A MILITARY ASSESSMENT
OF THE MIDDLE EAST,
1991-96

Edward B. Atkeson

December 7, 1992

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Strategic Studies Institute
U.S. Army War College
Carlisle Barracks, Pennsylvania

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The author attempts to assess the military balance of power in the Middle East after the Persian Gulf War and to explore techniques for incorporating dynamic factors in his analysis. His objective is to create an understanding of the military balance and trends in the Middle East that will influence security issues several years into the future through inclusion of intangible factors not often considered in the analysis of regional military balances. This study in the region is based upon extensive interviews with Middle Eastern political and military leaders, defense intellectuals, and U.S. embassy personnel. In addition, the author uses a methodology for objective measurement and comparison of the air and ground combat force potential of the principal states, and projects their future power through quantification of expected arms acquisitions.
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A distinguished steering committee of scholars and experts with deep experience and knowledge of the Middle East provided valuable commentary and advice at critical junctures. The group assembled by Dr. Abshire consisted of: Anthony Cordesman, Office of Senator John McCain; Max Gross, Defense Intelligence College; Geoffrey Kemp, Carnegie Endowment for International Peace; Michael Moodie, Arms Control and Disarmament Agency; Janne Nolan, Brookings Institution; John Pustay, The Applied Science Corporation; Bernard Trainor, Harvard University; Charles Waterman, Waterman & Associates; and from CSIS, James Blackwell, Robert Hunter, Shireen Hunter, Robert Neumann, Don Snider, and William Taylor. While the study report benefitted immeasurably from the valuable insights of the steering committee members, the report is not a consensus of the committee. The author alone is responsible for the views and judgments expressed here.

The author is grateful to the more than fifty scholars, government officials, and other knowledgeable persons in nine countries who contributed their time for interviews and discussions. Their names appear at the end of the report. Special mention is also merited for The Analytic Sciences Corporation for generously providing this project with the TASCFORM model, enabling the construction of an objective methodology for comparative force development forecasting.

Finally, the author wishes to thank Jeff Shaffer of CSIS who provided a range of support at the home office, both during the author's travels and the subsequent months of the development and coordination of the project.
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FOREWORD

This study was undertaken to assess the military balance of power in the Middle East in the wake of the Gulf War of 1991 and to explore techniques for incorporating dynamic factors in such analyses. In order to focus the effort on issues most relevant to current U.S. security interests, the geographic scope was limited to the areas of principal Arab-Israeli confrontation and the Persian Gulf.

The Middle East military balance has long been the focus of considerable concern among international security specialists, particularly over the last two decades as sophisticated weapons have proliferated dramatically throughout the region. In the wake of the Persian Gulf War, a principal U.S. security objective has once again become preserving a stable military balance in the region.

Most reports on military balances present a static net assessment of the major military equipment holdings of various countries in the region examined. The objective of the following study is to create an understanding of the military balance and trends in the Middle East that will influence security issues several years into the future through the inclusion of intangible factors not often considered in the analysis of regional military balances.

Analysis of the Middle East military balance is especially challenging since most nations perceive threats from all sides, and therefore innumerable interacting forces affecting that balance must be taken into account. These forces are assessed in chapters that focus on:

- The identification of critical factors and trends at work in the region;
- Threat perceptions of the regional leadership and descriptions of the strategies and programs for dealing with the threats;
• Development of measures of effectiveness of military programs projected into the latter years of the decade;

• Identification of potential flash points in the region for the illumination of relative strengths and weaknesses of the principal powers and possible challenges to U.S. security interests;

• Conclusions and implications for U.S. policy.

The Strategic Studies Institute is pleased to publish this study under the auspices of the Army Chief of Staff's Strategic Outreach Program. Given the importance of the Middle East to U.S. national security, the implications of the military trends in the Middle East will continue to have important repercussions for U.S. security and military policies.

WILLIAM A. STOFFT
Major General, U.S. Army
Commandant
SUMMARY

The Middle East is a region of complex political problems, of which the Arab-Israeli conflict, while of great importance, is but one. The region may be the most heavily militarized and armed in the world, with potential conflict issues outstanding among most of the states situated there. This study of relative military power in the region is based upon extensive interviews with Middle Eastern political and military leaders, defense intellectuals, and U.S. Embassy personnel. Where not otherwise identified, the judgements are those of the author.

Israel stands apart from its neighbors as a regional superpower. It has nuclear weapons, access to U.S. research and development efforts, and a well-developed military-industrial complex capable of adapting new technology to Israel’s military needs, sometimes before equivalent weapons are available to U.S. forces. With such advantages, Israel is in an altogether different class from the other states of the region.

Syria, presently the most powerful of Israel’s opponents, is changing its military strategy to emphasize long war over great depth. In case of war with Israel, Syria would likely attempt to prolong the conflict in order to exhaust the smaller state. It might seek cooperation with Iraq to gain additional strategic depth. It is not clear how the defense of Damascus might be handled.

Egypt is fearful of fundamentalist Islamic encirclement and internal disorder, as well as of Israeli military superiority. It is particularly concerned that Sudan might interfere with the Nile River waters and that some Egyptian fundamentalists might create domestic disturbances. If a better strategic balance or security assurances cannot be reached with Israel through the Arab-Israeli peace negotiations, Egypt could be driven to seek a unilateral solution to its principal security problem. Barring assurances from the United States on the matter, an Egyptian
search for some form of mass destruction weapons cannot be ruled out.

Jordan is depressed, both economically and militarily. Its leaders believe that it was badly misunderstood during the Gulf War. They are now seeking reinstatement of cordial relations with the West. Failing this, there is some danger that Jordan could become overly dependent upon Baghdad.

Saudi Arabia has changed its strategy to emphasize its own military preparedness. It seeks a defense capability against Iraq equivalent to that posed in October 1990 by the coalition forces, although few analysts believe that such an ambitious objective is attainable. Riyadh is also wary of Iran and distrustful of Jordan and Yemen.

Iraq is bloodied but unbowed. It will probably seek to rebuild a smaller force structure along more modern lines. It has probably not given up its designs against Iran or Kuwait.
Iran has undertaken a massive rearmament program. It apparently seeks development of nuclear weapons, control of the Persian Gulf, and a strike capability against Israel.

The study suggests a methodology for objective measurement and comparison of the combat force potential of the air and ground forces of the principal states under investigation, using the Analytic Sciences Corporation model TASCFORM. The methodology prescribes the projection of future power through quantification of expected arms acquisitions. This analysis indicates that a reordering of military power (not including Israel) is likely to occur by 1996. The "big five," in relative order of air-ground combat potential in 1991, were Syria; Iraq and Egypt (tie); and, Saudi Arabia and Iran (tie). In 1996 it is likely to be Syria; Iran and Egypt (tie); and Iraq and Saudi Arabia (tie). Israel will remain in a separate (incomparable) class. The analysis throws particular light on Iran as the fastest rising military power in the group.
CHAPTER 1

INTRODUCTION

OVERVIEW

The United States has vital interests in the Middle East. Considering the intrinsic volatility of the region, the United States must keep abreast of changes in the security environment and be prepared to defend its interests on short notice. These interests have been broadly defined in the President’s 1991 National Security Strategy:

American strategic concerns ... include promoting stability and the security of our friends, maintaining a free flow of oil, curbing the proliferation of weapons of mass destruction and ballistic missiles, discouraging destabilizing conventional arms sales, countering terrorism and encouraging a peace process that brings about reconciliation between Palestinians and Israel in a manner consonant with our enduring commitment to Israel’s security.

The Middle East is a region of ancient tensions and strife dating from biblical times. Even today, opinion leaders in the region often buttress arguments with citations from writings thousands of years old. For centuries the region formed the traditional land bridge for trade between Africa and Asia; since the digging of the Suez Canal, it has been a focal point for travelers en route from Europe to the Orient. In the 20th century it has gained prominence for its rich petroleum deposits, and since mid-century, as the venue of Arab-Israeli conflict over Palestine. So high had the stakes become during the era of Communist ascendency in Eastern Europe, and so closely were the major power interests involved, that it appeared for a while that the battles might become a catalyst for a third world war. Arms expenditures in the region in the last decade approached a trillion dollars.¹

For much of history, the West has viewed the region in its geographic segments, partially according to colonial spheres
of interest, but also as a matter of strategic convenience. The customary division has been among three subregions, from east to west: the Persian Gulf, the area of the Levant and of primary Arab-Israeli confrontation, and the Maghreb. In many respects such convenience continues. The U.S. Unified Command Plan, for example, assigns responsibilities to U.S. European Command (USEUCOM) and U.S. Central Command (USCENTCOM) in accordance with these divisions.

We should recognize, however, that in recent years military studies limited in scope to the traditional subregions have become vulnerable to increasing numbers of artificialities. The proliferation of long-range missiles and the rise of transnational Islamic fundamentalist groups, to cite two trends (noted later), mandate a broader strategic perspective than has been the norm in the past. Moreover, the involvement of Syria, Egypt and Israel in the Persian Gulf conflict of 1991 evidence a greater awareness of the region's countries of new factors and trends increasing the interdependence in at least two of the subregions. This study deals with the two most closely related subregions, the Persian Gulf and the territories at the eastern end of the Mediterranean Sea, treating them as a whole.

We should also recognize that the United States, itself, with its broad range of interests, has become an active player in the region. The demise of the Soviet Union has left the United States as the sole surviving superpower; as such its concerns enter the calculations of all the region's states with greater weight than ever before. For better or worse, the United States is viewed in many quarters as the ultimate arbiter of all conflicts. In conformance with the national strategy, it defends the weak, deters or punishes aggressors, succors the persecuted, counsels allies, and discourages ambitious leaders bent upon acquisition of long-range missiles and weapons of mass destruction. U.S. interests are region-wide, and its actions constitute a coordinated whole.

While beyond the geographic scope of this study, we should take note of a related dimension. The Islamic republics of the former Soviet Union have yet to respond clearly to ethnic and religious tugs from their sister states to the south, but the possibility of closer association exists. In early May 1992, in
Dushanbe, Tajikistan, for instance, having ousted the former government, militants called for the establishment of an Islamic state. Hence, we should bear in mind that as technology offers (or threatens) to extend potential battlefields, the breakup of the Soviet Empire may, in time, increase the number of players in Middle Eastern affairs.

At a high level of aggregation, a visitor to the region may gain the impression that the Middle East is peopled by a vast majority of souls with a yearning for change in the macro-regime under which they live and that they believe has been imposed upon them principally by foreign (Western) interests. The principal symptoms of this emotion are expressions of pan-Arabism, and resentment of royal oil wealth, of Zionism, and of historic foreign-imposed borders and foreign influence. The suggestion is strong that most of the people are looking for radical changes in favor of greater autonomy, better distribution of wealth, and more control of the lands which they believe to be their national patrimony.

On the other side we may see a smaller group of more privileged peoples who share a wariness of threats they perceive from radicals, revolutionaries, and terrorists. Here we find the royal houses of Kuwait and Saudi Arabia, and right wing elements of the Israeli political spectrum. In Saudi Arabia the view manifests itself in xenophobia. With the exception of the Haj (religious pilgrimage), tourism is unknown in Saudi Arabia. Saudi xenophobia is compounded by a distrust of Shiia Moslems, particularly the Iranians and Shiite Iraqis.

In Israel, a perception of continuing threat from hostile neighbors is mixed with an historical and religious sense of mission for seizing and holding territories considered to have been designated for the Jewish people by divine authority. Arab claims to the same territory are viewed by hard-line Israeli political and religious elements as of a second order and fostered by insincere and implacable elements bent upon the destruction of the Zionist state.

From time to time, charismatic Arab leaders have come to prominence with strong appeals to the dissatisfied masses, and promises for fulfillment of their aspirations. President
Gamal Nasser of Egypt was notable in this regard. President Hafiz Assad, in a narrower context, may be another. Certainly President Saddam Hussein has attempted to play such a messianic role. He cleverly invoked the popular Arab yearning for change in connection with his invasion of Kuwait, striking responsive chords with the leadership of the Palestinians, Jordanians and Yemenis. In addition, he mustered strong sympathy among the peoples of most Arab states.

Followers of the Ayatollah Ruhollah Kohmeini in Iran have offered a different type of mass appeal, one based upon a return to Islamic fundamentalist principles, to include the Shari'a, or sacred law. In many respects the objectives are similar to those pursued in Saudi Arabia, but with important differences. The Saudis maintain an absolute monarchy and strive for amicable relations with their principal trade partners in the West. The international fundamentalist movement is theocratically oriented, anti-royalist, and anti-West. It is also offensively postured, while the monarchies are defensive and conservative. The movement has spread in recent years to Sudan, and might have taken hold in Algeria except for a strong military backlash. In 1989, fundamentalists won almost half of the seats in Jordanian parliamentary elections. Substantial Islamic movements are also found in Tunisia and Egypt, and to some extent in Libya. Egyptian leaders express considerable apprehension of encirclement by fundamentalist states, but hesitate to comment on the disposition of their own citizenry.

From a U.S. security point of view, the Islamic fundamentalist movement's anti-Western, anti-Israeli bent is important. The more radical branches, such as Islamic Jihad, Hizbullah, and Hamas, evidence terrorist tendencies. The oil-rich monarchies, on the other hand, exhibit a readiness to cooperate in many areas with Western countries, but even they have their limits (e.g., refusal of U.S. base rights in Saudi Arabia).

At a lower level of aggregation, almost everyone in the region perceives a threat of some sort from his neighbors. The Arab-Israeli dispute is only the most prominent. Mutual antagonisms, distrust, and wariness among the states are far
more the norm than the exception. Almost any scenario for conflict is credible, given the poisonous atmosphere under which the states exist. This point is discussed in greater detail in Chapter 4.

While terrorism and guerrilla warfare are endemic to the region, the greatest threats to long-term U.S. interests stem from international military conflict. This does not necessarily mean the Arab-Israeli struggle. As important as that is, we should bear in mind that of 19 interstate conflicts in the region since 1947, Israel has been a party to less than a third—and in the most recent case, the Gulf War, Israel was only marginally involved. The focus of this analysis is upon the states of substantial military potential or strategic location, to assess their relative strengths and weaknesses.

The calculus of military power is complex. As this study will note, military characteristics may be measured in a number of ways. Tables 1 and 2 provide rough gauges of the degree of militarization of the principal states under examination, as well as basic data on population, armed forces, gross domestic product, and defense expenditures.

<table>
<thead>
<tr>
<th>Country</th>
<th>Population</th>
<th>Armed Forces</th>
<th>Soldier/Citizen Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Syria</td>
<td>12,784.800</td>
<td>404,000</td>
<td>1:32</td>
</tr>
<tr>
<td>Israel</td>
<td>4,822,000</td>
<td>141,000</td>
<td>1:34</td>
</tr>
<tr>
<td>Jordan</td>
<td>4,275,200</td>
<td>101,300</td>
<td>1:42</td>
</tr>
<tr>
<td>Iraq</td>
<td>19,854,600</td>
<td>382,500*</td>
<td>1:52*</td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td>(native) 7,600,000</td>
<td>111,500**</td>
<td>1:68**</td>
</tr>
<tr>
<td>Iran</td>
<td>53,766,400</td>
<td>528,000</td>
<td>1:102</td>
</tr>
<tr>
<td>Egypt</td>
<td>56,018,800</td>
<td>420,000</td>
<td>1:133</td>
</tr>
<tr>
<td>Yemen</td>
<td>11,500,000</td>
<td>65,000</td>
<td>1:177</td>
</tr>
</tbody>
</table>

* Post-Gulf War data
** Includes active National Guard

Table 1. Militarization of the Citizenry—1991.
<table>
<thead>
<tr>
<th>Country</th>
<th>GDP</th>
<th>Defense Budget</th>
<th>Def Bud/GDP Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iraq</td>
<td>19.7 bil*</td>
<td>8.6 bil*</td>
<td>.43*</td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td>88.0 bil</td>
<td>13.9 bil</td>
<td>.15</td>
</tr>
<tr>
<td>Jordan</td>
<td>3.9 bil</td>
<td>6 bil</td>
<td>.15</td>
</tr>
<tr>
<td>Yemen</td>
<td>8.0 bil</td>
<td>1.1 bil</td>
<td>.13</td>
</tr>
<tr>
<td>Israel</td>
<td>51.2 bil</td>
<td>6.2 bil</td>
<td>.12</td>
</tr>
<tr>
<td>Syria</td>
<td>17.4 bil</td>
<td>1.6 bil</td>
<td>.09</td>
</tr>
<tr>
<td>Iran</td>
<td>59.5 bil</td>
<td>5.7 bil</td>
<td>.09</td>
</tr>
<tr>
<td>Egypt</td>
<td>39.5 bil</td>
<td>1.7 bil</td>
<td>.04</td>
</tr>
</tbody>
</table>

* Pre-Gulf War data. Post-war data not available.


Little correlation exists between the order in which countries appear in Table 1 and where they appear in Table 2. However, we may establish a rough order of militarization by combining the factors considered, assuming equal weight for each. The result is depicted in Table 3. We should understand, however, that the designated index is not a reflection of the military power of the country, but approximates the relative priority which the political leadership in each country has placed upon the military

<table>
<thead>
<tr>
<th>Country</th>
<th>Designated Index*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iraq</td>
<td>15</td>
</tr>
<tr>
<td>Jordan</td>
<td>14</td>
</tr>
<tr>
<td>Syria, Israel</td>
<td>13 (tie)</td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td>9</td>
</tr>
<tr>
<td>Yemen</td>
<td>8</td>
</tr>
<tr>
<td>Iran</td>
<td>7</td>
</tr>
<tr>
<td>Egypt</td>
<td>5</td>
</tr>
</tbody>
</table>

*Maximum possible score: 18; minimum: 4

Table 3. Designated Indices of Militarization—1991.
in the distribution of national resources, both human and material.

Somewhat more important in gauging the relative military prowess of the states—if still far from definitive—is a comparison of mobilization potentials. (See Table 4.) This dimension provides a different order of listing. Most of the states treat the time required for mobilization as a military secret. Israeli leaders, as an exception, have frequently referred to a 24-hour capability for fielding a 600,000 man force. None of the others are deemed capable of such achievement, and even Israel may fall short in some respects. Moreover, Israel, in particular, may have difficulty maintaining its mobilized power because of its small population base.

<table>
<thead>
<tr>
<th>Country</th>
<th>Trained Reserves</th>
<th>Paramilitary</th>
<th>Total Mobilization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Egypt</td>
<td>604,000</td>
<td>374,000</td>
<td>1,398,000</td>
</tr>
<tr>
<td>Iran</td>
<td>350,000</td>
<td>207,500</td>
<td>1,085,500</td>
</tr>
<tr>
<td>Iraq</td>
<td>650,000</td>
<td>4,800</td>
<td>1,037,300</td>
</tr>
<tr>
<td>Syria</td>
<td>400,000</td>
<td>12,500</td>
<td>804,000</td>
</tr>
<tr>
<td>Israel</td>
<td>504,000</td>
<td>6,000</td>
<td>651,000</td>
</tr>
<tr>
<td>Jordan</td>
<td>35,000</td>
<td>232,200</td>
<td>368,500</td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td>20,000</td>
<td>15,500</td>
<td>146,500</td>
</tr>
</tbody>
</table>

Table 4. Trained Reserve and Mobilizable Forces—1991.

