feature with regard to the tactical movement of naval ships. In both US and USSR contingency planning there is an assumption "not to count heavily on the use of the Red Sea route in time of crisis".⁽²⁰⁾ Another factor regarding the importance of the Red Sea for naval shipping is related to the Indian Ocean. Soviet Far East units can reach the Indian Ocean through the Strait of Malacca much quicker than US ships from the Pacific fleet because of the distance factor. While Socotra is about 3240nm from Vladivostok, it is some 4617nm from US Pacific fleet. Considering the distance equation, the closure of the Red Sea route to the Indian Ocean may not be so inconvenient to the USSR as it may be to the US for the movement of naval units from the Mediterranean. However, the Americans take the view that the

closure of the Canal was helpful to them during their entanglement in Vietnam in the late 1960s because that closure deprived Soviet movement of units from the Black Sea to the Indian Ocean.⁽²¹⁾ Although closure of the Canal may impede the Soviets in deployment of their Black Sea units for reinforcement in the Indian Ocean these ships are available for the Mediterranean. They were used in July 1985 to exercise in the eastern Atlantic for the first time; this clearly shows that the Black Sea fleet could be useful in contingencies beyond the Mediterranean and Indian Ocean spheres.

8.1.3 Legal Problems

Before discussing legal problems that may face US shipping it is worth dwelling on the issue of the freedom of navigation in the Straits of the world. One of the great debates in the Third UN Convention on the Law of the Sea since 1973 has been this: if coastal states are to be allocated 12nm territorial seas, how can one be sure that they will not then interfere with shipping that passes through their territorial waters where straits are less than 24nm? However, the 1982 UN Convention on the Law of the Sea came up with the concept of 'transit passage' which is stronger than the principle of 'innocent passage' through territorial waters. Innocent passage is in any case very difficult to define. It may be helpful to quote both

principles again. According to Article 38, in international straits "all ships and aircraft enjoy the right of transit passage which shall not be impeded ..."⁽²¹⁾ This was discussed in chapter 6. Regarding the concept of innocent passage, Article 17 says that

"... ships of all states, whether coastal or land locked, enjoy the right of innocent passage through the territorial sea". ⁽²²⁾

Chapter 6 also gives more details on this issue. Both principles emphasize that the coastal state has no right to interrupt, interfere with, or stop shipping engaged in innocent passage. The only right it can exercise is to specify shipping lane for safety. However, the right of transit passage is a new concept; it is quite untested and maritime states still feel uneasy about it. The idea emerged as a part of a total package in which the coastal states were prepared to accept restrictions on their own sovereignty and in return they acquire 12nm territorial seas, 200nm Exclusive Economic Zones which maritime states were not keen to accept.

The Middle East and North Africa embrace one of the most remarkable concentrations of strategic waterways: Gibraltar, the Turkish Straits, Bab al Mandeb, and Hormuz. These are four of the key straits in the world out of the top ten. They would probably all feature in the top half dozen by virtue of the amount of traffic vulnerability, quantities of oil, strategic supplies and naval vessels, besides their

significance to superpowers as well as to the regional states. Regarding literature on these narrows, Bab al Mandeb has probably been given least attention hitherto, although it is evidently important because of its interest both to all states who use the Suez Canal and because of its significance to Red Sea riparians like Ethiopia, Sudan, AR Yemen which have no other natural outlet to the sea. With regard to disruption of shipping in Red Sea territorial waters (including straits) and EEZs, there should be no problem in peace-time if every state observes the spirit of the 1982 Convention. But problems could arise when the Coastal States take the right given to it by the Convention to interfere with shipping if the former's security is threatened (Article 25):

"The coastal State may take the necessary steps in its territorial sea to prevent passage which is not innocent." (23)

This issue was discussed in chapter 6. Apart from coastal state interdiction to shipping peace-time interruptions by other parties are most probable as discussed above. There is nothing that could be called a legal measure to ensure absolute safety of shipping, especially in such troubled waters as those of the Middle East.

A second problem that may face the US in the Red Sea, as well as in other waters, is that it does not intend to sign the 1982 UN Convention. As mentioned in chapter 6, the US

bases its objection primarily on the provisions for sea-bed mining. But when one considers US views about its need for quick maritime mobility and resentment of restrictions to freedom of movement, it is difficult to believe that its opposition is solely due to the right of sea-bed mining. Therefore, one may conclude that the US is not going to sign the treaty even if changes were made in respect of seabed mining. As mentioned earlier, the attitude of some coastal States toward US rejection of the Convention is hostile, notably certain statements put out by one of the Red Sea states, Yemen AR. So US shipping could possibly be interdicted in the Red Sea regardless of the right of transit passage. The other major problem concerns the issue of the EEZ. As figure 3.3 shows, the Red Sea waters of Sudan and Saudi Arabia are being divided into exclusive economic zones. Apart from PDR Yemen, Djibouti and Somalia, none of the other Red Sea states have formally claimed a 200nm EEZ. The concept of the EEZ may turn out to be a type of creeping jurisdiction by coastal states who will gradually feel that they have the right to tell shipping where to go, or when to go; and that they will increasingly patrol these waters under the guise of protecting their resources according to Article 56, paragraph b(iii). The coastal state is entitled (in its EEZ) to arrange for "the protection and preservation of the marine environment".⁽²⁴⁾

However, the maritime states, not least the US, fear

that little by little there will be the feeling that these EEZs are really territorial waters where the coastal states have the right to exercise restrictions on shipping. This problem will obviously be more critical in narrow seas, such as the Red Sea, where coastal states and international organizations are becoming increasingly concerned about pollution and its impact upon the marine environment. Despite what appears to be a restriction on the freedom of navigation by the introduction of the EEZ, Article 58 recognizes the rights of other states. It says:

"In the exclusive economic zone, all States, whether coastal or canal-locked, enjoy ... the freedoms ... of navigation and overflight ... and other internationally lawful uses of the seas related to those freedoms ..." (25)

However, if we look at tables 4.7 and 4.2 it appears quite clear that the number of US flags actually passing through the Suez Canal is surprisingly small compared to those of the Soviet Union. But there must, of course, be a higher proportion of other goods heading for the United States via the Red Sea-Canal route particularly on Liberian, Greek and Panamanian ships. Even taking these into account, direct American shipping interests in this route are small if compared, say, with those of the Panama Canal or even the Strait of Gibraltar. In sum, the Red Sea route is not of vital importance to direct US interests as it once was the lifeline of the imperial powers of Great Britain, France and Italy.