CRITICAL FACTORS AND TRENDS

In response to interviews, American and British analysts identified a number of critical factors and trends relevant to the balance of military power in the Middle East. The most important are listed below, together with comments on the military significance of each.
Factors.

The Demise of the USSR and Evaporation of Soviet Influence. Soviet influence was perceived broadly as a pernicious factor, exacerbating Western difficulties in the region. The Soviets supported the Arab confrontation states with strong economic, political and military backing. The Soviet Mediterranean Fleet served as a foil to the U.S. Sixth Fleet, and, on occasion, Soviet airborne forces posed a potential threat of intervention in the region.

Many analysts discern a double message from the demise of the Soviet Union. They believe it conveys a message to the confrontation states that the Arabs can no longer rely upon Soviet support in any conflict with Israel or the West. To the Israelis, they suggest, it says that Israel can no longer count upon being perceived as a Western bastion of strength in context with the great power competition. However, as disruptive as the messages may be to both sides, the analysts believe, the results could be quite positive. They propose that the chances for settlement of the Arab-Israeli dispute, free of Soviet influence, are better than they have been in decades.

The Role of the United States as a Player in the Middle East. It has become apparent that the United States is involved in Middle Eastern affairs, not as distant interested party, but as an active player interacting with the other states of the region. Friendly countries depend upon U.S. leadership, U.S. technology, and ultimately the support of the U.S. armed forces for their survival. The U.S. role in pulling together the 30 member coalition for the expulsion of Iraq from Kuwait, in succoring the Kurds under attack from Iraqi Revolutionary Guards, and in bringing Arabs and Israelis together in peace negotiations has solidified American practical citizenship in the region. No longer is the United States simply another oil-dependent "imperialist" outsider, but a member of the residents' club.

Cooperation by the Major Powers in the United Nations. The virtual unanimity among permanent members of the UN Security Council in 1990 and 1991 permitted the formation of the coalition which drove Iraqi troops out of Kuwait. Further,
the continuing cooperative attitude of the same powers offers at least a prospect for limiting arms deliveries to the Middle East, particularly long-range missile systems and weapons of mass destruction. While it is not apparent that accords are near, the absence of such official cordiality would greatly complicate the establishment and enforcement of any arms control regime. There is some danger, however, that tariff disputes between the United States and China or U.S. sales of military equipment to Taiwan could adversely impact future major power cooperation in the security area.

Russian President Boris Yeltsin clearly has come under increasing pressure to diverge from UN trade controls on Iraq and Libya. Sergei Karaoglanov, chairman of the Russian Economic Association, estimates that his country has lost between $10 and $30 billion as a result of prohibitions on arms sales to the two Middle Eastern states. Karaoglanov argues that Russia would have been better off to veto the sanctions against Libya and to refuse humanitarian aid from the West. Yeltsin has approved other sales to the Middle East, and in late July 1992 approved the sale of "excess" equipment abroad for the purpose of funding Russian military welfare programs. The income from these sales is expected to reach $500 million in 1993, and to grow to $1.5 billion by 1995.6

The Arab Search for Mass Destruction Weapons (MDW). Virtually all influential Arabs view Israel as a regional superpower. It is the only indigenous state believed to possess nuclear weapons, and it enjoys a special relationship with the United States, through which it obtains high technology weaponry not generally available on world markets. The 1982 Israeli invasion of Lebanon is viewed in Arab capitals as an instance of rogue elements of the Israeli leadership exploiting the country's military power without full government knowledge or sanction. Israel's military superiority and the apparent ability of some political factions to apply it without legal consideration are intimidating to its neighbors. There are strong pressures on Arab governments to seek MDW and delivery capabilities to balance the perceived "Israeli colossus." This search is likely to continue as long as there is no general settlement of Arab-Israeli differences.
Trends.

Proliferation of Long-range Missiles. While both Arab and Israeli armies have had long-range missiles since the 1973, neither has employed them in any serious manner. In the final stages of the 1973 campaign the Egyptians launched a SCUD missile, but it fell harmlessly in the Sinai desert. However, the subsequent use of missiles by both Iran and Iraq during the ‘war of the cities’ in the mid-1980s and by Iraq in the 1991 Gulf War has increased the likelihood of their use in any future conflict.

Proliferation of MDW. As noted above, there are strong pressures on a number of Arab states to acquire nuclear, chemical or biological weapons, both as a political-military counterweight and a deterrent to Israeli aggression. In addition to Iraq, Syria and Libya are believed to be capable of manufacturing and delivering chemical weapons on Israeli targets. Iran has stated a determination to develop all three types of MDW, and Tehran may have a capability for delivering such devices by aircraft. Israel is believed to have some 200-300 nuclear weapons. Its chemical and biological warfare capabilities are unknown. The use of chemical weapons during the Iran-Iraq War and the knowledge of MDW programs in neighboring countries are likely to encourage some states, which might not otherwise be so inclined, to develop or purchase their own weapons for deterrence or retaliatory purposes.

Advancing Conventional Weapons Technology (Quality over Quantity). The utility of high technology weaponry was graphically demonstrated in the 1991 Gulf War, especially during the air bombardment phase. Single missiles were employed to destroy enemy structures and equipment with lethal effects and minimal risk to the attacking platforms. In addition, electronic jamming and electromagnetic pulse weapons were employed to sharply degrade the performance of defending radars and communications systems, rendering them useless in some cases. As the battle developed, night vision devices, laser range finders, manned and unmanned reconnaissance aircraft and data-linked long-range strike
systems were employed to confuse and destroy the opposition. The Iraqi Army of over a million troops appeared incapable of responding to the high technology onslaught. Future military planners are certain to attach much greater importance to the quality of weapons systems than to their numbers.

**Waning Belligerence of Confrontation States.** The original group of Arab states bent upon the destruction of Israel in 1948 has virtually disappeared. Lebanon opted out of the alliance shortly after the initial engagements. Egypt followed suit 30 years later. Jordan has no desire to continue the battle, and participates in the peace negotiations with high hopes for escape from its long belligerent position. Syria would probably opt out if it could recover the Golan Heights. Most analysts expect that the oil-rich monarchies would consent to almost any peace formula acceptable to the Palestinians and Syrians. The most virulently anti-Israeli states, Iraq and Libya, are physically removed from the area of confrontation (albeit within range of some strike systems). The same might be said of Iran. Clearly, Israel no longer faces a threat of dismemberment by proximate enemies. The acute threat to Israeli survival, until such time as mass destruction weapons and delivery systems might become common currency, is substantially reduced.

**Increasing Israeli Population.** A serious threat to the survival of Israel since the foundation of the state has been its small population base. Israeli population growth rates (approximately 1.3 percent per year) have never approached comparable Arab rates (2.5 to 4 percent). The opening of Soviet emigration in the late 1980s greatly enhanced Israel’s prospects for strengthening its population. Soviet immigration to Israel in 1990 reached 200,000 persons. It declined in 1991 for a number of reasons to some 167,000, but Israeli experts remain confident that total immigration for the period 1989-95 will reach one million. If fully exploited, the new immigrants might contribute some 50,000 to 75,000 able-bodied men to the military manpower pool.

**Increasing Israeli Settlement of Occupied Territories.** In January 1992 some 245,000 Israeli citizens resided in about 250 settlements in the occupied territories, including East Jerusalem. This represented a 25 percent increase in
settlements over the previous year. The rate of construction of new homes jumped to 6,500 in 1991—up from 1,800 the year before. The principal purpose of the settlements under the Likud government was to "create facts" making surrender of the territories increasingly difficult to accomplish. But there were also strong security implications. Retention of the territories provided Israeli defense planners with both a substantially more compact area to defend and a terrain screen against ground-based electronic or optical surveillance from Arab territories. In the words of Mr. Benjamin Netanyahu, deputy foreign minister under the Shamir cabinet, the West Bank provides Israel "strategic height."10

The new prime minister, Yitzak Rabin, has drawn a distinction between "security" and "political" settlements, promising "severe and substantial" cutbacks of the latter. The implication is that the Israeli civilian presence in the occupied territories may continue to grow, but at a reduced pace, pending a final accord dealing with all outstanding issues.11

*Increasing Legitimization of Israel.* From a low period in the 1970s, Israel has established or reestablished diplomatic relations with most of the non-Arab countries of the world. The exchange of ambassadors with China at the time of the Kuwaiti crisis in the Persian Gulf facilitated great power coordination of actions against Iraq. In addition, it has been conducive to a close Sino-Israeli relationship in the design, manufacture, and marketing of high technology weaponry. Israel's arms exports are essential to the survival of its arms industry. Israel currently exports almost 70 percent of its arms production to over 60 foreign countries.12 Diplomatic relations are not essential to arms trade, but they facilitate the process.

*The Widening Appeal of Islamic Fundamentalism.* Radical Islamic fundamentalism has been a political factor in the Middle East since early in the century. One of the more prominent groups, the Muslim Brotherhood, was founded in Egypt in 1928 and spread to most other Arab countries in Africa and the Levant. The rise of the Kohmeini regime in Iran brought a different strain of the movement to power in that country. Similar groups have seized power in Sudan and attempted take-overs in Algeria and Tunisia. Strong fundamentalist
groups are also to be found in Jordan and Egypt. Reportedly, three training camps are located outside Khartoum, Sudan, for what are alleged to be “fanatical, suicidal zealots” intent upon destabilizing pro-Western Arab countries. The groups are strongly anti-West and reject peace with Israel. While some leaders have been elected to office, others operating clandestinely seek to evade countermeasures until they gather sufficient strength to seize control of a country. The groups have not yet demonstrated a degree of coordination which would make them a strong military threat, but if they were to gain power in additional capitals, such a problem could arise.

Growing Iranian Potential for Active Involvement in the Arab-Israeli Conflict. Iranian declaratory policy toward Israel has been highly adversarial. Until recently, however, Iranian actions against the Zionist state have been largely limited to support for extremist Shiite groups in Lebanon (e.g. Hizbullah). In 1991 Iran acquired 25 Su-24 (Fencer) high performance, long-range attack aircraft from the Commonwealth of Independent States. The Fencer can deliver a 3,000 kilogram bomb load a distance of 1,300 km using external fuel tanks. In addition, with Chinese and North Korean assistance, Iran has developed a variant of the Chinese M-11 intermediate range surface-to-surface missile, dubbed “Tondar-68,” with a range of approximately 1,000 km, probably with at least a marginal capability for striking Jerusalem from Iran’s extreme western border. The principal significance of these developments may be the emergence of an additional enemy confronting Israel, in a sense replacing neighbors which no longer desire to play a role in the Arab-Israeli struggle.

Continuing Syrian Influence in Lebanon. In October 1989 Lebanese parliamentarians drew up a Charter of National Reconciliation (the Taif agreement). Among other things, the document granted Syria troop deployment rights in the country. While no termination date was established, Syrian troops were supposed to withdraw to the Bekaa Valley by September 1992. In the meanwhile, it was envisioned that they would provide military assistance to Lebanese forces. Another stipulation of the accord was the withdrawal of Israeli forces
from South Lebanon, which has not happened. The practical effect of the arrangement has been to grant Syria rights as a protecting power. Syria maintains about 40,000 troops in Lebanon, about half of which are in the Bekaa.

The chief military significance of Syrian presence for both Syria and Israel is that, in the event of war, the front between the belligerents is likely to be broader than the traditional one on the Golan Heights. For Israel the situation offers opportunities as well as risks. Due to the nature of the terrain in the Bekaa Valley, with narrow spaces between hills in the south, the valley is more defensible from the south than from the north. Consequently, the Bekaa offers an avenue of relative advantage to Israeli forces seeking objectives in the mountains northwest of Damascus. In the event of renewed hostilities between Israel and Syria, the Israelis would not be limited to penetrating well-prepared Syrian positions on the Damascus Plain as in the past conflicts.

*Increasing Palestinian Population in Jordan.* Prominent Israeli leaders opposed to the establishment of a Palestinian state have pointed to Jordan as the appropriate homeland of Palestinians not content with life under Israeli control. In fact, the Jordanian population has evolved as increasingly—almost 90 percent according to one source—Palestinian. The influx of expellees from Saudi Arabia and Kuwait since the Gulf War has added to the large proportion of the population with loyalties possibly oriented toward others than the Hashemite royal house. If the bulk of the remaining population of the occupied territories were to choose, or to be forced to move to Jordan, the stage could be set for emergence of a radical Palestinian regime in Amman.

Jordan is in a period of severe economic recession. The impact on the military is so extensive that the possibility of the country becoming a military power of consequence before the end of the decade is virtually ruled out. However, the departure of the monarchy could result in the conversion of a relatively pacific state into a hotbed of revanchist, anti-Zionist, anti-West terrorist groups bent upon wreaking vengeance upon Israel and others supporting it. There would be a strong probability of renewed Jordanian affiliation with Iraq, and possibly with Syria in the event of resumed Arab-Israeli hostilities.
CHAPTER 2

SELECTED COUNTRY STUDIES

INTRODUCTION

This chapter reviews the security perceptions of selected nations in the Middle East and their strategies and programs for dealing with threats and security requirements. Wherever possible, the perceptions and strategies are drawn from statements by responsible leaders, while the programs are largely as reported in the public media and tabulated by the International Institute of Strategic Studies. The chapter also provides brief sketches of the military-industrial power of the various countries and points out particular strengths and weaknesses. This chapter is intended to provide a comprehensive, yet succinct, view of the threat perceptions and military policies and potential of the countries discussed.

ISRAEL

Most Israeli leaders recognize that the collapse of the Soviet Union and the defeat of Iraq have greatly reduced the magnitude of threats to the security of their country. They believe, however, that this is a temporary situation and that matters could deteriorate in the latter part of the decade. They profess concern in the longer term for the large military forces of neighboring countries which might be brought to bear against them in another outbreak of fighting. Many leaders perceive the number of potential enemies to be increasing, rather than decreasing, as technology and political changes bring additional, more distant Moslem states into the circle of potential adversaries. They believe that long-range missiles and the proliferation of MDW in the Middle East bode ill for Israeli security and that Israel must constantly strive to maintain a qualitative edge and quantitative sufficiency to be able to defeat any combination of possible opponents.
The Israeli leadership is not enthusiastic about arms control for containing these threats for several reasons. First, they are skeptical that progress is possible in the area until there is progress in peace negotiations. Second, considering the difficulty the UN has had in locating Iraqi MDW, they do not believe that adequate verification is possible. Third, they are skeptical whether arms control agreements are enforceable without extraordinary measures. Fourth, even if adequate controls were to be exercised by outside equipment suppliers, some of Israel’s foes might be able to manufacture contraband items themselves. Finally, Israel believes that it can maintain an edge over its potential enemies in virtually all fields, and does not desire limitations on its options.19

With respect to regional competition in the nuclear field, the 1981 Israeli raid on the Iraqi nuclear installation at Osirak revealed the limits of Israel’s tolerance. In June 1992, Major General Herzl Bodinger, commander of the Israeli Air Force (IAF), indicated that his government’s position in that respect had not changed. Referring to reports of the Iranian nuclear program, he said:

We should first try to work against [nuclear proliferation] by political means. And if that doesn’t work we may consider an attack.20

With regard to frontier security, the Israelis talk in the following terms:21

• Northern frontier (Lebanon): the threat of guerrilla (“terrorist”) infiltration, ambush and short-range bombardment increased over the 1991-92 winter season. The guerrillas are considered to have the approval of Damascus inasmuch as Syrian troops stationed in Lebanon make no apparent effort to stop them.

• Syrian frontier: quiet, but Syrian forces are concentrated in the area in a high state of readiness for launching an attack with minimal warning. They are acquiring many new weapons and have activated one reserve division, but they are not strong enough to take the Golan Heights by force.
• Jordanian border: intermittent problems with infiltrators. For the most part, Jordanian authorities make reasonable efforts to control their side of the line and to prevent cross-border incidents. For the time being, there is virtually no threat on this front.

• Southern (Egyptian) front: Security related incidents are rare.

• The worst case for Israeli planners is the continuing threat of coordinated attack by several Arab countries. If war broke out between Israel and Syria, Israeli leaders believe that it is likely that Iraq and Jordan would be involved. In addition, they believe that Egypt's attitude toward Israel could change very quickly. In the words of the chief IDF planner, "We must assume that a future enemy will probably try to surprise us. ... [Egypt] is a potential threat, but right now we have peace and I hope they will not break it." 22

There is no central or comprehensive statement of Israeli military strategy because major elements, most notably nuclear weapons, remain politically unmentionable. Access to U.S. technology is treated somewhat more openly, but rarely with the attention it merits. As a result, a description of the Israeli national military strategy of aggregation can only be inferred from sources other than the government. With this important reservation, we may characterize the three primary concepts of the strategy: (1) nuclear deterrence and war planning; (2) the maintenance of technological superiority over all potential opponents; and (3) maximization of state power through high militarization of the society.

Strategic planning is based upon a number of assumptions regarding the current security regime and the nature of the kind of war which might break out. 24 These include:

• Israel can count on a window of opportunity lasting 3-6 years during which hostilities are highly unlikely. During that period it must prepare for another round of fighting.
• The war, if it occurs, will be of brief duration, but intense ("short and sharp").

• Israeli planners must expect to be on the defensive initially. The political leadership is unlikely to grant permission for preemptive strikes against developing threats for fear of international criticism.

• Tactical assets are likely to be used against strategic targets. Missiles and unconventional warfare teams may be used by both sides to strike deep into hostile territory. There will be no completely secure rear areas for either side. In the words of Lieutenant General Ehud Barak, Chief of Staff of the Israeli Defense Forces (IDF), "We plan for a conventional war, but missiles are our biggest problem, and we should not discount the possibility of an Arab country getting a nuclear capability by the end of the decade."25

• Secret, high technology weapons are the key to "befuddlement" of the enemy. These are described as the "ability to unhinge an enemy offensive at the very outset, within the very first few hours of engagement, and thereby completely upset its original plan." Israel cannot afford a prolonged slugging match with Arab armies.

Traditional Israeli strategy has evolved with a number of fundamental characteristics.26 These include:

• Israeli security policy is strategically defensive, but its military operations are offensively oriented.

• Israel cannot entrust its security to an alliance.

• Israel must have sufficient indigenous military power to deter attack by its enemies, or to defeat the enemies in every engagement if deterrence fails.

• War must be conducted on enemy territory.
To these fundamentals, and with the assumptions above in mind, the current leadership has added some specifics pertinent to present circumstances.27

- Israel will cooperate with the sponsoring nations in the international peace negotiations.

- The Air Force will be maintained in a high state of readiness. It is the nation's first line of defense.

- Israel will make continued heavy investment in defense programs. Particularly critical is the development of secret "befuddling" weaponry within the 3-6 year window of quiescence, whatever the cost. The maintenance of control of the occupied territories also requires large resource commitments. Troop requirements run in the range of 120-150 company-size formations.28 These high priority programs are expensive, but they must be fulfilled, even if Israeli standards of living must be further degraded.29

Some indications of the thrust of Israeli thinking on defense strategy and programs have been revealed in public discussion. As defense minister in 1989, Yitzhak Rabin remarked:

Our main strategy is to prevent war through credible deterrence, and once war is enforced [sic] on us, to win it as quickly and decisively as possible. We believe that having the most offensive type of conventional forces—being a modern, efficient air force—is the best way to achieve both goals, and that's why it has first priority.

Stand-off is the name of the game in air, land and sea battles as far as we are concerned. We are striving to identify and locate a target in real-time from as far a distance as possible, as well as attack it from stand-off ranges.

...the gap between us and our potential enemies has actually widened, not reduced. The dogfight ratios our air force has achieved clearly prove this, increasing from 1:20 in the 1967 war to 0:90 in the 1982 Lebanon campaign. ... And that is probably why the Arabs went to push-button SSMs, so that they can avoid the confrontation in the areas of quality and motivation.30
In line with Rabin’s thinking, strong arguments have been made for development of weapons systems with great accuracy. These include anti-ballistic missile (ABM) systems, remotely piloted vehicles, and attack helicopters, all of which are deemed critical to providing Israel the necessary qualitative edge.\textsuperscript{31}

Also critical for the small country is high quality intelligence. In addition to the regular operations of the legendary Mossad and military tactical reconnaissance vehicles, the Israelis have invested heavily in space. The current low orbiting “Ofek” (Horizon) platform provides a telescope for periodic optical observation. A more ambitious half-billion dollar program, dubbed “Amos,” is scheduled for launch in 1994. “Amos” is designed for geosynchronous orbit to provide continuous coverage of the Middle East. It is expected to carry communications, imaging, and infra-red (missile launch warning) packages. The combination of high and low orbiting vehicles should substantially reduce Israeli dependence on the United States in this area.\textsuperscript{32}

The Israelis recognize the limitations of the Patriot air defense system for engagement of missiles. Former Defense Minister Moshe Arens exhibited particular enthusiasm for development of the Arrow ABM system which would engage enemy missiles at ranges greater than Patriot’s capabilities, reducing the risks of damage on Israeli territory from falling debris. The weapon might become operational by 1997. The costs have been high, and the system has experienced a number of setbacks, but the United States has provided most of the money, and a fallback may be available. The United States is separately developing a Theater High Altitude Area Defense (THAAD) system, which could be ready in a similar time frame. THAAD would intercept approaching missiles at still greater ranges and higher altitudes than Arrow, virtually eliminating ground damage in any instance of successful engagement.

Besides early-warning satellites and ABM, current Israeli acquisition programs include at least two large air defense radars, a squadron of AH-64 Apache attack helicopters, F-16, and possibly F/A-18 fighters.\textsuperscript{33} Facilitating these acquisitions
has been the authorization of an extraordinary grant of $700 million worth of equipment from stocks of the U.S. armed services. Ten F-15A/B fighter aircraft are included in the grant.\textsuperscript{34}

The Israelis attach particular importance to the Air Force. Unlike Israel's ground forces, the IAF is a highly professional service, with less reliance on reserves. Of some 700 combat aircraft, all but 100 are believed to be in active service. The total Israeli force potential of its air arm exceeds that of its closest competitor (Syria) by over 40 percent, and almost matches that of all of the other Arab forces in this analysis combined.\textsuperscript{35} We should also be bear in mind the versatility of the IAF. Over 80 percent of Israeli combat aircraft are dual capable (air superiority and ground attack), while almost all the aircraft of its potential opponents are optimized for a single mission.

Israel is also acquiring two German built Dolphin submarines.\textsuperscript{36} These boats, which will have a missile firing capability, could play a role in intelligence gathering and in protecting Israel's sea approaches from missile firing ships or hostile submarines. Reportedly, the Israelis have also recently developed a new anti-ship missile to be mounted on its new Saar-5 missile boats. Nicknamed "the Baraq," the weapon, which is scheduled for deployment in 1993, will have a range of 10 km.\textsuperscript{37}

The identity of the Israeli "befuddling" weapon, or weapons, is a matter of some speculation. The highly classified STAR-1, loitering anti-radar missile, which has just completed its development phase, would seem to fit the definition. The STAR-1 includes a "Delilah" unmanned aerial vehicle which simulates the presence of an attack aircraft. The system flies a preprogrammed path to the battle area where it assumes an autonomous search orbit. Capable of detecting a broad spectrum of electronic emitters, it selects a high priority target, and homes on the victim. Such a weapon, if used in mass, could destroy the ground-based elements of an extensive air defense system. or force it to shut down to avoid destruction.\textsuperscript{38}
Another candidate could be the U.S.-developed "high-power microwave" weapon which converts the energy of a conventional explosion into a pulse of radio energy. If the pulse is sufficiently strong it can penetrate computerized weapons systems and disrupt or burn out electronic components. The microwave weapons were first used by the U.S. Navy on an experimental basis in the Gulf War. Conceivably, they could be made available to Israel under the right circumstances.39 Anticipated Israeli arms acquisitions through 1996 are summarized in Table 5.

<table>
<thead>
<tr>
<th>164 Combat Aircraft:</th>
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<tbody>
<tr>
<td>15     F-15 A/B</td>
</tr>
<tr>
<td>5      F-15 D</td>
</tr>
<tr>
<td>60     F-16 A/B/C/D</td>
</tr>
<tr>
<td>42     F-16 (Enhanced Model)</td>
</tr>
<tr>
<td>42     F-18</td>
</tr>
<tr>
<td>25 AH-64 Apache Attack Helicopters</td>
</tr>
<tr>
<td>100 Merkava III Tanks</td>
</tr>
<tr>
<td>2 Dolphin Class Attack Submarines</td>
</tr>
<tr>
<td>&quot;Baraq&quot; Antiship Missiles</td>
</tr>
<tr>
<td>Weapons to Degrade Enemy Systems:</td>
</tr>
<tr>
<td>STAR-1 Loitering Anti-Radar Missiles</td>
</tr>
<tr>
<td>High-Power Microwave Weapons</td>
</tr>
<tr>
<td>&quot;Amos&quot; Geosynchronous Recon Satellite</td>
</tr>
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</table>

Table 5.
Anticipated Israeli Arms Acquisitions, 1991-96.40

The Israelis have no overt strategy for guiding the acquisition or employment of nuclear weapons. Their sole declaratory policy in this regard is contained in the oft recited and ambiguous, "Israel will not be the first country to introduce nuclear weapons into the Middle East." Recent press revelations place the total inventory at about 300 weapons of various types.41

Opinions differ regarding the purpose of such a large inventory. After the 1973 conflict, Israel is believed to have
established at least 3 nuclear-capable artillery battalions, each consisting of 12 self-propelled 175 mm guns. Clearly the formation of nuclear-capable artillery units indicates some thinking in terms of tactical nuclear warfare. On the other hand, no observer has yet reported any indication of Israeli doctrinal or training developments along that line. Coordination of tactical fires with conventional maneuver units is complex, and would be risky to inaugurate without training and rehearsals.

Another possibility is suggested in the title of a popular book, *The Samson Option*. Some Israeli leaders could wish to threaten total annihilation of enemy countries if Israel were subjected to MDW attack. Prime Minister Yitzhak Rabin, for example, has stated that Israel should be prepared to inflict one hundred times as much damage on any opponent as it might visit upon Israel. Anoushiravan Ehteshami reports a mind-set among some Israelis which says, "If we are going to be destroyed we will take all our regional enemies with us." One study indicates that such a task (with targets in Syria, Jordan, Iraq, Libya and Egypt) could be accomplished with either 138 weapons of 20 kilotons' yield or 26 weapons of one megaton each.

A third possibility is suggested by a number of U.S. Embassy officers: simple bureaucratic run-on. The Israelis have been making nuclear weapons for over 20 years. They may be prone to making new ones without disposing of older designs.

On the other hand, the Israeli stockpile may have been developed with one eye on the possibility of Soviet intervention in the region. In that case the Defense Ministry may have been thinking in terms of classical nuclear deterrence, or even warfighting. In any event, potential opponents cannot disregard the disturbing *Samson Option*, as well as lesser reactions, in their calculations of possible warfighting scenarios.

The Israeli arms industry is a large, highly sophisticated and capable complex with experience in manufacturing and servicing virtually all types of modern weaponry, to include tanks, missiles, jet aircraft and nuclear weapons. At its peak, in the mid-1980s, it employed over 62,000 persons. Between
1984 and 1988, production ranged from $2.25 billion and $2.4 billion worth of military goods.\textsuperscript{47}

Critics of the industry argue that it grew without direction and became excessively competitive in later years as it outstripped the requirements of the IDF which it was intended to serve. In 1990, for example, in the field of image processing, eight domestic industries competed for missile contracts. Increasingly, excess capacity was devoted to export. By 1991, the number of workers had dwindled to 46,500, but the volume of exports exceeded IDF sales by a factor of two.\textsuperscript{48}

High quality Israeli military products are now to be found in over 60 foreign countries. Paradoxically, the CSS-2 intermediate range missiles purchased by Saudi Arabia from China are believed to contain Israeli components in the guidance packages.\textsuperscript{49} If true, that fact may afford the Israelis a way to neutralize the weapons if they were to be fired toward Israel rather than Iraq or Iran.

**SAUDI ARABIA**

Saudi Arabia perceives itself to be virtually surrounded by hostile states. Jordanian and Yemeni support of Iraq during the Gulf War were seen as acts of treachery against Riyadh. Saudi suspicions run high that had Iraq ventured further to invade Saudi territory, both Jordan and Yemen would have joined in the attack to settle old scores dating back to the Ottoman period. To the east, Iran is viewed as a powerful potential foe. The Saudis supported Iraq in the Iran-Iraq War (earning no credit from either side), and they experienced the sting of Iranian-supported riots at the sacred mosque in Mecca during the 1979 Haj season. Moreover, they are aware that Iran has trans-Gulf claims which could impinge sharply on Saudi security.

The Saudis believe that their traditional practice of "rialpolitik" (the paying off of potential enemies with rials—the national currency) failed them in their most extreme test. Strapped for cash in the wake of the Gulf War anyway, they resolved to shift their strategy to seek deterrence of foreign attack primarily through heavy investment in arms, rather than...
bribes. Their objective is the development of a credible deterrent force on the model of the coalition of armies which faced Iraq on October 20, 1990. This was the level of military capability deemed appropriate for the defense of the kingdom. Thereafter, coalition planning focused on the assembly of larger forces capable of expelling the Iraqis from Kuwait.\textsuperscript{50}

While there is little expectation that the Saudis will match the DESERT SHIELD model, their plans are ambitious. They would like to triple the size of their forces, building to a total strength of 200,000 men (regular and national guard) by the year 2000. The ground forces would expand to 90,000 men and 7 divisions. Large orders have been placed abroad for armaments (see Table 6). In addition, they have contracted for construction of new airfields and installation of a high technology “Piece Shield” air defense system to tie together various national components (radar sites, sector control centers, surface-to-air missiles, airborne warning and control aircraft, and civil air).

Some analysts are skeptical that the Saudi population base is large enough to sustain armed forces of 200,000. CIA estimates place the number of native born, physically fit males

<table>
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<tr>
<th>Mid-1991 Level</th>
<th>On Order</th>
<th>Total by '95</th>
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<tbody>
<tr>
<td>72 Tornado Jets</td>
<td>48</td>
<td>120</td>
</tr>
<tr>
<td>60 F-15 Jets</td>
<td>38</td>
<td>98</td>
</tr>
<tr>
<td>29 Hawk Jets</td>
<td>60</td>
<td>89</td>
</tr>
<tr>
<td>0 AH-64 Atk Hel</td>
<td>12</td>
<td>?</td>
</tr>
<tr>
<td>12 Blk Hwk Hel</td>
<td>88</td>
<td>100</td>
</tr>
<tr>
<td>5 AWACS Aircraft</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>8 Patriot Batteries</td>
<td>14</td>
<td>22</td>
</tr>
<tr>
<td>0 M1A2 Tanks</td>
<td>465</td>
<td>465</td>
</tr>
<tr>
<td>1.700 Lt Armd Veh</td>
<td>1110</td>
<td>2810</td>
</tr>
<tr>
<td>8 Frigates</td>
<td>3</td>
<td>11</td>
</tr>
<tr>
<td>4 Çntr Mine Ships</td>
<td>1</td>
<td>5</td>
</tr>
</tbody>
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Table 6. Anticipated Saudi Arms Acquisitions 1991-95.\textsuperscript{51}
between the ages of 15 and 49 in the year 2000 at 1.08 million, a little over five times the number required.\textsuperscript{52} A force of 200,000 would give the country a soldier-to-citizen ratio (counting only native born Saudis) of 1:40, a figure substantially lower than either Israel or Syria, but higher than most countries of the region (see Table 1)—or of the world. Militarization of the populace on this scale would probably require conscription, and could pose a disruptive factor in Saudi society. Nevertheless, the goal appears feasible, if distasteful. The Saudi Government, itself, expresses confidence that it can be done by increasing recruitment quotas among the Bedouin tribes and by tapping the increasing pool of urban youths.\textsuperscript{53} Most likely, policy rather than population will be the limiting factor.

Saudi Arabia traditionally has relied upon Western contractors for supply and maintenance of its war materiel. However, a major component of the new Saudi program for expansion of its defense forces will entail investment in more elaborate facilities for logistical support. The government now seeks to develop an indigenous capability for depot rebuild of aircraft and vehicles. The effort will be highly expensive, involving personnel training, parts stockage, tools and physical plant. Conceivably, the project eventually could develop into a limited manufacturing capability, but no such plans have been reported. As will be noted later, Saudi Arabia has already invested heavily in the Egyptian-based Arab Organization for Industrialization (AOI) which produces many types of armaments. The principal benefits of the domestic effort would appear to be to increase assurance of responsive support to the larger armed forces after 2000 and to provide some diversification of the country’s industrial potential.\textsuperscript{54}

It is not clear whether, or to what extent, Saudi Arabia may eventually support U.S. force presence in the region. Washington and Riyadh have agreed to use the 1977 Military Training Mission Treaty as the legal basis for future defense cooperation. The Pentagon would like to preposition essential support equipment for five or six tactical fighter wings (some 400 aircraft) in the region, most of it in Saudi Arabia. In addition, it would like to place 200 tanks and 200 armored infantry
fighting vehicles in storage where they would be available for use by U.S. troops in an emergency. The U.S. Navy already deploys a carrier battle group to the region for 183 days per year, and may increase the duration to 270 days. The U.S. Air Force has been directed to deploy a team of fighters and support aircraft to the region when there is no carrier group nearby. If Saudi Arabia were to agree, the U.S. force presence could increase substantially. But a senior defense official may have been slightly premature when he commented, "We now have the ability to give anybody pause." The opening of the kingdom to Western influence and culture for a prolonged period of time is not likely to come easily. There may have to be some compromise and sub-optimization of prepositioning and training exercises to minimize political embarrassment to Riyadh.

THE GULF COOPERATION COUNCIL

Saudi Arabia is the largest and most powerful of the six-nation Gulf Cooperation Council (GCC). Formed in 1981 under the shock of the Iran-Iraq War, the organization has provided a minimal forum for coordination of defense matters. Proposals for substantial efforts, such as that forwarded by Sultan Qaboos of Oman, suggesting that the group form a 100,000 man defense force, have come to little. The organization has been troubled by territorial and other disputes among the members, and questions have arisen regarding their ability to provide sufficient personnel capable of operation and maintenance of high technology equipment. Moreover, Riyadh has harbored doubts regarding command and control of the force and is not enthusiastic about stationing foreign troops on its territory. Instead, it would prefer to strengthen the Saudi-led GCC Peninsular Shield force of less than 10,000 men.

In place of coordinated defensive programs, a number of the Council members have undertaken significant armament programs themselves (see Table 7), and three (Kuwait, Oman and Bahrain) have developed close bilateral security relations with the United States. Kuwait is essentially rebuilding its forces from scratch. Kuwaiti leaders foresee that they will
Kuwait
6 Patriot batteries with 450 missiles
6 Hawk batteries with 342 missiles
75 FA-18 fighter aircraft
110 Yugoslav M84 (T-72) tanks

UAE
337 M1A1 or 390 Leclerc tanks
500 BMP infantry fighting vehicles
20 AH-64 Apache attack helicopters
24-40 F-15F fighter intercepters

Oman
40 M60A3 tanks
119 V-300 armored cars (or 500 BTR-80 APCs)
16 Hawk fighter aircraft
4 Corvettes

Bahrain
8 AH-64 Apache attack helicopters
20 M-60 tanks
Patriot SAM batteries

Qatar
Patriot SAM batteries
Upgrade of air defense system
4 Vita class fast attack boats with Exocet missiles

Table 7. Anticipated Arms Acquisitions of Small GCC States, 1991-96.59

continue to be vulnerable to attack from Iraq and that their country is too small to offer a successful defense. Nevertheless, they believe that with high technology training and specialized equipment they might be able to offer a strong deterrent to aggression. Consequently, they have been slow to make some major equipment acquisition decisions while they study various approaches for maximizing their potential force effectiveness.58 Oman and the United Arab Emirates (UAE) have committed large sums to the acquisition of late-model arms.

Special note should be taken of Bahrain, both as a strategic asset and as one with special vulnerability. Bahrain provides important support facilities to the naval component of CENTCOM, and its rescue units were the first on the scene in
1987 when the *USS Stark* was struck by an Iraqi missile. During the Gulf War, Bahrain was host to some 17,500 U.S. servicemen and 200 combat and support aircraft.

At the same time, Bahrain has special security problems. Most immediate is a dispute with Qatar over control of the Hawar Islands lying between the two countries. More dangerous, however, are vulnerabilities to Iraqi and Iranian attack. The island was inconsequently struck twice by Scud missiles during the war. Further, Bahrain extends into the Persian Gulf like a bite-sized chunk of land which might appear tempting to a predator seeking control of maritime traffic in the area. Iranian leaders have not renounced an outstanding claim by the Shah for the territory. Unlike the other GCC members, Bahrain is only a marginal, and slowly declining oil producer. As the national income has slipped, so have defense expenditures. At present, it heavily and increasingly depends upon Saudi Arabia for maintaining its forces. Bahrain’s realization of its vulnerabilities may have prompted its move, in June 1992, to open contacts with Iraq, perhaps to off-set some of its dependence on others.  