8.2 Prospects

Enlargement of the Suez Canal comes top of anticipated events that could greatly affect the region. In chapter 4 much has been said about the development schemes related to the Canal. What is being waited for is the second stage of widening to accommodate supertankers and attract them back from the Cape route. If it ever occurs, it will result in considerable changes for Egypt, the region, and the West, most important being that the Red Sea route could regain its pre-1967 importance, especially if a comprehensive peace settlement is achieved. Apart from such geographical change, political change in the region could make significant alterations to the geopolitical map of the region. First and more important is the prospect for the Yemen AR. In chapter 7 we investigate American worries about how Yemen AR could threaten Saudi Arabia. With a large population and a mountainous region, Yemen AR could be strategically significant, especially when its location between Saudi Arabia and PDR Yemen is considered. Moreover, its fronting on Bab al Mandeb is also crucial particularly if it is fully united or aligned with PDR Yemen. Being preoccupied by the security of Saudi Arabia, in 1977 Washington was satisfied with what they saw as Yemen AR's alignment with Saudi Arabia under Riyadh's supervision and leadership.⁽²⁶⁾ However, the issue of the proposed unification between Yemen AR and PDR

Yemen could still be a worry to the United States with regard to its concern about having a buffer zone between the radical PDR Yemen and Saudi Arabia.

In the Horn of Africa any change of the status quo with regard to Eritrea and Djibouti could have critical repercussions on the geopolitical map of the region and could upset the strategic thinking and presence of the superpowers, and not least of all, the Israeli-Arab conflict. In view of the current developments in the Arab world: the alignment of some radical Arab states, such as Libya and PDR Yemen with Ethiopia, and the engagement of conservative and some radical Arab states in conflicts in the Gulf and Lebanon, one can hardly see Eritrea becoming an independent state. Some Arabs do not like to see it when they think of Eritrea as a prospective Marxist entity. The Americans do not wish to see an Arab/Muslim Eritrea that would weaken Ethiopia and might force it to align itself with radical Arabs, as it has already done since 1981.⁽²⁷⁾ The Soviet Union surely does not want to see either, although prior to 1974 they were supporters of the Eritrean cause; to Moscow it simply means fragmentation of Ethiopia, the Marxist ally who is strategically located to overlook Africa and Arabia. Nor would Israel welcome such a development and would prefer a united Ethiopia despite its Marxist character and alignment with two of Israel's most radical enemies. Israel's fear is related to its interest in avoiding increasing Arab hegemony

over the Red Sea.

The pocket state of Djibouti is the other important factor whose future could affect the balance of power regionally with regard to US-USSR contingency planning in the Lower Red Sea region. Contested between the pro-American Somalia and the pro-Soviet Ethiopia, the fate of Djibouti is dependent on the French presence. If the French get tired and, more important, become disinterested in the Indian Ocean area or are at odds with the United States and thus leave the Port state, no doubt the latter will be a battleground for the perennial belligerents of the Horn. Ethiopia is likely to have a say in the future of Djibouti because the latter is an important lifeline to Addis Ababa. The other most important development that could affect the situation in the region geopolitically and strategically is the relationship between Sudan And Egypt.

American and Soviet fortunes have been a series of advances and retreats in the Middle East. In most cases the loss of influence by one is a gain for the other, this could be nowhere clearer than in the Red Sea region. From 1955 to 1972 Egypt was pro-Moscow. From 1975 it tilted towards Washington, until 1977 when it became completely tied to the US. From 1969 to 1971 Sudan was under Soviet influence, then from 1973 on it began rapprochement with the US, until by the late 1970s it was clearly in America's sphere, but in 1985 it pulled out after the 'April the fifth' revolution. Ethiopia

was an important US ally from the early 1950s to 1974 when a Marxist revolution overthrew Haili Salassie and drove the Americans out in 1976. Since 1977 Ethiopia has become a full ally of the Soviet Union and strongly anti-American. From the early 1960s when it got independence, Somalia's policy was orientated to the East, until the mid and late 1970s when it was a strong Soviet ally. The Ethiopian revolution came at the expense of Somalia losing its communist support which ceased in 1978 when the Soviet Union changed sides by shifting to Ethiopia. From then on Somalia began to approach the US until in 1980 it became a full ally of the US and granted the latter naval facilities at Berbera where the Soviets had formerly established their military presence but quit in 1978. While PDR Yemen has been a strong Soviet ally since independence in 1967, neighbouring Yemen AR was an area of somewhat strong Soviet influence from the early 1960s until the late 1970s when Soviet dominance was mitigated largely due to Saudi American activities. Israel has been a strong American ally since its creation in 1948, Saudi Arabia and Jordan have not welcomed the Soviets and continued maintaining strong ties with the Americans. Long before its independence in 1977, the tiny state of Djibouti was a French foothold and has continued as a French ally even after independence. Overall, the contemporary advantage is to the United States, while tomorrow the advantage may be to the Soviet Union. However, the biggest asset the US has now is

Egypt. It is equally true that a revolution in one of the countries where the US is fully established could make things look very different to what they are today.

What happens in Sudan affects Egypt considerably, strategically and economically. Strategically, Egypt as well as the Americans, consider Sudan as strategic depth for Egypt where the latter, in case of threat, could use the Sudanese territory. The Americans have been preoccupied, especially since they linked Egypt with Israel, by fear for Egypt's security, and continued to view Sudan as a proxy state that could possibly be used to ward off Libyan threats against Egypt. As a result, Egypt has had a big say in Sudan's relations with the US, at least this continued until the ousting of President Numeiry as mentioned earlier. From then on, both Egypt and the US became worried about the situation in Sudan and the anti-American attitude that followed the revolution. It is worth mentioning here that following the revolution, Mr Sadig el Mahdi, a former Sudanese Prime Minister, who worked for the toppling of the Numeiry regime from its inception in 1969, and the most prospective leader for Sudan, welcomed the re-establishment of diplomatic relations with Libya, attacking the former regime's strong relations with the United States. He also demanded that Sudan should stop supporting the establishment of the USCENTCOM (formerly known as the R.D.F.), and declared his desire to see an investigation into the role played by the former regime

Table 8.1.

Water balances in the Egypto-Sudanese Nile, 1985-1990
(billion m³)

Country	Optimistic	Cautious	Pessimistic
Egypt	+ 15.8	- 6.8	- 14.1
The Sudan	- 3.2	- 8.2	- 9.7
Ethiopia drawdown	- 1.0	- 2.0	- 4.0
System deficit/ surplus	+ 11.6*	- 17.0	- 27.

*Note that under the optimistic projection, the implied surplus is entirely Egyptian and could be shared with the Sudan only if Egypt agreed to its drawdown at Aswan and to allow the Sudan to increase its effective share.