Ultimately, Bahrain looks to the United States for its security. Both Manama and Riyadh realize that Bahrain represents a Shiia enclave next to the Sunni keeper of the holy sites. Manama might sometime turn to Washington for protection if anything were to upset its good relations with Riyadh.

**SYRIA**

Syrian leaders perceive their country to be a potential “Germany of the Middle East.” They point with pride to their strong agricultural base and diligent work force. They feel that the country is mired down in a wasteful arms race with Israel because Israel continues to hold Syrian territory. Large armed forces are necessary, they insist, to protect the country from further Israeli aggression and to maintain internal security. Without tight control, the country could slip into the Islamic fundamentalist orbit which would thrust its social programs backward. The “great crimes” of which President Hafiz Assad
has been accused have been provoked by insurrectionist elements that would topple the government. If Israel would return the Golan, Syria could turn its energies to commerce and industry and raise the standard of living of its people.  

Syria cannot compete with Israel on a military plane without allies and the backing of a superpower. Failing that, it looks to the peace negotiations for justice. If the United States were a real superpower, spokesmen argue, it would force Israel to withdraw. By not doing so, the United States makes it look as though Israel is the real superpower and the United States simply a supporting actor.

Barring a settlement with Israel, Syrian strategy is to wait for things to change, "even if it takes 100 years." Recovery of the Golan Heights is a matter of national honor, the leaders argue, and nothing can ever make them accept anything less than the entire area. They may suffer many reverses, but they are resolved to recover their territory.

According to one report, President Assad has revised his strategy toward Israel. Rather than seeking "strategic parity," as the government claimed in the 1980s, the goal is now "strategic deterrence" to discourage Israeli attack. The strategy has three components: (1) the upgrading of the armed forces with advanced military equipment, (2) the development of a concept for "long and protracted conflict, unlike previous Arab-Israeli wars" in the event deterrence fails, and (3) an emphasis on "strategic depth" as a decisive factor in any large-scale conflict.

Informed American observers in Damascus believe that the likelihood of another war in the region in the next 10 years is higher than 50-50. If a rightist leader were to come to power in Israel and to consolidate Israeli control of the occupied territories, the probability would approach certainty. The chance that the Syrians can be cowed into surrender is very low. Further, the matter of nuclear warfare in the region must be taken seriously.

Reports of funds received by Syria from Kuwait and Saudi Arabia in 1991 for its part in the war with Iraq range from $700 million to $2.5 billion. The Syrian government intends to spend
the money largely on arms acquisitions. The principal acquisitions planned are listed in Table 8. Recent reports have placed the list in some doubt because of Russian insistence on payments in cash. However, if the list is not fulfilled from Moscow, Damascus is likely to turn to other suppliers.

48 MiG-29 (Fulcrum) fighter aircraft
24 Su-24 fighter/bombers
700 T-72 tanks
250 SP artillery pieces
Unknown quantities of air defense missile systems, including:
   SA-10 “Grumble” (all altitudes)
   SA-11 “Gadfly” (low-to medium altitude)
   SA-13 “Gopher” (low altitude)
   SA-16 No NATO nickname (low altitude)
SAM C2 System
174 Scud-C missiles
20 Scud launchers


In the longer term, Syrian initiatives to develop its domestic missile industry could be more important than the purchases from abroad. Reportedly, Syria and Iran have undertaken a joint effort to construct a plant in Syria, with Iranian funding, for the production of Scud-C missiles. North Korea will provide technical support. The project could substantially enhance Syria’s capability for massed missile offensives.

It would appear possible that Syria may also be preparing to manufacture a missile with a more rapid response than the liquid-fueled Scud. One possibility is a version of the Soviet SS-21 (Scarab). While more limited in range, the SS-21 is more accurate than the Scud and less vulnerable to detection during its preparation for firing. China may have delivered as much as 90 tons of solid fuel missile propellant to Syria for this purpose.
Syria's major element of military strength is its large active land force. Deployed largely on the Damascus plain facing Israel, the army would require few relocations to mount a massive armored and missile attack on the Israeli-held Golan Heights. Some analysts believe that the Israelis might not receive more than 20 minutes to 2 hours warning. Syrian artillery is trained and equipped to deliver massed fires, and has recently been strengthened through the acquisition of modern Soviet self-propelled howitzers. The air forces are heavily weighted for air defense, but, together with air defense missile forces, they could provide strong cover for such an operation. If coordinated with massive missile and air attacks on Israeli airfields, reserve equipment parks, and command and control centers, the Syrians might calculate that such an offensive could score some initial successes.

Syria is a signatory of the Nuclear Nonproliferation Treaty and thus far has shown no more than marginal proclivity for breaching the agreement. While some believe that Damascus is seeking nuclear weapons, no analyst has suggested that Syria has progressed beyond the research stage. Syria's chemical warfare capability, including nerve agents, however, is well developed. As early as 1985, U.S. officials were quoted as saying, "...the Syrians have the most advanced chemical weapons capability in the Middle East."

IRAN

The Government of Iran has had difficulty establishing its bearings since the death of the Ayatollah Ruhollah Khomeini, the founder of the Islamic state. However much moderate elements may wish to steer the nation back into the world community, no element has proven strong enough to break away from self-limiting radical rhetoric. The voice of Tehran has been largely the voice of volatile extremism.

The Iranians have reason to fear the resurgent power of Iraq. Iran is in the grip of a massive arms buildup, but as Kamal Kharrazi, Iranian ambassador to the UN, has pointed out, much of it may be justified as a prudent measure against a reoccurrence of the beating the country took at the hands of
Saddam Hussein in the 1980s. Iran has largely complied with the UN-mandated isolation of Iraq; notably it has retained for its own use some 115 combat aircraft flown to the country during the Gulf War to escape destruction by the coalition. Russia is supplying replacement parts, ammunition and personnel training for many of these planes.

Nevertheless, the government chooses to isolate itself from the peace process in the region. In December 1990, President Ali Rafsanjani called for the establishment of a pan-Islamic army for the annihilation of Israel. More recently, the U.S. Director of Central Intelligence (DCI) identified Iran as a state "hostile to U.S. interests," and said that

Tehran is rebuilding its military strength not only to redress the military imbalance with Iraq, but also to increase its ability to influence and intimidate its Gulf neighbors. ... Its clerical leadership has not abandoned the goal of one day leading the Islamic world and reversing the global dominance of Western culture and technology.

Iran also appears interested in extending its influence among the former Islamic republics of the USSR. In May 1992, Iranian leaders convened a meeting of representatives of a number of the CIS republics to discuss construction of a 3,000-mile rail link extending from Bandar Abbas, on the Iranian gulf coast, northeastward to Alma Ata, in Kazakhstan. The route would transit Turkmenistan, Uzbekistan, and Kyrgyzstan. Observers noted that while all of the parties exhibited interest, their perspectives may have been different. The republics are believed to be interested in aid and trade, but Iranian motives may have had more to do with becoming a pivotal power in a new bloc of Muslim nations capable of counterbalancing the Arab League.

At sea, Iran seeks to gain control of the Strait of Hormuz. It has contracted with China for delivery of a number of 70 ton missile boats, and with CIS for 2 or 3 Kilo class attack submarines. Reportedly, the submarines will be based at Chan Bahar, outside the Persian Gulf, where the deeper water may afford them greater security. Iran already has some 9-18 CSS-N-2 Silkworm anti-ship missiles deployed on three...
coastal sites which, together with mines, could prove hazardous to shipping entering the Gulf. Further, Iran has recently expelled all Arab residents of Abu Musa Island, a key UAE territory just west of Hormuz and undertaken extensive amphibious exercises in the area. The week-long exercise "Victory-3," employing fighter-bombers, destroyers, missile-launching frigates, and assault and antisubmarine helicopters, in May 1992 depicted operations to prevent an opponent from entering the Gulf.\textsuperscript{79}Taken together, the events bode ill for nations seeking to maintain unfettered passage through the strait in the future.

Estimates of Iranian defense spending vary widely. The DCI has stated that procurement of foreign weapons will total $10 billion for 1990-94. While some reports from Iranian emigre sources indicate that total defense spending reached as high as $19 billion in 1991 and that the figure for 1992 would be $14.5 billion, a more likely figure appears to be about $5-6 billion per year.\textsuperscript{80} Table 9 shows current reported procurement programs.

270-350 combat aircraft, including:

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Description</th>
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<tbody>
<tr>
<td>115</td>
<td>received from Iraq</td>
</tr>
<tr>
<td>72</td>
<td>F-7 fighter aircraft</td>
</tr>
<tr>
<td>68</td>
<td>MiG-29 fighter aircraft</td>
</tr>
<tr>
<td>25</td>
<td>Su-24 fighter aircraft</td>
</tr>
<tr>
<td>24</td>
<td>Su-27 fighter aircraft</td>
</tr>
<tr>
<td>12</td>
<td>Tu-22M &quot;Backfire&quot; bombers</td>
</tr>
<tr>
<td>2</td>
<td>Il-76 &quot;Mainstay&quot; AWACS aircraft</td>
</tr>
</tbody>
</table>

400-500 T-72 tanks

320 surface-to-surface missiles:

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Description</th>
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<tbody>
<tr>
<td>170</td>
<td>Scud Missiles (B and C)</td>
</tr>
<tr>
<td>150</td>
<td>N Korean &quot;Nodong 1&quot; missiles</td>
</tr>
<tr>
<td>2000</td>
<td>SAM launchers</td>
</tr>
<tr>
<td>2</td>
<td>Kilo Class submarines</td>
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</table>

72 F-7 fighter aircraft
68 MiG-29 fighter aircraft
25 Su-24 fighter aircraft
24 MiG-27 fighter aircraft
24 MiG-31 fighter aircraft
12 Tu-22M "Backfire" bombers

2-3 Kilo Class submarines

Table 9. Anticipated Iranian Arms Acquisitions, 1991-96.\textsuperscript{81}

The supersonic "Backfire" bombers are particularly significant. They are part of a possible $11 billion sale of former Soviet equipment to Tehran. If the deal materializes, the aircraft could provide Iran with a capability for striking any country within a 2,400 mile radius (unrefueled). Typical weapons loads for the Tu-22M are two AS-4 "Kitchen"
air-to-surface missiles or 12-18 1100 pound gravity bombs. A low altitude attack approach to Israel would take no more than an hour at Mach .9 from bases in western Iran. High level flight might take less than half the time.82

Besides current foreign procurement, Iranian expansion of their arms production base is continuing apace. In 1991 it encompassed 240 state-owned plants, 12,000 privately-owned workshops, and some 45,000 workers. The number of persons employed is expected to expand to 60,000 by the end of the decade. Iran is self-sufficient in ammunition of all calibers, and is known to manufacture remotely-piloted aircraft and spare parts for helicopters, tanks, artillery, and surface-to-air missiles. Tehran claims to seek self-sufficiency in the production of main battle tanks, ballistic missiles, and some types of aircraft by the year 2000. Some idea of Iranian aspirations in the armaments field was revealed at the Dubai international arms exhibition in January 1992. Of 26 national participants, Iran had the largest display. Systems offered for sale included long-range missiles, pilotless aircraft and armed speed boats. Also offered were contracts for the maintenance of older models of U.S. jet fighter aircraft. The Iranian R&D effort includes development of a 1,000 km range version of the Chinese M-11 intermediate range missile, named "Tondar 68." Such a weapon might be able to place Jerusalem at risk from a firing site on the extreme western edge of Iranian territory.83

Iran probably has active programs for the development of weapons of mass destruction in all major fields. President Rafsanjani stated in 1988, "We must fully equip ourselves with defensive and offensive chemical, biological and radioactive weapons."84 Iran demonstrated a chemical warfare capability during the war with Iraq. It is currently conducting nuclear research at Qazvin and Isfahan, and is constructing a fuel enrichment facility at Darkhovin. It recently concluded a contract with France for delivery of enriched uranium ordered prior to the Islamic revolution.85

In early 1992 an Italian judge announced discovery of international smuggling operations transferring weapons grade uranium and plutonium, and even complete nuclear weapons, out of former Soviet republics. Allegedly, the
materials were going to high bidders in the Middle East. Other reports indicated that three nuclear weapons, ranging in yield from 2 to 5 kilotons, were missing from a depot at Semipalatinsk, Kazakhstan. At least two of the weapons were believed to have reached Iran in 1991. They were presumed to be nuclear artillery shells, which would not be too difficult to move. Suspicions existed that high Kazakh officials were involved in the transfer. The CIA reportedly investigated the matter, but was unable to substantiate the allegations. Whatever the truth, U.S. intelligence does not estimate that Tehran will manufacture its own weapon before 2000.

EGYPT

Egyptian leaders identify three principal threats to their national security:

- a lack of regional strategic balance stemming from the overwhelming preponderance of Israeli military power;
- the threat of encirclement by Islamic fundamentalists; and,
- internal threats to domestic order.

Representatives of the political-military elite in Cairo express no sense of acute threat from Israel, but argue that the magnitude of the military imbalance between Israel and its neighbors is an unnatural and unhealthy state of affairs. They cite Israeli superiority in both high technology conventional and nuclear weapons. They believe the imbalance may promote ill-considered actions on the part of the Jerusalem leadership, such as the 1982 invasion of Lebanon. Israeli superiority, they argue, facilitates Israeli resort to force for dealing with many types of issues which could be settled by political means among nations entertaining greater respect for their neighbors. Indeed, they interpret the current Arab-Israeli peace negotiations as the sort of discussions which should have been undertaken long ago, but were impossible because of reckless attitudes among some officials in Jerusalem, fostered by confidence in Israeli military prowess.
Egyptian leaders also express an uncertainty regarding Israeli objectives. While they are happy to have recovered the Sinai, they question whether Israel is satisfied with its other borders, or if, perhaps, it seeks additional territory at Arab expense.

Cairo is further disturbed by the spread of Islamic fundamentalism to Sudan and Algeria. (Egypt fears, for example, that a hostile Sudanese government may interfere with the Nile River water supply.) While Egyptian spokesmen are not keen to discuss internal security problems in great detail, it is apparent that they recognize a vulnerability among the Egyptian people to the march of militant Islam. Extension of the movement to additional countries in the region could trigger reactions in Cairo of unforeseeable dimensions and ramifications.

Cairo looks primarily to the U.S./CIS-sponsored peace process for solution to most of its difficulties with Israel. Egyptian leaders are enthusiastic about the concept of a "new world order," and embrace the notion that the age of naked force is over. They support President Bush's arms control proposals, but are uneasy that the United States is addressing matters in the wrong order. They believe that the large number of Israeli nuclear weapons is the greatest threat to the security of the Middle East, hence it should be addressed first. Israeli evasiveness on nuclear matters, in their view, casts a shadow over the entire arms control issue. Finally, in this regard, they suggest enigmatically that if the United States is unable to focus attention on this matter, Egypt will have to find its own solution to the problem.

Egypt possesses a large, obsolescent military establishment, numbering about 420,000 troops, with 50-60 percent of the equipment of Soviet design, and none less than 20 years old. Egypt has no apparent ambition for expanding its forces, but seeks to modernize through gradual transition to Western equipment. In the short run, the country will be looking for opportunities to make small improvements through limited acquisition of surplus materiel on the open market.
The United States provides Egypt an annual military subsidy of $1.3 billion, most of which is used for procurement of U.S. materiel. This sum constitutes about 75 percent of the Egyptian defense budget, and some 85-90 percent of the military procurement budget.\(^8\)

The Egyptians assign a high priority to the modernization of their tank fleet. In addition to the funding mentioned above, the United States has recently provided Egypt with 700 M60-A1 tanks with the understanding that they will be used to replace a like number of older Soviet vehicles. The Egyptians plan to upgrade the new tanks to the M60-A3 model, affording the vehicles such capabilities as tracking targets 10 times faster than the Soviet T-54s they will replace.\(^9\) The United States and Egypt have also concluded a co-production agreement for M1A1 tanks in Egyptian factories. A sufficient number of M1A1s should be available to equip the Egyptian 2nd Armored Division by 1996.\(^1\)

The heart of the Egyptian arms industry is the Arab Organization for Industrialization (AOI), formed in 1976 by a consortium composed of Egypt, Saudi Arabia, Qatar and the United Arab Emirates. The complex has produced Tucano and Alpha Jet aircraft, tactical rockets and missiles, many calibers of small arms and artillery ammunition, light armored vehicles, communications equipment and radar, helicopters, Jeep and Wagoneer trucks, and NBC protective equipment. Under the memorandum of agreement with the General Dynamics Corporation, the complex will co-produce some 550 120-mm gun M1A1 tanks, gradually assuming a larger share of the manufacturing task from the American firm.\(^2\) AOI tries to market its products both inside and outside the Arab community, but thus far sales have been modest.

While Israeli nuclear capabilities are very disturbing to Egypt, and have been characterized as "unacceptable" to Cairo, few believe that Egypt is more than marginally involved in nuclear weapons development. Egypt reportedly has undertaken some research projects in the field, but is not believed capable of producing a weapon before 2002.\(^3\)
550 M1A1 tanks
Armored personnel carriers
152 TOW missile launchers with 695 missiles
Phase III improvement for 12 HAWK SAM batteries
24 Apache attack helicopters
F-16 fighter aircraft
C-130 cargo aircraft
Tanker aircraft
6-8 Oberon class submarines
Naval patrol craft
Missile boats

Table 10. Military Materiel Sought by Egypt.94

War materiel currently sought by Egypt from foreign suppliers is indicated in Table 10.

IRAQ

Many analyses of Iraqi motivations concern Baghdad's aspirations rather than perceived threats. Saddam Hussein is broadly viewed as a man desirous of raising Arab national consciousness and of leading the people to a destiny which he believes to be their birthright—beyond the influence of Western "neo-imperialism." His confrontation with UN officials visiting Baghdad in the wake of the Gulf War is explained as a gesture to remind the Arab people that he is still in command and unbowed, if somewhat bloodied for his efforts.95

This assessment imputes to Iraq motives of fear of domination by the West or by Arab groups serving Western interests. To these suppositions we might add probable latent concerns for a hostile Syrian neighbor to the west, and for a revanchist Iran to the east. Nevertheless, we may suppose that in the current time frame, the threat of revisitation of the air offensive inflicted on the country in 1991 by coalition forces prevails in Iraqi consciousness. Certainly Iraqi leaders have been careful to avoid unnecessarily precipitating another such attack. After lengthy stalling, they have met UN minimal demands for cooperation in locating and destroying nuclear research and manufacturing facilities and missile weapons. They have also restrained their forces from attacks on Kurdish
minority groups. Their strategy appears to be one of waiting out whatever period of subjugation the world community may impose upon them, expecting that they may again assume a leading role in the Middle East region when controls expire.

In the opinion of the DCI, Iraq probably still has a couple hundred Scud missiles hidden in the country. In addition, there are reports that Iraq has taken advantage of its relationship with Jordan to sequester certain key materiel in that country and possibly to transship some to Sudan. These may include Scud missiles and nuclear materials.\(^6\) If this is not the case, the DCI estimates it would take Iraq several years to restart its nuclear weapons program after the removal of international controls. Iraq's ability to pose either a chemical or bacteriological threat might occur much sooner.\(^7\)

Iraq emerged from the 1991 war with substantial quantities of equipment intact. It still has more combat aircraft and tanks than Iran, and probably as much artillery, and significant reconstruction has taken place at artillery and ammunition plants.\(^8\) It is outclassed in the region only be Israel, Syria and Egypt. Further, Iraq probably has sufficient manufacturing capability and expertise to maintain its forces for some time, but inevitably the forces will degrade as they are denied critical replacement parts. Barring a radical change of government, and unless closely monitored restrictions are placed upon Iraq indefinitely, one should expect that the time will come when Iraq will move rapidly to recover its former military prowess. In the opinion of General Joseph Hoar, Commander-in-Chief, U.S. Central Command, it would take Iraq some 8-9 years from the time that the restrictions were removed to match its former might.\(^9\) However, the Iraqi initiative could prove to be more qualitative than quantitative.

The former defense minister, Major General Ali Hassan Al-Najid, denied any intention to rebuild the armed forces to their previous levels. He told Baghdad's *Al-Thawra* newspaper in January 1992:

*[The government decided to build] a small, but powerful, well-maintained and effective army. We have turned a page in determining the size of the army. ... Iraq needs a strong, though*
small, army to fulfill two roles. One at the Arab level and to be used in response to an Arab resolution, and one at national level to protect Iraq's borders especially following the abuses which occurred after the Gulf conflict.\textsuperscript{100}

It would seem from these remarks that Baghdad had learned from the Gulf War experience the value of quality in force development in comparison with quantity. Quantity may still be of value in internal security operations, but high technology quality appears to be ascendant on the conventional battlefield. If General Al-Najid was reporting government views accurately, we may expect a very different distribution of military investment in Baghdad when (and if) import restrictions are lifted. Further, the point may be important for Western planners to remember when addressing future arms control matters in the region. Restrictions on certain types of tactical reconnaissance, targeting, and missile systems may be just as important for discouraging local aggression in the next century as have been limitations on armored vehicles, artillery and tactical aircraft in the context of the historic NATO-Warsaw Pact balance.

**JORDAN**

Jordan's security situation has deteriorated since the Gulf War. In addition to a hostile Israel and a suspicious Syria on two of its borders, it has been obliged to add another potential adversary, Saudi Arabia, which appears both suspicious and hostile. In the words of a high ranking Jordanian military official, threats to Jordan's security now originate from "360 degrees of the compass."\textsuperscript{101}

The Jordanian leadership insists that its position during the Gulf War was badly misunderstood abroad. Jordan was not in sympathy with the Iraqi occupation of Kuwait, but hoped, as a friend of both parties, that it could broker a settlement of the dispute which would avoid war and achieve the greatest good for the people of the region. In addition, Jordan has a large Palestinian population, and therefore had a domestic constituency to speak for. The government takes pride in representing the people, as well as ruling them, hence, the
voice of Amman was a voice which echoed some of the more seductive notes of messianic appeal struck by Saddam Hussein.\textsuperscript{102}

In March 1992, King Hussein announced that his country was cooperating in the economic sanctions program mandated against Iraq by the UN Security Council. The program imposes severe burdens on Jordan inasmuch as it was Iraq’s most important trading partner before the Gulf War. Indirectly, by refusing to answer media queries regarding Saudi efforts to destabilize his regime, the king lent some credence to perceptions of threat from the east expressed by other officials.

A fundamental element of Jordan’s strategy appears now to be recovering good graces with the U.S. Government. The King made clear his expectation of success in this regard with the comment, “I believe that the warm relationship of friendship and mutual respect ... between our two countries is well on its way to have regained, hopefully, the warmth, the understanding, the atmosphere of which we were once proud.”\textsuperscript{103}

As a gesture of goodwill the United States moved to resume at least a minimal level of military assistance. The United States approved $22 million for Jordan in FY 1991 and $27 million (including $2 million for training) in FY 1992. Most of the money was for spare parts for TOW missiles, M60A3 tanks, and F-5 and C-130 aircraft. However, as Field Marshal Fathi Abu Taleb, Chairman of Royal Jordanian Joint Chiefs of Staff, pointed out, the amount can do little to ensure the maintenance of the bulk of Jordan’s U.S.-origin equipment. The cost of maintaining the full inventory runs at about $170 million per year.\textsuperscript{104} More recently it appeared that even these modest funds were problematic. Suspicions of lax Jordanian controls over transshipment of contraband goods to Iraq and rumors of Iraqi officers training in Jordan continued to bedevil U.S.-Jordanian relations. King Hussein’s gesture of meeting with Iraqi opposition leaders in London in early fall 1992 may signal a determination on his part to close the gap.\textsuperscript{105}

Other elements of Jordanian strategy for surviving its period of economic hardship include reducing the armed forces,
postponing modernization plans and selling excess equipment. Specific austerity measures instituted in the Jordanian Armed Forces include:

- Reduction of forces from 130,000 to 100,000 men and conversion to an all-volunteer force;
- Sales of a number of F-5 fighter aircraft;
- Cancellation of an order for 12 Mirage 2000 fighter aircraft;
- Cancellation of British Tornado aircraft order;
- Postponement of a scheduled upgrade of Phase II HAWK SAM to Phase III;
- Retention of Chieftan main battle tanks until 2000;
- Curtailment of training programs by one third; and, 
- Possible replacement of one (of two) mechanized divisions with a light division.\(^{106}\)

Some of the savings realized from these measures are expected to contribute to an upgrading of the remaining U.S. F-5 and French F-1 aircraft in service.

LEBANON

For most practical purposes, Lebanon is a ward of Damascus. Syrian troops are deployed over two-thirds of the country. Whether they will withdraw to the Bekaa Valley in accordance with the Taif agreement or not remains to be seen.

The Lebanese government has disclosed a “national strategy” for easing foreign troops out of the country. The president has promised to prevent guerrilla attacks against Israel from southern Lebanon when Israel provides a timetable for withdrawal of its troops from the area, and the Lebanese Army is prepared to assume the mission. The government believes that the strength of the army in southern Lebanon needs to be raised from 10,000 to 14,000 for adequate coverage of the area. Reportedly, the president has assurances from the Iranian-backed Hizbullah that it will not
operate from areas where Lebanese troops are currently deployed.

The Lebanese force expansion would entail about a 35 percent increase in manpower, nationwide, and a structural increase from 12 to 19 brigades. Equipment would come from 7-year-old contracts, frozen by the U.S. Government, and from France, from which the Lebanese are seeking spare parts for deadlined armored vehicles and aircraft of French manufacture.

The proposition is conditional upon the cooperation of many parties, not the least being Israel. It also must weather possible internal resistance, which could be strong. The cost is estimated at $240 million, of which Beirut has but $5 million in hand. Further, there may be some truth to the remarks of one Christian leader who argued that security in Lebanon is a political and not a military matter. "If 10,000 soldiers cannot maintain security," he said, "then one million will not be able to do the job."\textsuperscript{107}
CHAPTER 3

FORCE CALCULATIONS

SOURCES AND METHODS

This chapter deals with the derivation of combat potential indices for air and ground forces of selected Middle East countries, based on the measurement of observable military assets. Order of battle data is adapted from the International Institute of Strategic Studies *Military Balance* for the years 1989-93, modified where appropriate. A qualitative dimension is added to basic descriptive and quantitative data through the application of the “Technique for Assessing Comparative Force Modernization” (TASCFORM). This technique determines relative values of individual weapons (adjusted weapon system performance [AWSP]) by assessing technical characteristics. These characteristics, such as payload, range, accuracy, mobility, speed and maneuverability, are assessed together with subjective weight factors determined by survey research with groups of experienced analysts and systems users. These values are then aggregated, using inventory data, to produce “designated force performance” (DFP) indices reflecting the total power potential of the armament of a given force or state. National DFPs provide one measurement of total force potential for comparison purposes. Mid-1991 is used as the basic data point.

An important objective of this chapter is to provide a basis for development of estimates of future relative strengths of the forces considered. Two techniques are employed. In the first, current growth rates are determined from retrospective calculations from the basic data point. The projections are then made assuming linear extension of the growth rates. In the second, changes to the DFP based on reported acquisitions and retirements of equipment are calculated and projections are made based upon assumptions regarding delivery dates. Coupled with certain other assumptions, such as equivalencies
of equipment not indexed in the TASCFORM data base and probabilities regarding quantities of particular arms purchases. projections yield further insights of possible future DFP levels.

**DFP do not reflect qualitative aspects of a force which are not inherent in the materiel being counted.** Leadership skills, integrative and coordinative factors, doctrine, training and organizational matters are all neutral. Further, the process makes no provision for weapons of mass destruction. Accordingly, it is not useful to address all countries as a single class. Israel, with its stockpile of nuclear weapons, its access to advanced U.S. research and development, and its high technology base and industrial capacity, is considered to be in a separate category from states primarily reliant upon observable military equipment contained in the data base.

Figure 1 displays the over-all air-ground DFP for the principal countries of the region in mid-1991. Country projections to 1996 are depicted in Figures 2-5. Data point (1991) and projected (1996) DFP are summarized in Figure 6. Barring a resumption of arms purchases, Iraqi forces may be expected to deteriorate at a rate of about 3 percent per year. An additional analysis, employing only AWSP data for combat aircraft (Figure 7), is made to illuminate the ambitious programs being undertaken by Iran, Saudi Arabia and Kuwait in this field.
Notable points among the figures are the following:

- *Figure 1* - Syria is the most powerful Islamic state in the region in terms of conventional forces in being. Its margin of power over the next competing states is approximately 20 percent. Egypt and post-war Iraq are essentially even, followed at a considerable distance by Iran and Saudi Arabia. The Saudi position is remarkable in view of its very large defense budget (portrayed in Table 2).
Figure 2 - The projection of Iran's military growth pattern appears to fall below projections of future arms acquisitions. This may reflect an acceleration in Tehran's rearmament program. At the indicated rate of growth, Iran should be able to reach its announced goal of equivalency with Iraq by 1996. It may also become a serious threat to its Gulf neighbors.
Figure 3 - Syria appears to be continuing its ambitious arms acquisition programs, but there is no evidence of any recent acceleration of the effort. While it is expected to acquire the equipment listed in Table 8—or equivalent materiel—some may be delayed due to Russian insistence on cash payments.
Figure 4 - There is an apparent aberration in Egypt's DFP in 1990. The exceptionally high score stems more likely from an accounting error in the data base than from an actual peak in Egyptian force potential. Comparison of the projection of future force growth with the extension of the rate displayed between 1989 and 1991 indicates that Egyptian forces may actually be experiencing a deceleration in their arms acquisitions programs.
• **Figure 5** - The figure indicates that Saudi arms procurement may fall below its historical growth rate. However, we should remember that Saudi arms acquisitions were unusually high in 1990 and 1991 due to the threat of Iraqi attack. While the figure does not necessarily confirm that the Saudis will achieve their objective of a deterrent force against Iraq, the possibility is clearly there.
1. IRAQ IS THE ONLY LOSER
2. EXCEPT FOR IRAQ, EGYPT MAKES THE SMALLEST GAIN
3. MOST STATES CLUSTER AROUND THE 27-29 THOUSAND LEVEL
4. IRAN AND SAUDI ARABIA ARE THE BIG PERCENTAGE GAINERS
5. THE SYRIAN PROJECTION MAY BE DELAYED

- Figure 6 - Barring some interruption, such as a peace accord, Syria may be expected to maintain its conventional force leadership until 1996. Behind her, a sharp reshuffling of relative power potential among the competing states is likely. Unless the UN arms embargo is lifted, Iraq's military power can be expected to gradually erode. Baghdad has a respectable industrial base which may prolong its power, but it is likely to lose ground technologically and to experience difficulty in replacing worn equipment. The greatest growth may take place in Iran and Saudi Arabia, with Iran possibly overtaking both Egypt and Iraq.
Figure 7 - Most remarkable on this figure is the expected growth of Iranian air power—virtually tripling in combat potential by 1996. Saudi air power is expected to gain substantially, too, but Syria will probably remain in the lead.
CHAPTER 4

COMPARATIVE ANALYSIS

FLASH POINTS

An assumption of potential conflict between or among the parties under consideration is inherent in any military net assessment. Hence, the analysis depends upon alignments which the parties may assume in a conflict. Few regions of the earth offer as rich a variety of issues over which armed conflict might occur. Besides the Arab-Israeli dispute, as we have seen, are the rich against the poor, Sunni Muslims against Shiites (and both of these against Jews and Christians), fundamentalists against secularists (and both of these against royalists). There are also variations, such as the Iranian call for an Islamic war (with Persians as well as Arabs) against Israel. There are territorial disputes, historical disputes, and disputes over tactics for settling other disputes. The atmosphere is poisonous, and many combinations of belligerents can arise to subdue others. The intersections on Figure 8 illustrate some of the potential flash points in the

POTENTIAL MIDDLE EAST FLASH POINTS IN THE 1990s

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(DISREGARDING SMALL EXPEDITIONARY CONTRIBUTIONS TO LARGE EFFORTS)

Figure 8.
region from which conflicts may spring. This analysis attempts to identify the strengths and weaknesses of each of the principal parties which might bear on their relative power in context with the particular adversaries with which they might have to deal.

Israel and Iraq appear to have more enemies than the others. Israel is still in a formal state of war with most of its neighbors, regularly conducting operations against targets in one—Lebanon. Iraq has been at war with most of its neighbors (Turkey and Jordan excepted) within the past 5 years, but even Turkey provided bases for forces taking part in operations against Iraq in the 1991 Gulf War.

Baghdad insists that the “mother of all battles” over Kuwait continues; even Iraqi opposition leaders refuse to acknowledge Kuwaiti sovereignty. Iraqis appear so incorrigible on the subject that prominent Saudi and Kuwaiti figures are beginning to believe that it is not solely the leadership of Saddam Hussein that is at fault, but the entire Iraqi political system.  

No flash point is posited between Israel and Saudi Arabia, but distance and the traditional Saudi disinclination for military ventures, rather than good will, are the principal determinants. The anticipated U.S. sale of F-15 jet aircraft to Saudi Arabia over the remainder of the decade is unlikely to affect significantly the Arab-Israeli balance because of Riyadh’s preoccupation with the security of its frontiers and the Persian Gulf, and its lack of experience in the management of power projection forces. Riyadh possesses long-range Chinese CSS-2 missiles capable of striking targets in Israel, but the Defense Ministry in Tel Aviv is apparently satisfied that it possesses sufficient deterrent power to neutralize the threat. It may be significant that the former Mossad (Israeli intelligence service) officer, Viktor Ostrovsky, did not identify Saudi Arabia in his disclosure of Israel’s list of enemy states.  

ISRAEL VS IRAN

More disturbing to Tel Aviv is the possibility of conflict with Iran. Three reasons seem most persuasive: First, Tehran may
acquire nuclear weapons before the end of the decade; second, the Persian government is virulently anti-Israel; and, third, Iran lies outside the envelope of American influence. The warning by the commander of the IAF, noted above, that military action may be necessary to prevent Iran from developing nuclear weapons, suggests that a potential flash point exists.

Indeed, Israel may already be in a shadow war with Iran. Israel’s operations against Iranian-backed guerrillas in Lebanon and the apparently Iranian-supported bombing of the Israeli Embassy in Buenos Aires on March 17, 1992 may represent the opening blows in a new struggle. If this is the case, the potential may be more for a simple exchange of raids than for a large scale conflict. Indeed, Major General Uri Sagi, chief of IDF intelligence, has argued that Iran may have higher priority strategic interests which would take precedence over its quarrel with Israel in the foreseeable future. General Sagi did not elaborate, but it may be imagined that he was speaking of Iran’s concern for the continuing threat from Iraq addressed below.

Nevertheless, the possible acquisition of “Backfire” bombers by Iran represents a disturbing prospect for change in the military balance in the region. Very likely it would lower the threshold of Israeli military action against Iran in time of tension. Pressures for preemptive action between Iran and Israel would be increased on both sides. It would not be surprising if Israel were to demand that the contract not be consummated and, failing this, to threaten attack against any bases in Iran to which the aircraft might be delivered.

ISRAEL VS IRAQ

Israeli and Iraqi forces have collided in most Arab-Israeli conflicts, with the Iraqis sharing humiliation with their kinsmen in other Arab states. Iraqi units reached within 6 miles of the Mediterranean Sea at one point in the War of Independence (1948), but most Israeli-Iraqi actions since have taken place on Arab ground. As Israeli strength has grown, Iraqi performance
has become increasingly marginal. In the Gulf War, Baghdad's sole capability for attacking Israel was by Scud missile.

It is over 200 miles from western Iraq to the Israeli border, through either Syria or Jordan. If Iraq were to attempt to take part in a conventional attack on Israel it would have to anticipate heavy air attacks, both during the period of 8-10 hours necessary to move a division to the front, and thereafter on its lines of supply. It is quite unlikely that even the initial movement could be made undetected in a period of heightened tension. With virtually all Israeli combat aircraft capable of ground attack missions, the Iraqi risk of heavy losses would be high.

On the other hand, if the initial move were undertaken in conjunction with a general Arab offensive against Israel, the IAF might be occupied with higher priority missions. As we have noted, the IAF's first priority is to gain air superiority; even aircraft available for ground support missions might be obliged to devote their principal effort to assisting ground forces absorbing the initial attack on the Golan Heights.

This scenario illustrates the importance of attack helicopters to the Israelis. While organized under the IAF, attack helicopters are uniquely suitable for close ground support, and would undoubtedly play a major role in that connection. In adequate numbers they could provide the essential support to the ground and relieve high performance aircraft for use in the air battle and in interdicting the enemy's rear and isolating the battlefield.

The Iraqi Air Force is in no condition to challenge the IAF and is unlikely to develop a capability before the end of the decade. Conceivably it could cooperate with a Syrian effort, but unless substantial preparations were made, to include coordinated training and command doctrine, its contribution would likely be limited.

Iraq might have the greatest impact on Israel in the field of long-range missile attack. As we have noted, it might not take Iraq long to reestablish its chemical warfare capability if UN sanctions were to be lifted without the imposition of some form of long-term safeguard. Iraq has acquired considerable
expertise in the missile field, and could develop improved missles, to include quick launch solid fuel weapons with improved accuracy.

It is not clear at this point what form an Israeli countereffort might take against another attack on its cities. Unquestionably, Israeli civil defense measures will improve as a result of the Gulf War experience. The key question pertains to active measures. The IAF and the Defense Ministry are apparently at odds over whether the emphasis should be on offensive or defensive operations. The Arrow ABM has yet to prove itself and could outrun its funding before it is ready for deployment. The Patriot system, currently deployed, may have already been stretched to the outer edge of its improvement envelope for dealing with surface-to-surface missiles (SSM).