Source: John Waterbury, Hydropolitics of the Nile Valley, Syracuse University Press, Syracuse New York, 1979, p.239.

in the transportation of the Ethiopian Jews, the Falashas, from Ethiopia to Israel through Sudan in January 1985,⁽²⁸⁾ just three months before Numeiry was overthrown. Mr el Mahdi wants Sudan to follow a non-aligned policy, a view which is held by most Sudanese political forces. He indicates that the Soviet Union is a superpower and has interests in the region and cannot be ignored. Therefore, he believes in a free Sudan of balanced relations with great powers.⁽²⁹⁾ The US has become alarmed by rapprochement between Sudan and Libya. The Times (7/85) indicates that the US has voiced "grave concern to Sudan at the prospects of a military relationship between Sudan and Libya."⁽³⁰⁾ American worry stems from the fact that Sudan "strategically borders southern Egypt, a close ally of the United States".⁽³¹⁾ Another long-rooted and important factor in shaping Sudanese-Egyptian relationships is the Nile waters which are most critical for Egypt. In the past, especially in the 1950s, the question of the Nile water created grave difficulties in the relationship of the two countries. As Waterbury (1979) indicates, there is likely to be competition between Egypt and Sudan for Nile waters in the 1990s⁽³²⁾ (table 8.1). Such anticipated competition could materialize if the current trend of unrest in the Southern Sudan continues. Alternatively, if Sudan could join or even sympathize with the policies of the radical Tripartite pact formed in 1981, and which its northern and eastern neighbours, ie, the LAJ and Ethiopia have joined (chapter 7.2).

A third factor concerning prospects for Sudan is the question of oil, and whether the country could be an oil producer - by mid 1980s - as indicated by the International Petroleum Encyclopedia (1982).⁽³³⁾ The issue of oil is probably a political game played by the US on Sudan in order to have it under American influence. While geologically, Sudan may have oil, producing such oil greatly depends on Sudan's political orientation, because oil companies - especially American, are closely tied with their countries' external policies.

Analyses of US energy demand and transportation have shown that American dependence on overseas supplies has been increasing while domestic reserves and production are declining. Therefore, the United States and her allies will depend more on Gulf oil in future because the Gulf will be the epicentre of world energy when possibly by the close of this century, the resources of non-OPEC members are depleted. Crisis and instability along the Cape route may shift the oil traffic of the US and Western Europe to the Red Sea-Canal route, especially if the Egyptians decide to carry out the shelved phase of the Canal's development. In sum, the Red Sea region will unquestionably continue to be the arena for geopolitical activity of global significance.

8.3 Recommendations

The American President Woodrow Wilson (1856-1924) who is celebrated for the fourteen points in the peace conference at

Paris in 1919, declared that

"We dare not turn from the principle that morality and not expediency is the thing that must guide us." (34)

and that

"The values and principles we live by as a nation will be what history will remember America for, not the sophistication or quantity of our weapons." (35)

Looking at the previous two quotes and thinking of the year 1984 as marking 200 years of American diplomatic relations with the Middle East,⁽³⁶⁾ one cannot but reflect ~~that~~ the US record in the area for the last forty years or so has departed from Wilson's 'morality'. History may remember the US for being the source of the means of oppression and destruction. The main deviation of the US from its values is represented by its backing of aggression and expansion practised by Israel on Arab territories in which the Red Sea was a central catalyst. Considering this fact and US overall policy in the Middle East as well as in other parts of the developing world, one may agree with Whittlesey (1943) that geopolitics in the hands of politicians "invariably turns out to be a design for the practice of American power politics".⁽³⁷⁾ Davidson (1979) says of the Americans that "they have gone too far in clothing the skeleton of *Realpolitik* in the robes of Saintliness".⁽³⁸⁾

Had it not been for its unrestrained and unconditional

commitment to Israel as well as its denial of Palestinian rights and interventionist attitude against the will of the people of the region, US relations with Middle Eastern countries could have become a good example of international relations. With intrinsic interests in the Middle East, the US and its Western allies still have to come to terms with the Arabs to safeguard those interests, especially oil supply and transportation. The US needs to avoid exaggerating the spectre of a Soviet threat, because such allegations have often gone too far and are seen locally as an excuse for intervention. With regard to the Red Sea region in particular, there can be no separate policy for it, since it is one of the core areas in the Middle East. Thus, the US should stop polarizing and dividing the regional states and should also recognise how far a policy of intervention injures the national pride of the local people there, and harms American interests. The US should not think that an Arab army can be employed as proxy to fight for perceived American interests. The New York Times (2/79) indicates that following the toppling of the Shah and the signing of the Camp David Accords, President Carter had in mind the use of the Egyptian army as a regional policeman. The President, adds the paper, stated that Egypt could become "a legitimate stabilizing force" in protecting the smaller nations of the area, and that the treaty of peace between Israel and Egypt would "free more than five divisions now stationed in Sinai". He cautions

that these Egyptian troops may not

"be used, but at least any entity that threatens to attack another country in the Middle East would be faced with the prospects that these Egyptian forces might very well be used to preserve the peace". (39)

Ironically, two years later, the same Egyptian army that President Carter wanted to employ as mercenaries avenged its nation's pride by assassinating President Sadat, America's most important ally at that time.

In the Red Sea region the US should stop backing repressive regimes providing them with the means of oppression of the principles of human rights. Examples of American cooperation with dictators and oppressive rulers in the Red Sea region could be easily sited. Emperor Haile Sellassie of Ethiopia (1950s-1974) and President Numeiry of Sudan (1975-1985), could be taken as examples of such cooperation. Both rulers were brought down through revolutions which demonstrated a wide anti-American reaction in both countries, with special reference to Ethiopia. The late President Sadat could constitute another example of those dictators whom the US backed in their cracking down upon their nations' fundamental rights. Instead, the US, which is quite capable of so doing, should support the principles of human rights. The US should meet the real economic needs of the region rather than granting excessive military aid. It should work for the resolution of conflict instead of fostering it. If this is to be done, the US must

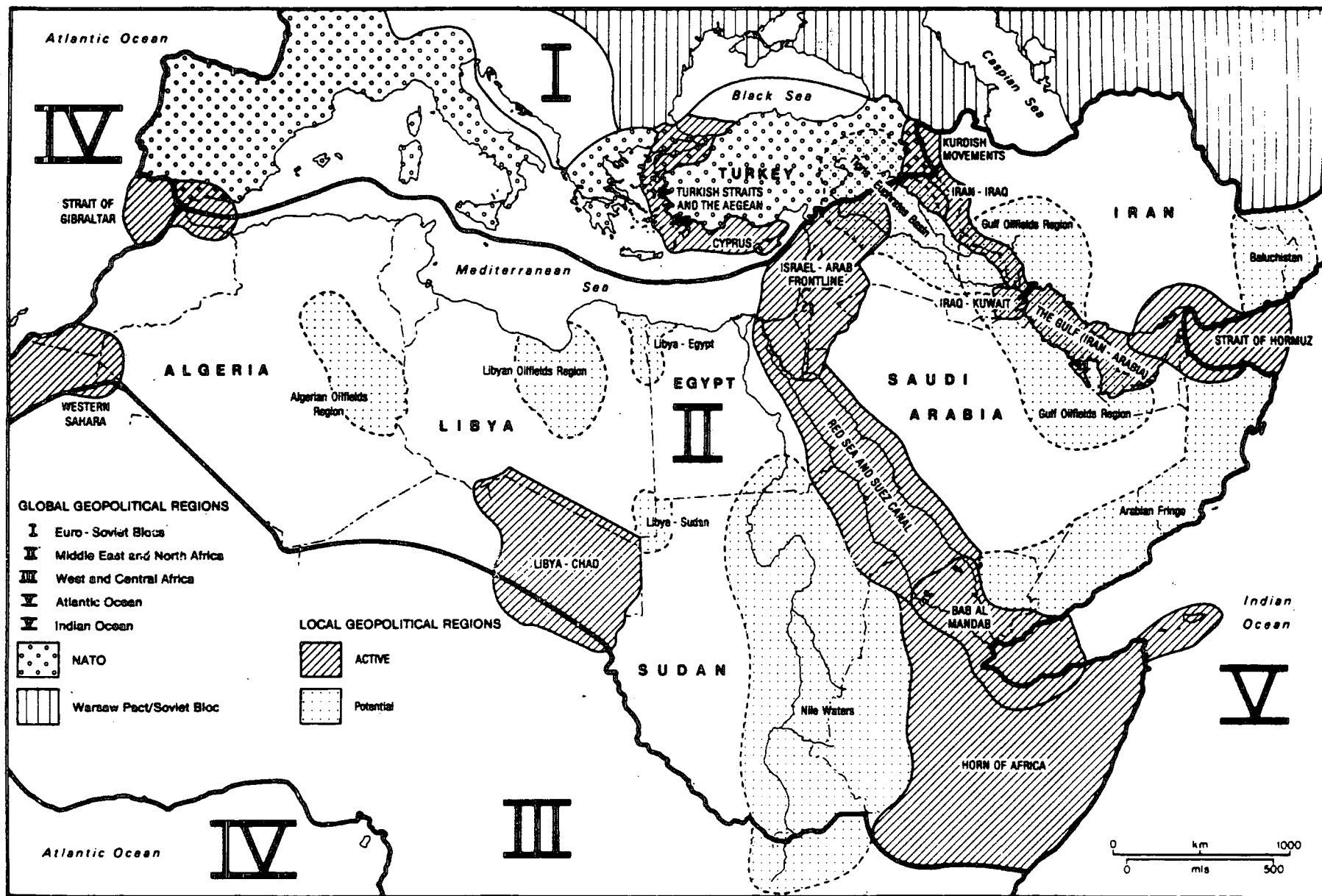


FIG. 8.1 GEOPOLITICAL REGIONS AND SUB REGIONS OF THE MIDDLE EAST AND NORTH AFRICA

come to understand the region and the aspirations of its nations far better.

This study is believed to be the first attempt at geopolitical analysis of a single world region. It therefore carries many of the weaknesses of pioneer work. If nothing else, it has highlighted the opportunities for further useful research by political geographers, what is demonstrably one of the world's key geopolitical regions. The following topics are among the most important:

(a) The widening of the Suez Canal. If Phase II goes ahead before the end of the century, there are economic, political and environmental implications which deserve investigation. It may or may not serve the interests of Red Sea states to allow large Supertankers (V.L.C.C.'s) through the Suez Canal.

(b) The concept of geopolitical regions. There are clearly problems of definition, but the reality of geopolitical and geostrategic regions appears to be acceptable. These could be rigorously identified and analysed. An interesting attempt to draw up a hierarchy of geopolitical regions appears in Drysdale and Blake, 1985⁽⁴⁰⁾ (figure 8.1).

(c) Definitions of terms. In US Senate hearings and other official documents there is no consensus as to regional and geographical terms such as 'Middle East', 'Red Sea region', 'The Gulf', 'the Mediterranean world', 'bases' and 'facilities', yet all are used freely by policy-making

groups. There is much scope for analysis of such terms. This could be usefully linked with perception studies of the regions in question, particularly involving perceptions of the peoples of the regions themselves.

(d) Prospects for regional cooperation. Cooperation between coastal states of the Red Sea could be extremely fruitful in the fields of transportation, labour migrations, environmental management, and security. It has already begun in combating pollution, and might be extended to other activities.

(e) International boundaries. Several land boundaries in the Red Sea region are in dispute. Offshore boundaries have scarcely begun to be delimited, and much research could be undertaken on boundary problems and their implications.

(f) Geography and conflict. It has been noted that conflict seems endemic to the Red Sea region as in much of the Middle East, and it occurs at local, regional, and continental scales, involving groups and tribes, states and superpowers. The spatial relationship between conflict at these different scales could be examined to see how far each 'feeds' on the other.

Much of this work has been enriched by using geographical methods and perspectives. At the end of the research it is clear that much of the basic geography of the Red Sea region is inadequately understood and documented. The length of coastlines, number of islands, coastal populations,

local fishing, and coastal trade are all examples of inadequately researched geographical phenomena. Here, perhaps, is the biggest challenge of all to the geographical researchers of the future.

The coastal states of the Red Sea Region are clearly nervous about superpower involvement, and do not always agree with the methods used by the United States to protect its geopolitical interests. Nevertheless, it has to be recognised that, as this thesis has argued, the global geopolitical realities of the Region make it inevitable that United States interests and involvement will continue in the future. If anything, they will increase rather than diminish. Much will depend on exercise of restraint by the United States if it is to be able to retain good relationships with coastal states.

Chapter Eight

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APPENDIX ONE

**NATIONAL CLAIMS OF THE RED SEA STATES TO MARITIME
JURISDICTIONS**

United States Department of State Bureau of Intelligence and Research. Limits in the Seas, No. 36 5th Revision, 6th March, 1985.

DJIBOUTIDJIBOUTI

TYPE	DATE	SOURCE	LIMITS	NOTES
I. TERRITORIAL SEA	1-09-79	Law 52/AN/78	12nm	Nuclear-powered vessels and vessels carrying nuclear or other radio-active materials must give prior notification.
II. ARCHIPELAGIC, STRAIGHT BASELINES, AND HISTORIC CLAIMS	1-09-79	Law 52/AN/78		Establishes baselines closing Gulf of Tadjoura.
III. CONTIGUOUS ZONE	1-09-79	Law 52/AN/78	24nm	
IV. CONTINENTAL SHELF				
V. FISHING				
VI. ECONOMIC ZONE	1-09-79	Law 52/AN/78	200nm	
VII. SECURITY				
VIII. POLLUTION				
IX. MARITIME BOUNDARIES				
X. LAW OF THE SEA CONVENTION		Signed December 10, 1982.		