IAF spokesmen argue that primary reliance should continue to be placed on offensive operations. The Air Force leadership has strong confidence in its ability to locate missiles and to destroy them prior to launch. One should also note Israel's space-based intelligence effort and its readiness to project long-range special forces elements into potential launch areas, in context with its concept of deep battle employing strategic assets.

The prospects for successful conventional military action by Iraq against Israel are not good. The antagonists are too far apart. Relations between Baghdad and Damascus are showing some signs of improvement, but that is not to say that the two Ba'athist states are likely to move sufficiently close to permit true integration of tactics and doctrine between their armed forces. While Iraq has had close relations with Jordan, and may, indeed, have training elements there now, the opportunities for that relationship are limited. Jordanian force capabilities are ebbing, and Israel is ill-disposed to permit significant foreign military presence in the Kingdom. In the words of Deputy Foreign Minister Benjamin Netanyahu, "Jordan is Israel's strategic depth. The crossing of the Iraqi-Jordanian border by Iraqi forces in strength would be a casus belli." In such a case, mobilized Israeli forces might quickly overrun western Jordan. Leading elements of the Israeli active force might meet the Iraqis east of Amman,
delaying their advance. In any event, the Jordan Valley would pose a daunting inhibitant to any force attempting to attack Israel from the east.

ISRAEL VS SYRIA

Like most others, Syria has taken note of the importance of high technology intelligence gathering and command and control systems in the performance of coalition—particularly American—forces during the Gulf War. The Syrian leadership can be expected to internalize its observations in this regard, and Syrian forces may become substantially more sophisticated than they have been in the past. Very likely, Syria will acquire such equipment as remotely piloted vehicles (RPV) for reconnaissance, together with appropriate data links and computers to assist in target selection and fire direction. Further, it should be expected that the Syrian air defense system will undergo significant enhancement to improve its performance against Israeli air attack.

There is a rough numerical equivalency of Syrian and (mobilized) Israeli forces in the air, but the equivalency is deceptive. Two-thirds of Syria's tactical fighter squadrons are designed for air defense, leaving but a fraction for close support of ground forces. In contrast, virtually all Israeli fighters have a ground attack capability, and four squadrons are dedicated to that purpose.

Nevertheless, Israelis evidence concern that the IAF may be inadequate to support the ground forces for the first day or two of combat. Syrian air defenses and surface-to-surface missile launchers have high priority as targets for attack by Israeli aircraft. Operations against these systems, together with defense against hostile air incursions, are expected to heavily tax the capabilities of the IAF in the early hours of conflict. Further, as aircraft become more expensive to procure and maintain, the number of aircraft may diminish, while the number of missile sites may increase, expanding the size and types of target sets.\textsuperscript{113}

Offsetting the drain on Israeli air assets to some extent is the Israeli capability to maintain high sortie ratios in comparison
with the Syrians. According to one estimate, the IAF, with superior ground technical support, can generate a maximum of 4.5 sorties per aircraft per day. The Syrians, in contrast, can achieve but 2. Under sustained operations the Israelis can maintain 2.5 sorties per aircraft per day, as opposed to only 1 for the Syrians.\textsuperscript{114}

In the ground-based air defense area, Syrian forces exceed those of Israel by more than 3:1. While not valid for calculations of the correlation of forces because air defense missile batteries do not engage one another, the ratio is a strong indication of the importance which the Syrians attach to the Israeli air threat and of their emphasis on defensive capabilities. The Syrian air defense system is presently superior to most of those found in Warsaw Pact states in the mid-1980s.\textsuperscript{115}

The balance of air and air defense forces between Israel and Syria indicates that both sides are comfortable with the notion of conducting the air battle primarily over Syrian territory. For the less well-trained Syrian aviators it facilitates ground control of operations and maximizes chances for pilot and crew recovery in case of being shot down. For the Israelis, it minimizes chances of casualties in the homeland. However, if a third party, such as Saudi Arabia or Iraq, were to assume a major role in an Arab-Israeli conflict, the air action might take place over a substantially wider area.

The most obvious asymmetry on the ground between Israeli and Syrian forces is that of the size. However, others merit mention. Syria has almost twice as many artillery tubes and rocket launchers as Israel. Israel, on the other hand, has eight times as many armored infantry vehicles (albeit many of old design). Further, while the bulk of Syrian artillery is towed, more than half of Israel's is self-propelled. The Syrians are apparently attempting to correct this imbalance with the purchase of 250 self-propelled pieces from Russia, as noted above.\textsuperscript{116} Clearly, the Syrians look to firepower as the key to battle management, while the Israelis, in accordance with their doctrine, look primarily to offensive maneuver by combined arms forces.
The impact of these differences is to suggest that while the Syrians are more defensively structured than the Israelis, their strength lies in a capability for a quick strike with heavy punch. If they were to seek a resolution of the Golan Heights issue by force, they would need to mount a quick strike before the Israelis had time to mobilize or to bring their air power to bear on the ground battle. If the Syrians were successful in driving the Israelis from the Heights in less than 24 hours, they might be able to hold their gains until the United Nations, or other outside authority, could freeze the action. Neither side has the capability for sustained intensive combat. Both rely highly upon foreign sources for supply.

From the Israeli point of view, the Golan Heights continue to pose problems for military operations. The density of Syrian fortifications and the constrained area for maneuver raise the specter of heavy casualties, a factor which carries particularly negative connotations for Israel with its small population base. These considerations also raise the question of alternative avenues of attack.

Lebanon provides some answers. While the Bekaa Valley is narrow and defended by some 20,000 Syrian troops and Syrian-backed guerrillas, it represents a strong alternative for a highly mobile force. A concerted air-ground attack northward to the Beirut-Damascus road, perhaps assisted by airborne or airmobile assault on the highway pass over the anti-Lebanon mountain range, could place Israeli forces in a commanding position overlooking Damascus, effectively outflanking the bulk of the Syrian Army. Israeli air, once it had overcome the Syrian Air Force, could probably prevent significant Syrian ground reinforcement of the Bekaa.

Still another possibility would be Israeli use of the assault routes followed in the 1982 campaign leading to Beirut. Assisted by small amphibious landings, the Israelis could force their way forward until they were on the Damascus highway again, and follow this route eastward until they were on the high ground behind Damascus. While longer, this course might minimize confrontation with the 40,000 Syrian troops, believed to be in Lebanon, until the final phase of the operation.
Whatever the course of the conflict, major considerations such as the integrative quality of forces, doctrine, and topography, clearly favor Israel. Nevertheless, the Syrian capability for sudden, limited notice attack, and the rough equivalency of designated force potential (DFP—see Chapter 3) which may develop by 1996, cannot be dismissed. This is particularly cogent considering Israel's concern for avoidance of casualties. The threat of Syrian missile attacks on Israeli urban areas could constrain Israeli air operations to some extent. The possibility of fighting a battle to a draw, or some sort of political stand-off, might appear sufficiently attractive to the Syrian leadership to prompt such an attempt.

ISRAEL VS EGYPT

Armed conflict is not expected to occur between Israel and her southern neighbor in the remainder of the century. Both countries have strong interests in maintaining the peace—even if, as some critics characterize it, it were to remain little more than a “cold peace.” Nevertheless, parties on both sides of the border recognize that circumstances could change, particularly under stimulus of a sudden change in one of the governments, such as by assassination or coup.

Military actions would likely depend heavily upon how a conflict might break out. A political “bolt from the blue” could find both armies ill prepared. The accession to power in Cairo of radical elements intent upon resuming the struggle against Israel would generate shock waves that could sharply escalate tensions and perhaps precipitate hostilities with little time for planning. In that case, Israel might have an advantage, considering its superior mobilization system. The Israeli Air Force would likely play a dominant role initially. It might attack Egyptian airfields and command and control centers and would probably attach high targeting priority to any Egyptian ground forces attempting to move east of the Sinai mountain passes.

On the ground, the first indications of hostilities could prompt moves by both sides to rush into the central Sinai to seize or secure the passes as early as possible. The Israelis might hope to trap some Egyptian forces east of the passes,
and to destroy them by air and ground attack. An Egyptian expedition in force across the Israeli border would be a very risky venture because of the distances to be traversed and the difficulties inherent in maintaining the force. The lines of communications (LOC) running across the canal, through the passes, and across the desert would be highly vulnerable to air attack. The Egyptians would also find that they faced a rather broad front, without much opportunity for the preparation of forward defensive positions. In all likelihood, considering superior Israeli capabilities for mobile warfare, they would be playing into the enemy's hands.

Instead, the Egyptians might choose to base a defensive line on the central mountains. However, unless they could deploy sufficient air defense units to the area before the IAF began its strikes, they might find themselves in a precarious position. Their LOC would still lie across the canal, with likely bottlenecks in that area.

If, on the other hand, the Egyptians based their principal defense line on the Suez Canal, they might realize somewhat greater chances of success. Certainly they learned the lesson of retaining a mobile reserve west of the canal from the 1973 campaign. How the battle might develop as the Israelis again closed on the canal is highly conjectural.

A less precipitous change in Cairo or determination to alter policy with respect to Israel might generate a more careful alteration in Egyptian military posture. Depending upon its interpretation of the course of events, the Egyptian high command might seek to reinforce the central Sinai secretly in anticipation of conflict at some time in the future. For its part, the Israeli leadership would probably mount its own effort, intensifying intelligence gathering activities over the area. Israeli reconnaissance aircraft, accompanied by protective air superiority fighters, might penetrate Egyptian airspace as far as the Gidi and Mitla Passes, and possibly to the Suez Canal. Any Egyptian troop concentrations detected above those permitted in the 1979 Sadat-Begin treaty would prompt loud protest from Jerusalem, and possibly trigger Israeli air strikes on some troop concentrations. (No more than 22,000 fully equipped Egyptian troops are permitted between the Suez...
Canal and the mountain passes in peacetime, and no more than 4,000 lightly armed border guards are permitted east of the passes.)

If the new Egyptian regime showed an inclination to persevere in its preparations, Jerusalem might feel compelled to escalate the action, at least to the level of a limited air offensive, possibly followed by a degree of national mobilization. If, however, the Israelis did not detect, or were unable to document, illegal reinforcement of the Sinai, they might choose to reinforce the border area, backing it up with a low-level partial mobilization.

Of high interest to Israel would be the threat of surface-to-surface missiles from Egypt. Egypt possesses SCUD-Bs, which, if moved east of the canal, could reach communities in southern Israel. Also, Egypt was a participant, with Argentina, in the development of the 900-km-range Condor II missile, and undoubtedly acquired a measure of expertise from that experience. It might be able to acquire and operate longer-range weapons from China (such as the CSS-2) or other suppliers. A change of policy in Egypt toward Israel would also likely open doors to other Arab stockpiles and technology, perhaps permitting development of an indigenous weapon with assistance from neighbors.

Israeli experience with the psychological impact of Iraqi SCUD missiles in the Gulf War would place heavy pressure on Jerusalem to give high priority to the location and destruction of any weapons capable of reaching Israeli soil in a future conflict. The pressure might be so high that any extraordinary preparations detected around potential launching sites or missile storage facilities could precipitate preemptive counterforce strikes by the IAF.

If Israel were determined to repossess the Sinai peninsula, or even part of it, to protect itself from any future aggression, it could not count on being able to recover it at the peace table. The price in all probability would be the cost of a ground offensive carried at least to the extent of Israel's territorial desires—perhaps to the passes and to Sharm el Sheikh, or perhaps to the canal. Certainly Israel would have a strong case
in international forums for an extended occupation of the area, or even annexation, if it was obliged to conquer it for a fourth time.

Once joined, the course of battle would depend in part upon the success of Israel’s “befuddlement” weapon and political factors extant at the time. Overall, it would seem that Egypt’s military risks would be larger than Israel’s in the early phases of such a conflict, and its opportunities fewer. However, recognizing Israel’s dependence upon the early defeat of an opponent and termination of the fighting, it would be unwise to venture a forecast of the outcome.

**ISRAEL VS JORDAN**

Jordan is not a serious threat to Israel, either alone or in conjunction with other forces. On the contrary, its location along the length of Israel’s eastern border provides Israel with a measure of early warning against attack by a third party, via Jordan. We have noted how prominent Israeli leaders refer to Jordan as Israel’s “strategic depth.”

We should recognize, however, that Jordan’s complexion could change. Some Israeli leaders view Jordan as “the Palestinian state,” and suggest that Palestinians in the occupied territories desirous of living in a country of their own should move there.\(^{118}\)

Jordan is already heavily populated with Palestinians, and additional concentrations of immigrants from the West Bank and Gaza could destabilize the Hashemite throne. The result could be the transformation of a weak, inoffensive (if formally hostile) neighbor into a hotbed of revanchist, perhaps fundamentalist, hatred, bent upon the destruction of the Zionist state. Israel’s security problems would doubtless multiply, with little prospect for restabilization in the foreseeable future. Not unlikely, the difficulties which Israel has found on its northern border with Lebanon would be replicated in the east, but with a much longer border to patrol. In short, pressure to force Jordan into a Palestinian mold could prove counterproductive for Israel.
ISRAEL VS AN ARAB COALITION

In the event of a reconstructed combined Arab front against Israel, it is likely that the Golan Heights would be Israel's first territorial concern. In the south the great mass of Egyptian forces are west of the Suez Canal, and most would have to travel over 150 miles to reach Israel. To the east, Jordan has been severely weakened, and whether or not the West Bank were under Israeli control it could be quickly reinforced or reoccupied. The Jordan Valley would form a formidable barrier to hostile attack from that quarter even if outside forces were employed. The Arabs might be able to mount an aerial or missile war with Israel for a short period of time, but they would be in no position to prevent the reoccupation of the West Bank or to dislodge Israeli forces once deployed. In the north, by contrast, Syrian forces are virtually in attack positions, and would have to traverse no more than 25 miles to the edge of the Golan escarpment. The Israelis faced a decision regarding priorities between their northern and southern fronts in the 1973 war, and resolved it in favor of the north (Golan Heights).

We have examined the case of conflict between Israel and Syria; we must also consider the case of Israel vs Syria and Iraq in combination. If the two Arab countries were able to develop a close cooperative relationship, the mid- to long-range implications for Israel could be dangerous. Together with Lebanon, Syria and Iraq have a potential for building a formidable military alliance, complete with mass destruction weapons and delivery systems. Moreover, they could hold a frontage of about 80 miles with Israeli-held territory and have a strategic depth of some 400 to 600 miles.

Syria's new strategy emphasizing long war and operations in depth may attach lower importance to the defense of Damascus under some circumstances. Conceivably, by falling back upon the desert space and the mountains to the north, the Arab partners could make it far more difficult for Israel to achieve decisive victory on its own. Barring major power intervention, a conflict might drag on for months, or even years, sapping Israeli strength.
Israel might avoid being dragged into protracted war in depth by foregoing major ground assaults. Raids might be staged when worthwhile targets presented themselves, but the Israelis may prefer to avoid entering Damascus and to limit their ground operations far beyond it. Principal reliance for suppressing Arab operations would likely fall to the IAF and to special operations forces for mounting combat raids on the ground. MDW might or might not be employed. If they caused many casualties or came into general use, there would be heavy pressure upon the Israeli leadership to turn to its nuclear weapons.

While the United States and its allies might not be under great pressure to intervene in the early stages of a conflict of this sort, it seems likely that pressures would mount the longer it continued. As soon as it became apparent that Israel could not terminate the fighting on its own terms, or as soon as MDW came into play, strong calls from many quarters for U.S. or Western intervention and suppression of the action would be likely.

More likely than not, the force requirement for intervention at this point in the conflict would be large—perhaps on the order of the force deployed for the DESERT STORM operation. While it might not be intended that the intervening force fight its way in, it would have to be prepared to do so. Similarly, it might have to defend itself if it were perceived as primarily aiding the interests of one side of the conflict or the other.

An important point in this analysis is the probable capability of Israel to hold its own against an Arab coalition. The outcome might not be substantially different if Iran were to take part with conventional forces. Iran could contribute many types of forces, but its missiles and aircraft would probably be most telling, even if they were only conventionally armed. Iran's entry could be more serious if it entailed the addition of a nuclear deterrent force to the anti-Israel coalition. Such a development might either dissuade Israel from employing its nuclear weapons or prompt her to launch preemptive strikes.

Much would depend upon the general strategic situation and the attitude of the United States and its Western allies. If
the war were otherwise progressing well, and U.S. forces were close at hand, Israel might be persuaded to forego its nuclear option. If, on the other hand, the war were not going well and the chances of U.S. or Western intervention remote, the likelihood of nuclear warfare would be greater.

IRAN VS IRAQ

Hostilities between Iran and Iraq are a distinct possibility within the time frame of this study. There are many outstanding issues between the two countries, and Iran may sense its current advantage for preparing for further fighting while Iraq is under UN supervision and sanctions. As we have seen, there is a prospect for Iran to overtake Iraqi military strength by 1996. Further, the Iranian leadership has specifically identified Iraq as the purpose and target of its on-going arms buildup.

As became clear in the progress of the earlier Iran-Iraq war, natural barriers tend to contain military operations in the border region between the two countries. Iraqi swamps west of the Tigris River and the Zagros Mountains to the east inhibit deep penetrations by either country into its neighbor. To what extent the Iranian buildup might overcome this factor remains to be seen. It is clear that, absent third country intervention, Iran could dominate the northern end of the Gulf and perhaps the airspace overhead. It might also dominate any revisitation of the "war against the cities," with "Backfire" bomber raids as well as heavy missile attacks on central Iraq.

Tehran might also calculate that the relationship between the Shiia in southern Iraq and the Baghdad government had been so poisoned by Saddam Hussein's suppressive actions in the wake of the Gulf War that the issue could be exploited to Iranian advantage. Iran might see an opportunity in this, not only to even the score with its old antagonist, but to "liberate" permanently a sizable section of Iraqi territory. The creation of a friendly Shiia buffer state between Iran and Iraq might be an attractive enough goal to justify renewed conflict.
IRAN VS SAUDI ARABIA

Conflict between Iran and Saudi Arabia would be quite unlikely without involvement of one or more of the other GCC states, and perhaps all in concert. Iran has territorial claims on the west side of the gulf, perhaps providing some motive for military action. If the United States were to substantially reduce or to eliminate its presence in the area for any reason, the possibility of conflict might be considerably higher than it is under present circumstances.

An Iranian incursion onto the western littoral could occur by three basic routes. One stretches through southern Iraq into Kuwait and Saudi Arabia; a second crosses the gulf, aimed perhaps at Bahrain or Qatar; while a third runs across the Strait of Hormuz to Oman. Either of the latter two would require both air and sea superiority by Iran.

The first route, via Iraq, might be feasible in the aftermath of a successful campaign against Baghdad. Conceivably, a friendly Shiite buffer state could assist Iranian forces transiting the country, perhaps providing some measure of security and protection for the LOC. The advantage of this route would be the ability to move heavy armored forces in sufficient strength to engage Saudi armor.