EGYPTEGYPT

TYPE		DATE	SOURCE	LIMITS	NOTES
I.	TERRITORIAL SEA	1-15-51	Royal Decree, Article 5	6nm	
		2-17-58	Presidential Decree No. 180/1958	12nm	
		8-26-83	UNCLOS Declaration		Foreign warships require prior notification; nuclear-powered ships and ships carrying nuclear and other inher- ently dangerous and noxious sub- stances require prior authoriz- ation.
II.	ARCHIPELAGIC, STRAIGHT BASELINES AND HISTORIC CLAIMS	1-15-51	Royal Decree Article 6		Establishes straight baselines; Bay of el-Arab claimed as an historic bay: see <u>Limits in the Seas</u> No.22
III.	CONTIGUOUS ZONE	2-17-58	Presidential Decree No. 180/1958	18nm	
		8-26-83	UNCLOS Declaration	24nm	
IV.	CONTINENTAL SHELF	9-03-58	Presidential Decision No.1051	200 meters or to depth of exploitation	
V.	FISHING				
VII.	ECONOMIC ZONE	8-26-83	UNCLOS Declaration	Undefined	Declared that actions will be taken to 'regu- late all matters' relating to the EEZ.
VII.	SECURITY	2-17-58	Presidential Decree No. 180/958	18nm	

VIII. POLLUTION

IX. MARITIME
BOUNDARIES

X. LAW OF THE SEA CONVENTION	Signed Dec. 10, 1982. Ratified August 26, 1983, with a declaration.
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ETHIOPIAETHIOPIA

TYPE	DATE	SOURCE	LIMITS	NOTES
I. TERRITORIAL SEA	9-25-53	Maritime Proclamation No. 137	12nm	
II. ARCHIPELAGIC, STRAIGHT	9-25-52	Federal Revenue Proclamation No. 126		Establishes undefined straight base-lines around the Dahlac archipelago.
III. CONTIGUOUS ZONE				
IV. CONTINENTAL SHELF				
V. FISHING	9-25-53	Maritime Proclamation No. 137	Undefined	For pearl and other sedentary fisheries limit, waters extends to limits of fisheries.
VI. ECONOMIC ZONE				
VII. SECURITY				
VIII. POLLUTION				
IX. MARITIME BOUNDARIES				
X. LAW OF THE SEA CONVENTION		Signed December 10, 1982.		

ISRAELISRAEL

TYPE		DATE	SOURCE	LIMITS	NOTES
I.	TERRITORIAL SEA	10-23-56 9-10-64	Law No. 5717	6nm	Became Party to the 1958 Convent- ion on the Terri- torial Sea and the Contiguous Zone.
II.	ARCHIPELAGIC, STRAIGHT BASELINES AND HISTORIC CLAIMS				
III.	CONTIGUOUS ZONE				
IV.	CONTINENTAL SHELF	2-10-53 6-10-64	Law No. 5713	To depth of exploitation.	Became Party to the 1958 Convent- ion on the Conti- nental Shelf.
V.	FISHING	1937	Fisheries Ordinance No. 6	No Limits	Palestine Mandate specified licensing system.
VI.	ECONOMIC ZONE				
VII.	SECURITY				
VIII.	POLLUTION				
IX.	MARITIME BOUNDARIES				
X.	LAW OF THE SEA CONVENTION				

JORDANJORDAN

TYPE	DATE	SOURCE	LIMITS	NOTES
I.	TERRITORIAL	1943	Law No. 25	3nm
II.	ARCHIPELAGIC, STRAIGHT BASELINES, AND HISTORIC CLAIMS			
III.	CONTIGUOUS ZONE			
IV.	CONTINENTAL SHELF			
V.	FISHING			
VI.	ECONOMIC ZONE			
VII.	SECURITY			
VIII.	POLLUTION			
IX.	MARITIME BOUNDARIES			
X.	LAW OF THE SEA CONVENTION			

IX. MARITIME
BOUNDARIES

X. LAW OF THE SEA CONVENTION Signed December 10, 1982, with a declaration.

SAUDI ARABIASAUDI ARABIA

NOTES	DATE	SOURCE	LIMITS	NOTES
I. TERRITORIAL SEA	2-16-58	Royal Decree No. 33	12nm	
II. ARCHIPELAGIC STRAIGHT BASELINES AND HISTORIC CLAIMS	2-16-58	Royal Decree No. 33		Establishes straight baselines see <u>Limits in the Seas</u> No.20
III. CONTIGUOUS ZONE	2-16-58	Royal Decree No. 33	18nm	Navigation, fiscal, and health matters
IV. CONTINENTAL SHELF	5-28-49 2-26-58 10-01-68 1-29-69 5-16-74	Royal Proclamaion Royal Decree M/27	Not specific Not Specific	Boundary agreement with Bahrain entered into force: see <u>Limits in the Seas</u> No.12 Claims ownership of hydrocarbans and minerals in the Red Sea. Boundary agreement with Iran entered into force: see <u>Limits in the Seas</u> Agreement signed with Sudan relation to joint exploitation of Red Sea seabed and subsoil resources.
V. FISHING	4-30-74	Foreign Ministry Statement	Not Specific	
VI. ECONOMIC ZONE				

VII. SECURITY 2-16-58 Royal Decree No. 33

VIII. POLLUTION

IX. MARITIME
 BOUNDARIES

X. LAW OR THE Signed December 7, 1984.
 SEA CONVENTION

SOMALIASOMALIA

TYPE	DATE	SOURCE	LIMITS	NOTES
I. TERRITORIAL SEA	9-10-72	Law No. 87	200nm	Foreign warships must obtain permission prior to transiting territorial sea.
II. ARCHIPELAGIC, STRAIGHT BASELINES, AND HISTORIC CLAIMS	9-10-72	Law No. 87		Enabling legislation for straight base-lines
III. CONTIGUOUS ZONES				
IV. CONTINENTAL SHELF				
V. FISHING				
VI. ECONOMIC ZONE				
VII. SECURITY				
VIII. POLLUTION				
IX. MARITIME BOUNDARIES				
X. LAW OF THE SEA CONVENTION		Signed December 10, 1982.		

SUDAN

SUDAN

TYPE		DATE	SOURCE	LIMITS	NOTES
I.	TERRITORIAL SEA	8-02-60	Council of Ministers' Resolution 1047 Territorial Waters and and Continental Shelf Act, Act No. 106	12nm	Foreign warships must obtain permission to transiting terr- itorial sea.
II.	ARCHIPELGIC STRAIGHT BASELINE, AND HISTORIC CLAIMS	12-31-70	Act No. 106		Authorizes the drawing of straight base- lines under specified circumstances.
III.	CONTIGUOUS ZONE	12-31-70	Act No. 106	18nm	
IV.	CONTINENTAL SHELF	12-31-70 5-16-74	Act No 106	200 meters or to depth of exploitation.	Agreement signed with Saudi Arabia relating to joint exploitation of Red Sea sea- bed and sub- soil resources.
V.	FISHING				
VI.	ECONOMIC ZONE				
VII.	SECURITY	12-31-70	Act No. 106	18nm	
VIII.	POLLUTION				

IX. MARITIME
BOUNDARIES

X. LAW OF THE SEA CONVENTION Signed December 10, 1982.

<u>YEMEN (ADEN)</u>		DATE	SOURCE	LIMITS	<u>YEMEN (ADEN)</u>
TYPE					NOTES
I.	TERRITORIAL SEA	2-09-70 1-15-78	Law No.8 The Territorial Sea, the Exclusive Economic Zone, the Continental Shelf and other Maritime Zones Law of 1977, Act No. 45 of 1977	12nm 12nm	Foreign warships must obtain permission prior to transiting the territorial sea. Nuclear- powered vessels and vessels carrying nuclear or other radio- active materials must give prior notification.
II.	ARCHIPELAGIC STRAIGHT BASELINES, AND HISTORIC CLAIMS	1-15-78	Act No. 45 of 1977		Enabling legislation for straight baselines.
III.	CONTIGUOUS ZONE	2-09-70 1-15-78	Law No. 8 Act No 45 of 1977	18nm 24nm	For customs and criminal jurisdiction purposes.
IV.	CONTINENTAL SHELF	2-09-70 1-15-78	Law No. 8 Act No. 45 of 1977	200 meters or to depth of exploitation Edge of continental margin or 200nm	
V.	FISHING				
VI.	ECONOMIC	1-15-78	Act No. 45 of 1977	200nm	
VII.	SECURITY	1-15-78	Act No. 45 of 1977	24nm	Jurisdiction claimed within contiguous zone
VIII.	POLLUTION	1-15-78	Act No. 45 of 1977	200nm	

YEMEN (SANAA)		YEMEN (SANAA)		
TYPE	DATE	SOURCE	LIMITS	NOTES
I. TERRITORIAL SEA	4-30-67	Republican Decree No.15	12nm	
II. ARCHIPELAGIC, STRAIGHT BASELINES, AND HISTORIC CLAIMS				
III. CONTIGUOUS ZONE	4-30-67	Republican Decree No.15	18nm	For customs and sanitary jurisdiction purposes.
IV. CONTINENTAL SHELF	4-30-67	Republican Decree No. 16	200-meter depth.	
V. FISHING	1964	Law No. 30	12nm	
VI. ECONOMIC ZONE				
VII. SECURITY	4-30-67	Republican Decree	18nm	
VIII. POLLUTION				
IX. MARITIME BOUNDARIES				
X. LAW OF THE SEA CONVENTION	Signed December 10, 1982, with a declaration that warships, warplanes, and nuclear-powered ships must obtain agreement prior to transiting territorial sea; and that Yemen adheres to rules concerning rights of national sovereignty over territorial sea, including straits linking two seas.			

Port	Chief Exports	Principal Imports	F a c i l i t i e s			
			Ship	Container	Fuel	Water
Aden	coffee, hides, salt, gum, petroleum products, cotton, cotton seed and fish	cotton and silk goods, grain, livestock, metals, all kinds of foodstuffs, crude oil and petroleum products	✓	✓	✓	✓
Assab	hides, skins, linseed, castor oil seeds, neuk seeds, coffee, cereals and dry fish	include petrol in bulk, oil in drums, general merchandise, machinery, etc.	✓	✓	✓	✓
Aqaba	phosphate, tar products, cement and fruit	general cargo, building materials, grain and machinery	✓	✓	✓	✓
Berbera	spin, ghee, gums, sheep and goats,	cotton goods, sugar, rice and dates	✓	✓	✓	✓
Djibouti	coffee, pulses, beans, oilseeds, oilcapes, hides and skins from Ethiopia	mainly for Ethiopia, consist of all types of manufactured goods	✓	✓	✓	✓
Eilat	minerals, phosphates, potash and ores	timber, building materials and foodstuffs	✓	✓	✓	✓
Hodeidah	cotton, hides and skins and cotton seeds	food and live animals	✓	✓	✓	✓
Jeddah	-	foodstuffs, machinery and transport	✓	✓	✓	✓
Massawa	linseed, fruit and vegetables, livestock, meat, oilcakes, hides and salt	cotton and silk goods, certain building materials, petroleum products and provisions	✓	✓	✓	✓
Port Sudan	ginned cotton, cotton seeds, gum, sesame, senna, skins and hides, oilcakes, oil seeds and beeswax	sugar, timber, crude oil, gunnies, cotton goods, coffee, iron, hardware, hessian, flour, tea, provisions, etc.	✓	✓	✓	✓
Suez	-	coffee, flour, coal, machinery and grain	✓	✓	✓	✓
Yanbu	Crude oil and gas	construction material especially cement and industrial equipment	✓	✓	✓	✓

Source: 1) The Hydrographer of the Navy, Red Sea and Gulf of Aden Pilot, 12th edition, 1980, Somerset, England, 1980
 2) Lloyd's of London Press Ltd, 1984, Ports of the World, London, 1984.

F.O. = fuel oil only

NAP = not available at present (1984)

E = to be supplied in an emergency

L = limited, and only alongside berthed ships could be supplied

M = only minor ship repairs can be performed

APPENDIX THREE Threat to Shipping in the Red Sea

Short term				Long term			
Type	Formal/ Informal	Actor	Example	Type	Formal/ Informal	Actor	Example
Attack from shore	Informal	Non-governmental group	The Palestinian rocketing of the Coral Sea at Bab al Mandeb in 1971	Attacks from shore	Formal	Regional powers	1)* Attack on the Red Sea, the Gulf of Suez and the Strait of Tiran during the Israeli Arab war of 1956; and the British threat to the Suez Canal, 1956.
Mines	Informal	Unidentified group: (the shadowy Islamic Jihad)	The mining of the Red Sea in 1984				2)* Attack on the Straits of Tiran and Gubal in the 1973 4th Israeli Arab war.
				Blockade	Formal	Regional or super-power	1)* In 1951 Egypt blockaded the Gulf of Aqaba to British shipping as part of a policy of blockading Israel. 2)* Egyptian blockade of Tiran Strait near Sharm al Sheikh to vessels en route to or leaving Eilat in 1967. 3) Egyptian blockade of Bab al Mandeb to ships sailing to Tiran Strait during the 4th Israeli Arab war of 1973. 4) Such action could be anticipated from the USSR or the US as a result of superpower confrontation in the Red Sea region or if any of the TW finds its navigational interests seriously threatened. Such senario could come from Israel, especially in the Gulf of Aqab and Tiran Strait. Also the endemic conflict in the Horn of Africa could cause a blockade to Bab al Mandeb if the conflict includes Djitouti.