The cross-gulf route might be useful for a limited campaign to seize isolated objectives. Iranian sealift is capable of transporting about one armored brigade in a single lift. Shore bombardment and modest air defense might be provided by Iran's three destroyers and five frigates. Newly acquired Kilo class submarines might protect the convoys or be used to close the Strait of Hormuz during the operation. A rejuvenated Iranian Air Force would bear a heavy burden, with responsibilities for air cover, close support to ground forces, and troop airlift.

Iran has one airborne and four special forces brigades which might participate in the initial assault. It also has a merchant marine of some 133 ships which could supplement its amphibious vessels. Unless, however, the Iranian Air Force could neutralize the Saudi Air Force—which does not seem
particularly likely considering the sophistication of the latter — the success of the operation is difficult to foresee.

An assault operation across the strait would be simpler because of the shorter distances involved. It might, however, ultimately prove more difficult. The UAE and Oman have much more powerful forces than the other small GCC states, and the landing areas could not be isolated as easily as beachheads on either Bahrain or Qatar. If Iran could seize a lodgement in Oman and hold it long enough to introduce sufficient force to overcome the resistance, it might ultimately prevail, but the operation would be high risk. Saudi air forces could be brought to bear on the landing sites in short order, and Saudi armor might arrive before the local forces could be subdued.

In sum, a major attack by Iran on its Arab neighbors does not seem to be a particularly easy matter, nor does it appear to offer an opportunity for quick seizure of a digestible objective (e.g., Bahrain). If attempted, it might be in the wake of a successful campaign against Iraq, perhaps simultaneously with a diversionary effort by land against Kuwait while the main effort was mounted across the gulf.

None of this, of course, considers the possibility of major power intervention. As long as the United States and its major allies are not otherwise engaged in conflict elsewhere in the world, and as long as access to oil is deemed critical to Western security, the likelihood of overt Iranian aggression against the GCC states is low.

**IRAQ VS SYRIA**

Bad blood between the Damascus and Baghdad dictatorships set the nations at opposite poles in the Iran-Iraq dispute, and again in the Gulf War of 1991. The sour relationship between two of Israel’s most powerful adversaries has been a boon to Jerusalem, minimizing chances of a well-coordinated action against Israel’s defenses in the Golan area. While there are some signs of rapprochement between Syria and Iraq, the possibility of conflict at some time before the turn of the century cannot be ruled out. If it were to occur,
it could, indeed, be the “mother of all battles,” so close to Saddam Hussein’s heart.

As we have noted, Syria’s conventional force power presently exceeds that of Iraq by a substantial margin, and the gap is likely to widen as long as Iraq remains under UN sanctions. Nevertheless, Syria could have difficulty bringing forces to bear on its eastern frontier without dangerously depleting its position on the Damascus plain and possibly compromising its position in Lebanon. A realization of its precarious position between Iraq and Israel may be a principal motivation now for Hafez Assad to seek some accommodation with Baghdad.

Barring such, Syria might seek cooperation from Iran to at least pin down sufficient Iraqi forces to permit Syria to execute an offensive against western Iraq. Baghdad is about 200 miles from the Syrian border, offering a feasible military objective. As long as Syria could maintain control of the air, its supply lines, including possible barge traffic on the Euphrates River, should be reasonably secure. It would not, however, have a rail line in its LOC unless it chose the Tigris valley as an attack route.

Topographically, one should note the location of the large lakes west of Baghdad which might tend to inhibit east-west ground movement. The lakes could play an important part in either a defense of Baghdad or in protection of an invading force frustrated in its initial assault of the capital and seeking a fall-back position for recuperation. In any event, the lakes would make a useful objective area in their own right. A penetration to that depth toward Baghdad likely would render advanced Iraqi positions to the south untenable, prompting large withdrawals from the westernmost extreme of the country. In this case, Iraq would be denied Scud missile launching sites within range of Damascus.

The attitude of third parties toward such a conflict is uncertain. Depending upon the circumstances surrounding the origins of the dispute, and the political objectives of the participants, other parties, such as Israel or Saudi Arabia, might elect to stand aloof. On the other hand, they might desire to lend support to one side or the other, or even succumb to
temptsations to take advantage of perceived opportunities. Israel, for example, might wish to clear Lebanon of hostile guerrilla (Hizbullah) forces, or even to press Syrian forces to withdraw. Intervention might well carry more negatives than positives for either Israel or Saudi Arabia in an Syrian-Iraqi conflict, but that is not a question likely to be resolved in the near future.

IRAQ VS SAUDI ARABIA AND THE GCC

Clearly this is the contingency of greatest Saudi concern. Riyadh is aware that the day is approaching when UN controls over Iraq will be lifted, and unless they are replaced by some other regime for peninsular security, the future could resemble the past—especially if Saddam Hussein remains in power. The Iraqi-Kuwaiti border flash point was given fresh prominence when Baghdad rejected the boundary established by the UN between the two countries in May 1992.119

The most dangerous aspect of the conflict might be the lessons which Baghdad learned from the 1991 Gulf War. As we have noted, the Iraqis have apparently gained an understanding of the importance of quality forces. Presumably, they have also learned the importance of the classic principle of the offensive. Iraq may be far less disposed in the future to limiting the scope of its operations once it is committed to action. Unlike 1990, a second Iraqi offensive could entail an effort to mount high speed penetrations along the coast as far south as Qatar, or southwestward toward Riyadh in expectation of destroying the Saudi armed forces.

The distances, however, are daunting: approximately 400 miles along either axis—twice the distance covered by the DESERT STORM "left hook" maneuver. Further, Iraq would have to deal with substantially stronger and more sophisticated Saudi forces, and, in the case of a coastal drive, would have little or no support from the sea.

Most damaging from the Iraqi point of view would be its inability to control the gulf or to prevent outside intervention by a major power or a reconstructed UN coalition. Rapid seizure of the entire eastern littoral of the Arabian Peninsula would
seem beyond Iraq's capability before the year 2000. Unless Saudi Arabia and its GCC allies were to suffer severe internal disruptions impinging on their ability to defend themselves, they should be able to slow the Iraqi advance sufficiently to permit Western expeditionary forces to arrive in force before the Iraqis reached their principal objectives.

The situation would not be substantially different if Jordan and Yemen were involved—as some observers apparently believe might have occurred in the Gulf War had Iraq been more successful. The interests of those countries are in rather more limited objectives, and their forces are unlikely to be capable of much more than local operations.

SYRIA VS JORDAN

Syrian-Jordanian relations have traced an uneven course. At their worst, in the 1960s, attempts were made on King Hussein's life—on one occasion by Syrian assassins with explosives (which killed the prime minister) and on another by Syrian fighter aircraft when the monarch attempted to pilot his plane over Syrian territory. In 1970, Syrian armored units invaded northern Jordan under the guise of the PLO. An inspired Jordanian defense and some Soviet pressure on Damascus resulted in their withdrawal.

The greatest deterrent to a renewed Syrian invasion is probably the Israeli policy, previously noted, of treating such an event as a cause for Israeli military action. The Yarmuk River bed is a natural defensive barrier between Jordan and Syria in the vicinity of Irbid, overlooking the juncture of the Yarmuk with the Jordan River. To the east, however, the terrain is quite open and has numerous north-south arteries which would support invasion forces. Jordan, itself, has modest forces, but might be able to delay an invader, if it were so inclined, until a third party could intervene and resolve the matter.

SAUDI ARABIA VS JORDAN

Riyadh gave sufficient credence to rumors of Jordanian attack during the Gulf War to poison relations between the
kingdoms for the foreseeable future. In addition, competition has been keen between Amman and Riyadh over the legitimacy of claims of responsibility for the maintenance of Moslem holy sites in Jerusalem. Mutual distrust is strong. If there were no desert between the principal populated areas of the two countries, border skirmishes might have become a post-DESERT STORM staple.

Nevertheless, the likelihood of general warfare between the two countries is remote. There are no significant, militarily attainable objectives for either side acting alone. The rumors of attack from the west alive in Riyadh in 1990 arose in context of Saddam Hussein’s call for pan-Arab action, and are not likely to be repeated within the time frame of this analysis. While we should take note of the existence of a possible flash point on the Saudi-Jordanian border, the likelihood of its ignition seems negligible.

SAUDI ARABIA VS YEMEN

Somewhat more worrisome is the possibility of a clash between Saudi Arabia and its more populous (estimated 11.5 to 13 million persons) neighbor, Yemen. As with Jordan, the Saudis harbor strong suspicions of Yemeni collusion with Iraq during the Gulf War to settle the long-simmering border dispute between Riyadh and Sanaa.

The Saudi government has warned Western oil companies to cease exploration efforts in the disputed border area with Yemen. The warning is believed to include a threat of military action if it is not heeded. Further, the Yemeni press has reported actions by Saudi agents to destabilize the regime of Lieutenant General Ali Abdullah Saleh by promising Saudi citizenship to border-area residents if they support Saudi territorial claims. These recent developments come in the wake of the Saudi expulsion of an estimated 700,000 to a million Yemeni workers in the kingdom for their alleged support of Saddam Hussein. The economic impact on Yemen has been severe.

The stage has been set for low-level, possibly guerrilla, conflict between the two countries. While there is no indication
of such intent on the part of either party at the present time, this potential flash point merits particularly close observation.

The Yemeni ground forces have certain advantages. They are larger than those of Saudi Arabia and they are composed of seasoned veterans. Further, they are concentrated in the area of potential conflict, while Saudi forces largely are deployed to deal with threats from the north and east, and with internal disturbances. It would be difficult for the Saudis to concentrate sufficient force in the southwestern corner of their country to match the Yemenis.

On the other hand, the Saudi Air Force is substantially larger and far better equipped than its Yemeni counterpart. If the issue could be settled in the air, the odds would clearly favor Riyadh, but that seems highly unlikely. The Saudis have little ground capability for bringing a conflict to a successful conclusion if the Yemenis were willing to sustain the casualties which an air war might entail. Hence, the prospect for settlement of the territorial dispute by either party by force of arms is not good.

An understanding of this may have led to an agreement in June 1992 by the Saudis and the Yemenis to enter negotiations over their differences. Considering the poisonous relationship which has prevailed between the two powers, an armed conflict on the border, should it come to that, could drag on for as long as the parties wished. The negotiations appear the wiser course for both.
CHAPTER 5

CONCLUSIONS

INTRODUCTION

The foregoing chapters of this study have reviewed the perceptions of indigenous leaders and Western analysts regarding the security regime in the Middle East. They have also presented estimates as to how the various states may develop their military components in the latter years of the decade. Finally, they have identified potential flash points between countries known to harbor grievances toward one another, and sketched possible military scenarios. This chapter draws conclusions from the preceding review of the relative military power of the principal states.

ISRAEL

Israel stands alone in the Middle East as a regional superpower. While its geographic and demographic bases are small, it has a skilled, educated and militarized population and a close working relationship in security matters with the United States. There is little doubt that Israel possesses a large number of nuclear weapons and the means for delivering them on all potential adversaries. Israel's nuclear stockpile may have been built upon an expectation of possible need for deterring Soviet aggression in the Middle East. Considering the demise of the Soviet Union, the stockpile may now exceed reasonable requirements.

While the possibility exists that other states in the region could also acquire nuclear weapons in the latter years of the decade, Israel has active programs for both offensive and defensive measures to counter their use. Further, it is likely that Israel's intelligence and defensive programs will employ layered elements, to include early detection of launch and
tracking, and multiple interceptors, for high assurance of destruction of incoming missiles.

In the area of conventional arms, Israel appears adequately structured and armed to engage and defeat virtually any combination of hostile neighbors bent on attacking her defensive perimeter. Israel maintains a large proportion of its population under arms and has a mobilization system which has proven itself in past conflicts. The IAF, which garners 70 percent of the military procurement budget, is maintained in a particularly high state of readiness, and is unlikely not to respond to warning. Further, the long distances between most of the main concentrations of Arab ground forces, such as in Iraq and Egypt, and the Israeli frontier, and the sparsity of road and rail nets would impose high risks upon those forces should they attempt to move closer. Only Syrian forces appear deployed and postured for launching a short warning attack.

While the greatest military threat to Israel lies in current trends towards proliferation of weapons of mass destruction and long-range delivery systems among potential enemies, there is another, less obvious danger. A combination of opponents prepared for a lengthy campaign could draw Israel into a prolonged conflict for which neither the IDF nor the Israeli economy would be prepared. An alliance between Syria and Iraq would appear to pose the most serious prospect in this regard. Barring intervention by the United States or other outside powers, Israeli forces could be drawn deep into hostile territory, beyond the capabilities of IDF logistical systems or the national infrastructure to support. The Jerusalem leadership should be wary of temptations in such circumstances to push the ground forces of the IDF beyond the reach of their tether.

Besides its principal missions, discussed above, the IAF suits Israel well for executing retaliatory raids against hostile military and guerrilla units attacking or harassing Israeli settlements or security forces. However, there has been a weakness in Israeli strategy in this regard. Until the recent change of government in Jerusalem there has been a notable lack of any “carrot” to match Israel’s military “stick.” With the exception of monetary inducements to members of the South
Lebanon Army, incentives to neighboring peoples and states
to cooperate in promoting stability in the area have been
overwhelmingly negative.

In early July 1992, shortly after his election to office, Prime
Minister Rabin signalled a sharp change in policy. He argued
publicly that Israel could do much to combat anti-Semitism
worldwide through fair treatment of Israel’s Arab minority and
of Palestinians in the occupied territories. Clearly the remarks
also conveyed an incentive to the Palestinians and the
populations of neighboring states to adopt more cooperative
attitudes toward Israel in the future. Implementation of the
policy could substantially improve the chances for peace in the
Middle East.\footnote{122}

IRAQ

Iraq has slipped in its standing in the Middle East region,
both as a result of its defeat in the Gulf War and of the UN-
mandated destruction of facilities for manufacture of mass
destruction weapons and long-range missiles. Whereas Iraq
may arguably have had the preeminent ground force in early
1991, its army has deteriorated to a point of rough parity with
that of Egypt, and substantially below that of Syria. Depending
upon the duration of UN controls, and the concentration with
which neighboring countries pursue their current arms
programs, Iraqi forces could slip further behind as the decade
advances. Possibilities exist for Iran, and even Saudi Arabia,
to muscle ahead of Iraq in overall military strength by the year
2000.

Iraq has retained adequate forces for maintenance of
internal control and for protection of the regime. It probably also
has the capability to again overrun Kuwait and to mount large
raiding expeditions into either Iran or Saudi Arabia. It is
deficient in air and naval forces, however, and would be
severely strained to support ground operations far from its
borders for any length of time. Operations in Saudi Arabia
would be particularly difficult to sustain under a
well-orchestrated air counteroffensive by Riyadh.
Iraqi forces are poorly postured or prepared for participation in an attack on Israel, and may remain so for some years after UN sanctions are removed, or possibly almost permanently if an effective arms control regime can be devised to limit Iraq's acquisition of mass destruction weapons and long-range delivery systems.

It is unlikely that Iraq will recover its former stature as a military power of influence before the year 2000. It could, however, regain a measure of strength if it were to find a kindred state with which to coordinate its policies and actions. Of its four major neighboring states, Syria would seem to offer the greatest opportunity for partnership. Baghdad's recognition of the possibility may lie behind recent indications of detente between the traditionally hostile Ba'athist powers. Should an alliance develop, it would probably raise concerns for the security of royalist regimes in the region. It could also have an impact on the Arab-Israeli balance by stiffening Syria's hand, and heightening concerns in Israel.

It is not clear that the military balance would be immediately affected. It would take time for Iraq to rebuild its forces and for the new allies to structure a common or coordinated defense. Communications would be a significant problem, especially where time critical information had to be passed to multiple subscribers in standard format with high fidelity, such as with air defense nets. Over time, of course, the threat to Israel could grow. For its part, Israel might establish specific thresholds beyond which it would not permit the cooperation to develop without incurring risk of Israeli attack.

SYRIA

Syria's military strengths lie principally in its strong national leadership and its large armed forces. The forces are deployed in positions from which they could shortly undertake combat operations and are adequately equipped for short-range missions. Further, they are being upgraded with new equipment, primarily of Soviet design, and may narrow the gap in combat effectiveness with Israel in some dimensions before the end of the decade. Moreover, Syria's efforts to improve its
missile and chemical arsenals may significantly strengthen Damascus' hand vis-a-vis Jerusalem as the years progress.

There is little likelihood, however, that Syria can attain its previously announced goal of equivalency with Israel in a broad military sense. Indeed, as noted above, Syria may have changed its strategy. Its principal objective now may be the more modest one of deterrence against Israeli attack. Syria has lost its superpower patron, and it continues to be plagued by a necessity to place politically reliable figures rather than the most competent contenders in key leadership positions. Also, the forces continue to lack integrative, combined arms sophistication. However advanced Syria's air defenses, for example, its limited industrial and training bases require that the defenses be installed on a "turn-key" basis, with minimal adjustment for local circumstances. There is little opportunity for either hard or software adaptation to special problems. As a consequence, for the rest of the decade Syria is likely to remain vulnerable to Israeli "befuddlement weapons" designed to severely degrade deployed systems with known characteristics.

EGYPT

Like Syria, Egypt possesses large armed forces, but they tend to be less well-equipped. Egypt's territorial security probably rests as much upon its desert expanses as upon its army. The Sinai to the east and the Western Desert provide a measure of insulation from potentially troublesome neighbors. As noted in this study, prominent concerns include an unstable Sudan to the south, which could conceivably meddle with the Nile waters, and internal threats from Islamic fundamentalist factions.

Egypt's concern with Israel is less one of border incursion than of simple strategic imbalance. Cairo deplores what it considers Israeli supremacy in military matters, fearing that its strength will continue to encourage Jerusalem to seek military solutions to political problems.

From its own perspective, Cairo fears that it, like others, will be driven down a path toward the acquisition of mass
destruction weaponry, whether it likes it or not. Failing this, Egypt’s military potential is unlikely to shift significantly with respect to other powers in the region during the ensuing decade. As long as it remains dependent upon the United States for the bulk of its arms procurement, and oriented toward modernizing its forces with American equipment (e.g., M1A1 tanks), it can expect to keep abreast of regional developments, but the likelihood of a change in its relative position will not be great.

IRAN

Iran is engaged in a massive military buildup, apparently seeking parity with Iraq and a dominant position in the Gulf. It may also seek an influential position among the newly independent Islamic republics in the CIS. While there is speculation that it may moderate its fundamentalist fervor and perhaps restrain its agents overseas, it is clearly pursuing a path toward rapid modernization and expansion of its armed forces.

Iranian rearmament of its ground and air forces is no more remarkable than its efforts to rebuild its navy. Leading figures make no secret of ambitions to gain control of the Strait of Hormuz. Iran probably interpreted the reflagging of Kuwaiti tankers during the Iran-Iraq War as highly provocative, and is apparently resolved to insure that such circumstances do not occur unchallenged again.