APPENDIX FOUR

VESSELS DAMAGED BY EXPLOSIONS
IN GULF OF SUEZ AND RED SEA

Lloyd's of London, 1984.

NAME	TYPE	FLAG	GROSS TONNAGE	YEAR BUILT	CARGO	REPORT OF CASUALTY	DATE
1) KNUD JESPERSEN	m.ro-ro cargo/ general cargo vessel	Russian	8,815	1979	general	Damaged by explosion under hull after exiting Suez Canal between Km. 80.50 and traffic separation scheme in lat. 29 49N, long. 32 32E. Anchored off Adabiya port, south of Suez harbour, for inspection and repairs. Proceeded July 18.	2200 hours local July 9, 1984
2) BIGORANGE	motor well- stimula- ting vessel	Panamanian	846	1979	-	Damaged due explosion south of Suez. Extensive damage to engine-room but less severe elsewhere. Returned to Ras Shukheir. Intended to tow vessel Dubai/Sharjah area for repair.	Reported 1800 hrs local July 28, 1984
3) MEDI SEA	m.v.	Liberian	14,136	1981	-	One mine exploded in lat. 29 30 00 , long. 32 36 48 E. about 200 metres off starboard side. Vessels blacked out, machinery stopped. Arrived Suez two hours 15 minutes later. Sustained damage but transited Canal July 28. Surveyed and repaired at Le Harve.	1510 hours local July 27, 1984
4)	m. vehicle carrier	Japanese	17,380	1981	vehicles	Felt explosion underwater in lat. 29 34 48N, long 32 34 00E Inspection revealed slight damage Transited canal July 29.	1925 hours local July 27, 1984
5) VALENCIA	m. tank	Spanish	77,604	1977	-	Explosive blast 'strong enough to lift stern of vessel' in Gulf of Suez. Arrived Jeddah August 4 and sailed August 6.	July 28, 1984

NAME	TYPE	FLAG	GROSS TONNAGE	YEAR BUILT	CARGO	REPORT OF CASUALTY	DATE
6) LINERA	m.v.	Cyprus	9,498	1971		Damaged by underwater explosion off Ras Shukheir. Repairs partly effected off Ras Shukeir and proceeded for Jeddah August 3.	July 28, 1984
7) PERUVIAN REEFER	m.v.	Bahamian	6,010	1970	-	Damaged due to underwater explosion off Yemen about 50 miles north of Bab al Mandab in lat. 13 47N long. 52 57E. Proceeded to Mina Qaboos.	July 31, 1984
8) KRITI CORAL	m.v.	Greek	11,849	1982	sheet metal/	Damaged by mine explosion in southern Red Sea near fairway buoy off Hodeidah in lat. 13 52 30N, long. 42 57 00E. Engine room and superstructure damaged. Vessel actually lifted clear of water, falling back with strong vibrations. Subsequently arrived Mokha August 3 for inspection of damage. Sailed from Mokha in tow August 19 for Piraeus.	1315 hours August 2, 1984
9) MORGUL	m.v.	Turkish	5,150	1984		Damaged by mine explosion in southern Red Sea in lat. 13 45N, long. 43 00E. Subsequently reported engine breakdown August 6	August 2, 1984
10) GEORG SCHUMANN	m.v.	East German	7,723	1966		Damaged by mine explosion in southern Red Sea in lat. 13 22N, long 42 59E. Reported engine damaged. Towed to Hodeidah anchorage, awaiting towage to Rijeka for repairs. Sailed from Hodeidah in tow August 18 for Rijeka.	August 2, 1984

NAME	TYPE	FLAG	GROSS TONNAGE	YEAR BUILT	CARGO	REPORT OF CASUALTY	DATE
11) DIA HONG DAN	m.v.	North Korean	6,608	1980		Damaged by explosion in southern Red Sea. Reportedly continued voyage.	August 2, 1984
12) HUI YANG	m.v.	Chinese	9,913	1978		Immobilised by shock of underwater explosion about 30 metres to starboard in southern Red Sea in lat. 13 44 06N, long. 42 57 18E. Underwent emergency repairs and proceeded several days later.	July 31, 1984
13) TANG HE	m. con- tainer	Chinese	16,108	1983		Damaged by shock of mine explosion about 80 metres away in southern Red Sea in lat. 13 29 36N, long. 42 58 48E. Subsequently proceeded.	August 3, 1984
14) JOZEF WYBICKI	m.v.	Polish	8,644	1967		Struck mine while entering southern Red Sea, causing strong explosion which damaged engine-room piping forcing vessel to stop. Reported on August 13 to be proceeding at half speed towards Suez Canal.	
15) BASTION	m.refri- gerated fish carrier	USSR	633	1973		Struck mine in southern Red Sea in lat. 13 31N, long. 42 58E. Damage unknown	August 6, 1984
16) not reported	trawler	USSR	-	-	-	Struck mine in southern Red Sea off east side of Hanish Island.	August 14, 1984
17) THEOUPOLIS	m.v.	Cyprus	11,765	1958	in ballast	Sustained hull damage and power failure as result of mine explosion in southern Red Sea about 18 miles off Mokha in lat. 13 28N, long. 42 57E.	2000 hours August 15, 1984

NAME	TYPE	FLAG	GROSS TONNAGE	YEAR BUILT	CARGO	REPORT OF CASUALTY	DATE
18) ESTE	m.v.	Panamanian	4,627	1979	-	Struck a mine off Ras Shukheir in lat. 28 09 48N, long 33 19 18E sustaining damage to engine-room. Arrived Jeddah July 29 and sailed August 3 for La Spezia	early morning July 28, 1984

APPENDIX FIVE

Saudi Diplomatic, Aid, and Military Initiatives in support of Western security interests,
1970-1982: an American view

December 1969 to July 1972	King Faisal and his brother-in-law and chief of intelligence, Kamal Adham, are instrumental in persuading Sadat to break with USSR
1970-1971	Saudi Arabia aids opposition to pro-Soviet National Liberation Front in South Yemen
26 October 1974	Saudi Arabia agrees to pay \$400 million per year to support an Arab League lease on Perim Island and secure the southern entrance to the Red Sea
5 March 1975	Saudi Arabia aids in achieving the Iranian- Iraqi Algiers accord at the OPEC summit
April 1975	Saudis agree to fund US Hawk surface-to-air missile sales to Jordan
September 1975	Saudi Arabia supports second disengagement agreement in Sinai. previously provided \$400 million in aid to Egypt
August 1975	Saudi Arabia gives North Yemen \$100 million in budgetary support and \$400 million in economic aid to reduce dependence on USSR
March 1976	Saudi Arabia starts efforts to link conservative Gulf states
April-June 1976	Saudi Arabia agrees to fund Syrian intervention in Lebanon at Lebanon's request. Supports creation of joint peacekeeping force
October 1976	Saudis apply heavy financial pressures on Syria and perform a key role in the resolution of the cease-fire in the Lebanese Civil War. Saudi-sponsored cease-fire in Lebanon, Saudi Arabia funds creation of Arab Deterrent Force
1976-1977	Saudis offer aid to anti-Soviet regimes in Africa (eg Zaire) and to anti-Marxist Angolan forces under Savimbi. They also persuade Somalia to abandon the Soviet and espouse a pro-Western stance
March 1976 to 26 June 1978	Saudi Arabia seeks to ease South Yemen away from USSR
July to September 1977	Saudi aid to Somalia supports it in war with Ethiopia at time when US and UK pledge military aid to Somalia
Early 1977	First Saudi-funded US arms transfers arrive in North Yemen
April 1977	Saudi aid supports Muhammad Daoud of Afghanistan in 1978 in his effort to reduce dependence on USSR
February 1978	Saudi Arabia presses the US to also assist Somalia to thwart the Soviet/Cuban-backed Ethiopian forces operating in the Horn
June 1978	Saudi Arabia finances airlift of 1,500 Moroccan troops to Zaire to suppress left-wing insurgents invading from Angola. Military aid is offered to Zaire, but requires US approval to re-export such US-made hardware.

8 March 1979	Saudi Arabia opposes embargo of US and Egypt, and cutoff aid and economic dealing with Egypt at Baghdad Conference on Camp David Agreement.
April 1979	Saudi Arabia goes along with the Arab economic and diplomatic boycott of Egypt, but privately assures Egypt of continued financial aid to purchase US arms.
June 1980	King Khalid visits Germany, improving relations between the two powers, since Schmidt had come to Riyadh earlier to obtain a loan of about \$1.7 billion to help finance the German balance-of-payments deficit.
October 1980	Riyadh breaks diplomatic relations with Libya after Qaddafi's vicious attacks on the US for aiding Saudi Arabia in defence of the oilfields.
December 1980	Saudi mediation ends Syrian-Jordan border crisis after forces build up to 50,000 men and nearly 1,000 tanks.
1981	The Saudis provide critical aid to reduce Sudan's financial problems. In 1981 they supply the Sudan with over \$300 million through the IMF.
May 1981	Though the Saudis publicly back Syria in the crisis with Israel, they send a high-level emissary to counsel restraint and effect a compromise with diplomatic and financial pressure.
August 1981	Fahd Peace Plan marks major advance in Arab willingness to recognize Israel and reach a peace based on Israel's 1967 boundaries.
November 1981	Saudi Arabia unsuccessfully seeks a consensus on the Fahd Plan at the Arab Foreign Ministers Meeting in Fez.
January 1982 to January 1983	Saudi Arabia works with the US to bring a halt to the conflict in Lebanon, reach a peaceful outcome of Israel's invasion of Lebanon, and persuade Syria to evacuate Lebanon.
March 1981	Saudi Arabia agrees to fund Jordanian purchases of US arms to give Jordan adequate self-defense capability and reduce pressure to seek arms from the USSR.
June 1982	Saudi Arabia outbids Iran, and provides the aid necessary to push South Yemen into accepting a Kuwaiti-mediated peace settlement with Oman in November.
July to September 1982	Saudi Arabia helps mediate the PLO evacuation from Beirut and southern Lebanon.
September 1982	Saudi Arabia takes the lead in catalyzing the Arab Summit to take a favorable stand on an Arab-Israeli peace settlement.
January 1983	Saudi Arabia continues to fund improved air defense links in the Southern Gulf, and provide strategic aid to Iraq, Pakistan, Jordan, Somalia, Sudan, and Afghanistan. Saudi aid to Syria remains a key counterweight to its military dependence on the USSR.

Source: Cordesman, A. The Gulf and The Search for Strategic Stability, Westview Press, Boulder, Colorado, 1984, Mansell Publishing Limited, London, 1984, pp.34-35.

APPENDIX SIX

The Red Sea Region: Military Balance

Country	Population in Thousands*	Total Armed Forces	Est Def- exp.	Est FMA	Infl- ation	Army	Navy	Navy Bases	Air Force	Reserves	Air Defence Command	Forces Abroad	Para Military Forces
Djibouti	335												
Egypt	44673	447,000	\$3.043b	\$1.5b	16%	315,000	20,000	Alexandria, Port Said, Hersa-Port Tew fig Hurghasa, Safaqa	27,000	335,000	85,000	Iraq, Oman Sudan Zaire	139,000
Ethiopia	32775	250,000	\$377.778m		15-20%	244,500	2,500	Massawa, Assab	3,500	200,000			169,000
Israel	4027	172,000	\$ 6.461b	\$1.5b	131.5%	135,000	9,000	Haifa, Ashdod, Eilat	28,000	326,000		Lebanon 20,000	4,500
Jordan	3127	72,800	\$465.374m	\$800m	8.0%	65,000	300	Aqaba	7,500	35,000			7,500
Saudi Arabia	10025	51,500	\$21.952b		1.0%	35,000	2,500	Jeddah (Western Fleet), AL Qaruf Jubail (Eastern Fleet), Ras Janura, Dammam, Yanby, Ras al Mishsap	14,000				25,000
Somalia	5085	62,550	\$127.376m	\$25.4m		60,000	550	Berbera, Mogadishu Kismayu	2,000				29,500
Sudan	19795	58,000	\$234.50m	\$100m	15%	53,000	2,000	Port Sudan	3,000			Iraq 1,500	3,500
Yemen AR	6085	21,550	\$526.904		15%	20,000	550	Hodeida	1,000				25,000
PDR Yemen	2093	25,500	\$159.409m		10%	22,000	1,000	Aden, Perim Island	2,500				30,000

Source: *From Statistical Papers, Series A Vol XXXVI, No. 2. Population and Vital Statistics Report, United Nations, New York, 1984.

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- Fig. 2.5: Ibid.
- Fig. 2.6: Ibid.
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- Fig. 3.2: Drysdale, A. and Blake, G. Political Geography of the Middle East and North Africa, OUP, New York, 1985.
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Periodicals and Newspapers not mentioned in Section A.

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African Affairs

BP Statistical Review of World Energy

Bulletin of the Iraqi Press

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Far Eastern Economic Review

Foreign Report

International Herald Tribune

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The Master Gas System (MGS)

MEED

MEES

The Middle East

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Al-Musawar

Al-Watan Al-Arabi

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Al-Akhbar

Al-Bilad

Al-Madina Al-Munawarah

Al-Ray Al-Aam

Al-Riyadh

Al-Siyasa

Al-Watan

A Sharq Al-wrsat

Quwat Al-Shaab Al-Musallaha