Iran is clearly disappointed in the evolution of the post-hostilities security regime in the Gulf area. Tehran believes that it should be a member of the GCC—and the most powerful member, at that. It probably blames Saudi Arabia primarily for its exclusion. As long as it is excluded, Iran probably also senses some necessity to design its forces for cross-gulf operations in the long run. Iran has territorial claims on the western shore, and the day could come when it would feel obliged to press the issue. An amphibious capability would strengthen its position. The acquisition of Tu-22M “Backfire” bombers would provide Iran a capability for mounting
disarming strikes against Saudi CSS-2 missile sites prior to an invasion attempt.

Iran appears to also harbor some ideas about conflict with Israel. The “Backfires” would provide substance to its inflammatory rhetoric. Clearly Tehran is uncomfortable with the current imbalance of strike capabilities vis-a-vis Israel and is not satisfied with waiting for the development or market availability of longer-range missile systems with sufficient accuracy to provide real military utility. It seems to seek at least a rudimentary offensive deterrent to Israeli attack by mid-decade.

SAUDI ARABIA

Like its gulf neighbor, Iran, Saudi Arabia has undertaken an ambitious rearmament program. Unlike Iran, however, the effort seems more clearly defensively oriented. There is no apparent determination to build a capability for interdicting traffic in the Gulf. Riyadh’s model is the defensive posture assumed by the Gulf War coalition prior to the UN decision to liberate Kuwait.

This represents a major strategic change for the Saudis. The former reliance on payoffs of friends and enemies has been shifted to a reliance on armed force. Further, the orientation of the effort is virtually a full circle. While the principal concern is northward, Yemen, Jordan, Iraq and Iran are all perceived as potential adversaries.

Riyadh values its GCC partnership, but is loath to invest much capital in the organization as a military alliance. Saudi conservatism shies away from committing Saudi forces to supranational control, even if the kingdom is the dominant power. Further, it suspects Iranian intentions and is not anxious to create a security regime which might come under heavy pressure from Tehran for membership and possible competition for leadership. Riyadh is more comfortable with the perpetuation of a loose association of minor states in which each develops its forces as it sees fit.
Saudi Arabia is sympathetic to the Palestinian cause, but was incensed by the PLO’s pro-Iraq attitude during the Gulf War. The Jordanian and Yemeni attitudes were similarly unsettling, and have poisoned relations between the capitals of these countries and Riyadh—possibly for the remainder of the decade (some say a generation).

Fulfillment of the Saudi arms program is not likely to prove as simple as it might be under different government policies. Like a number of other states in the region, Saudi Arabia tends to select its leaders primarily from among the royal family and its close supporters. Political reliability is deemed of first importance, even though it may result in less than first class leadership. The expansion of the armed forces will create additional command positions for which there may not be sufficient interested talent among trustworthy groups. If certain entrenched practices are not changed, the quality of leadership may erode further.

The possibility of Iranian acquisition of “Backfire” bombers must be unsettling for Saudi Arabia. The speed and other attack capabilities of the aircraft pose a threat of potential disarming strike against the kingdom’s principal deterrent force, its Chinese CSS-2 ballistic missiles. The development is likely to increase Riyadh’s determination to acquire additional F-15 or other high performance interceptor aircraft and air defense systems.

However it develops, the Saudi arms program is not likely to lift the kingdom to the front ranks of military powers in the region. Nevertheless, the increase may be dramatic. Conceivably (if not particularly likely), with careful planning and judicious selection of weapons and leaders, Saudi Arabia could elevate itself to rough parity with a diminished Iraq. Coupled with enhanced forces among its GCC allies, by the end of the decade Riyadh could find itself with a substantial deterrent force against either Iraqi or Iranian aggression.

JORDAN

Jordan is in a period of military retrenchment, driven by both political and economic pressures. It appears to have lost both
its capacity and will to play a prominent role in regional affairs and to seek simple survival in a veritable ocean of unsympathetic neighbors.

If there is a strength in Jordan's military establishment it is more in its traditions and culture than in the observables. Under extended economic stringencies the combat effectiveness of its forces is likely to erode, and the nation's political stability may deteriorate concomitantly. For the present, the nation's security probably lies as much in the hands of Jerusalem as it does in Amman. Certainly any Arab neighbor contemplating action against, or through, Jordan would give first attention to the likely Israeli reaction.

Whatever the truth of allegations of continued Jordanian-Iraqi conspiracy, the effects on the regional military balance are probably marginal. While covert cooperation could conceivably contribute to some prolongation of Saddam Hussein in power, it is unlikely to fulfill requirements for rebuilding the Iraqi armed forces. It should be noted that in mid-June 1992 Iraq suspended all domestic air flights for lack of spare parts for the aircraft. Iraqi Airways Director General Noureddin Safi announced at that time that the airline had lost $200 million and idled 4,000 employees as a result of the UN sanctions.123

There is no indication that any of Jordan's neighbors perceive the Iraqi connection to be so dangerous as to prompt intervention. Jordan's ties to Iraq are important to both countries, at least in the short run, and would be difficult to eradicate completely in any event. With Jordan's large Palestinian population, sympathetic to both the West Bank and Baghdad, and without alternative sources of revenue, the government probably finds limited choices of action.

A greater danger would seem to lie in a prolonged period of ostracism for Amman from the West and enforced relationship with Baghdad. If Jordan finds no other useful connections, its dependence upon Iraq could deepen, and the Jordanian armed forces could fall increasingly under Iraqi influence. Considering Jordan's strategic location and historic
pro-Western orientation. It would seem wise for Western interests to minimize the estrangement of the kingdom.

THE SMALLER STATES

Of the five smaller gulf states, Kuwait, the UAE and Oman are mounting the greatest efforts to enhance their defense capabilities. Kuwait, unhappily situated in close proximity to two of the most powerful and most fearsome states in the area, faces the most daunting challenge. The others have better opportunities to match their forces to the magnitude and acuity of the threat. All five depend to some extent upon the United States for their security. However, as Saudi defenses improve, Riyadh may be able to shoulder greater responsibility for regional security.

Yemen and Lebanon are special cases, the one a client of Damascus, and a potential battle ground between Syria and Israel; the other more remote, but with a sizable population and a serious border dispute with a powerful neighbor. Lebanon is unlikely to be able to insure its own security in the remainder of the decade, but the combination of location and population provide Yemen with significant advantages against foreign aggression before 2000.

THE BOTTOM LINE

In sum, a net assessment of the military balance in the Middle East places Israel at the pinnacle of power, followed by a turbulent group of states, many of which harbor grievances with each other only marginally less serious than that which they nurture against Israel. Trailing Israel, but at some distance, comes Syria, hungry for recovery of the Golan Heights. Next are Egypt, with its large but obsolescent army, and Iran, scrambling ahead with ambitions for regional leadership. Below them fall Iraq, in decline under UN sanctions, and Saudi Arabia, awakened from its years of naivete to begin the process of building a credible military posture. The likelihood of peace in the region for the remainder of the decade may be greater than for conflict at any specific potential flash point identified in this study, but probabilities
diverge beyond that. Tranquility is not endemic to this part of the world.
CHAPTER 6

IMPLICATIONS FOR U.S. POLICY

The foregoing conclusions have important implications for U.S. policy in the Middle East. These are grouped into four major areas as follows.

ARMS CONTROL

The Middle East is continuing its dangerous path in the accumulation of weapons, and the pace is quickening. Most dangerous is the trend toward proliferation of mass destruction weapons and the means for their delivery over long distances. Efforts to restrain the growth are not likely to be effective unless they are perceived to be fair to all parties. No country or group of countries can be expected to forego security programs or measures considered vital to its survival.

It is important to remember that many aspects of U.S. experience in arms control negotiations in Europe do not transfer well to the Middle East. In Europe there were two major blocs, and, for most practical purposes, but two major parties to reach agreement. The Middle East, as we have noted, is multipolar, and the polarities are constantly undergoing change. The United States, in its negotiations with the USSR, found that both sides had expectations of mutual good. Both sought stability and security at lower levels of armament and expense. Moreover, as Yehoshafat Harkabi has pointed out, the negotiations were conducted between states that recognized each other and maintained diplomatic relations.124

The situation is quite different in the Middle East, particularly between Arabs and Israelis. Israel seeks security and peace essentially on the basis of the status quo. The Arabs, on the other hand, fear that peace and stability under current conditions would freeze Israel in a position from which it would have no incentive to withdraw from the occupied
territories. Instability and tenuous peace are basic tools for the aggrieved party to insure that the current division of territory does not become permanent. Consequently, the Arabs do not generally share the Western perception of arms control as an objective good. On the contrary, to many of them it smacks of a deceitful means for foreign (Zionist and "imperialist") interests to disarm the Arabs and to perpetuate perceived injustices.

Clearly, a number of the states, or factions within the states, have mutually exclusive agenda, particularly with regard to the order in which peace negotiations and arms (both conventional and mass destruction) controls should be addressed. There is no single order acceptable to all parties. And yet all of the issues must be addressed and contained. The community of nations cannot acquiesce to the continuation of dangerous trends while it searches for an overarching solution to difficult problems.

Some promise may lie in addressing problems simultaneously. Arms control, for example, can neither await political settlement, nor can it precede it. There is no fair way to order the issues. They must be undertaken together. As Egypt's Foreign Minister Esmat Abdel Meguid stated with regard to the chemical-nuclear chicken-or-egg question, "Any progress on banning chemical weapons is tied to the conclusion of a parallel ban on nuclear arms." And as Geoffrey Kemp pointed out with respect to high technology weapons, "...high technology items cannot in the last resort be decoupled from the peace process."125

If the United States is to play a useful role in the stabilization and pacification of the region, it must emphasize that no party can expect to be made completely secure unless all parties are secure. This does not mean that all combinations of belligerents must strive to become mirror images of one another—an absurd concept. What it does mean is that the United States, and possibly other major powers, must be prepared to play a balancing role where imbalances cannot otherwise be eliminated. Most prominent in this area is the matter of nuclear weapons. If nuclear balance is to be achieved, either Israel must surrender its lead, or some formula
must be devised guaranteeing the other parties in the region a measure of protection against nuclear blackmail.

The most fruitful path for investigation in this case may lie in the direction of a substantial reduction in the Israeli nuclear weapons inventory. If the quantity of weapons now held was based to any extent on deterrence of Soviet aggression, there should be an identifiable package which could be disposed of with minimal risk. If Jerusalem wished to temporarily retain a number of these weapons for bargaining purposes with other parties, it could probably still make a significant unilateral cut as a gesture of goodwill and for the good of the entire region.

A balance in conventional weaponry is highly important, but it is less cogent than with mass destruction weapons because the ramifications of failure are less drastic. Like the nuclear issue, however, the conventional balance question does not have to be solved through quantitative or qualitative equivalencies. Guarantees by outside powers may be applied to even the scales. And U.S. guarantees are likely to enjoy greater respect than those of most other powers or supranational organizations (unless accompanied by assurance from the United States).

There is a third area of arms control concern. As we have noted in our examination of Iraqi strength, new technologies are very important in determining the true relative military power between states. These include advanced computer technologies and their applications, particularly to command, control, communications and intelligence. As the former director of U.S. defense research and engineering, Donald Hicks, has pointed out, data-sharing networks, intelligence fusion centers, and advanced navigation and guidance systems can greatly enhance the accuracy of older weapons. They can also serve as force multipliers, critically affecting the balance of power between states of nominal equivalency. The matter is of special importance to the security of Israel which depends heavily upon such systems for maintaining a margin of military superiority over its neighbors.

The United States needs to develop a thorough understanding of the impact of the new technologies for
shaping future arms control regimes. Certain types of reconnaissance, targeting and weapons control systems may be substantially more important than the numbers of conventional (or even of mass destruction) weapons which they support or control.

Geoffrey Kemp has pointed out other types of arms control and confidence building measures for dealing with limited (tactical) issues. These may be applied when two or more parties desire a temporary arrangement until the more important questions can be addressed. These he refers to as "pre-negotiations" initiatives. They include such familiar practices as "red lines," deployment restraints, and restraints on external supply. They may be unilateral, bilateral or multilateral; explicit or implicit, but to operate properly they must be understood by all concerned. As important as these have proven in the Middle East, they should not be confused with real negotiations or settlement of the grievances.126

SECURITY ASSISTANCE

We have noted how arms sales in the Middle East have been affected by both demand "pull" within the region and by supply "push" from major suppliers. If there is to be an effective arms control regime, all parties, on both the demand and supply sides, must play responsible roles. Arms sales are not necessarily antithetical to arms control. On the contrary, they can play a definite role in sustaining a balance conducive to peace. In the words of the U.S. Department of State:

The United States offers security assistance to strengthen the national security of friendly nations...security assistance provides vital continuity in American foreign policy and helps to build secure and stable relationships.127

The key lies in the proper allocation of weapons acquisition authorizations for the development of an overall regime for the region. This is most usefully determined through multilateral negotiations, possibly coupled with the extension of specific security guarantees where imbalances persist.
American security assistance may stem from any or all of: (1) recognition of need or merit on the part of the recipient, (2) the internal American political process, or (3) the national interests of the United States. The first two factors are less amenable to policy planning than the third, but all play important parts. Security assistance is best understood and most effective when it is firmly supported by all three factors.

Unfortunately, there is little structural stability in the system. Both Israel and Egypt have developed heavy dependency upon U.S. military grant aid, but there is little assurance that such programs will continue to be funded. Disruption of either case could be very destabilizing to the security regime unless it were to be replaced by some other form of assurances.

As for the remainder of the region, the United States is not a dispenser of much largesse. The other 12 countries under examination in this study together receive less than two percent of all U.S. foreign security assistance. The wealthy countries of the region are important recipients of American armaments, and have the means to provide their own funding. (This study assumes that the United States will approve sale of all or most of the 72 F-15 aircraft planned for the Saudi Air Force by the end of the decade. The possibility of Iranian acquisition of “Backfire” bombers would seem to increase the cogency of the Saudi need.) It is in the other, less well endowed countries where opportunities exist for exercising somewhat more influence by modest changes or adjustments.

One program which would seem to merit some enhancement is that for Jordan. The kingdom is paying for its identification with Baghdad during the Gulf War, but the price has been extraordinarily high. National revenues have fallen drastically in connection with the UN sanctions against Iraq. Virtually all support from the oil producers has ceased, and Jordanian workers have been expelled from their former jobs in the Gulf area. The United States resumed a very modest support program for the Jordanian Armed Forces for a while, but it was hardly enough to be influential, and virtually all funds have recently been frozen.128
The U.S. Department of State and Defense Security Assistance Agency view Jordan in these terms:

Maintenance of a stable Jordan remains a key facet of U.S. interest in the region, particularly now that we have reached a critical phase in the peace process. Since the Gulf war hostilities ended, King Hussein has adopted a helpful position on the peace process....

The foregoing review of the military balance in the Middle East reveals little cause for alarm over Jordanian arms. Riyadh's concerns appear to have sprung from a sense of imminent danger in 1990 under circumstances unlikely to reoccur in the foreseeable future. Saudi Arabia's new military programs and Jordan's retrenchment are bound to reduce those concerns. If there is danger in the situation today, it would appear to stem more from a growing Jordanian dependence upon Iraq than from a Jordanian threat to its neighbors. Accordingly, it would seem wise for the United States to play a larger role in stabilizing the position of the Hashemite House in Amman, in part through more extensive security assistance.

The greatest problem in the security assistance and arms sales programs in the Middle East appears to lie in a lack of a coherent, overarching policy for guidance of the program managers. The chief of the U.S. security assistance program in Riyadh, for example, has protested that he does not have sufficient guidance to assist the host country in its arms acquisition efforts. On one occasion he recommended that the Saudis be sold a number of aircraft of a particular design. Only a quarter of the recommended number was forthcoming—with no explanation of why the program should be cut by 75 percent.

Ideally, the U.S. Government, including the legislative branch, would have an internally coordinated "objectives" concept for discussions among the principal weapon supplier and recipient nations. While complete closure of the document, with universal agreement among all parties, would be unrealistic, the process might help to identify areas of principal difference and to improve understanding of others' concerns. It would also help the U.S. Government to develop its own plan for arms allocations, either through the security
assistance program or private sale. Perfect conformance with the plan would not be as important as a narrowing of the problem for reasonable management.

TECHNOLOGY TRANSFER

The United States has agreements with many countries in the region related to sales of military equipment of U.S. design. The closest association is with Israel, which amounts to a substantial, if unmeasured, pillar of Israel's security structure. Unfortunately, questions have arisen regarding allegations of Israeli abuse of its privileged position, casting some doubt as to whether the relationship can continue to be as close as it has been in the past. Investigations of the matter have thus far been inconclusive.

It may be less important whether the allegations are true than whether the United States has placed some Israeli government officials and industrialists in an untenable position. Israel is a manufacturer and world-wide exporter of quality military equipment. It heavily depends upon the approximately $2 billion it earns through foreign sales of its arms to underpin its own weapons acquisitions and to support its industrial base. With a close and many-faceted relationship with U.S. research and development activities—governmental, industrial, academic and independent—the country is in an awkward position of conflict of interest. It must be expected that some Israeli researchers and officials will from time to time encounter significant temptations or pressures to adapt U.S. technology to Israeli equipment intended for foreign sale.

There is a clear need for a low-profile, comprehensive review of U.S.-Israeli technology connections, in all their many forms. The partnership is too important to permit a cloud to dwell over the process, perhaps endangering benefits currently being realized by both sides. Ideally, such review would be chartered and conducted on a bilateral basis to ensure that the investigation itself would not become a cause of further suspicion or distrust. It is one thing for the U.S. Intelligence Community to report its suspicions. It would be quite another for the two governments to address the matter as a team.
It might also be useful to make an effort to assess the value of Israel's technical association with the United States. Such an assessment might prove valuable in connection with future efforts to reach regional balance among the various parties. While a dollar figure may or may not be useful (or even possible), the principal objective would be to illuminate the connections of greatest importance, and to identify any which might be particularly sensitive. Possibly some with greater risks than value should be terminated, or trade-offs might be found. Such assessment should contribute to a better understanding of the need for specific levels of cooperation in particular fields and, perhaps, a sense for options which might be undertaken in other fields with other countries in the region to balance the relationship with Israel.

U.S. FORCE PRESENCE

The United States also has agreements with a number of Middle East states pertaining to military exercises and base rights. U.S. equipment storage facilities are to be found in Israel and Kuwait, and a “floating armored brigade” with 100 M1A1 tanks and 58 Bradley infantry fighting vehicles is planned for storage on Navy cargo ships in the Indian Ocean. Other storage sites may be established elsewhere. The stocks in Israel may be expanded to include sufficient equipment for an entire division. U.S. ground force presence is evident on a regular, if limited, basis in Kuwait, Bahrain and Egypt, primarily in connection with joint exercises.

As we have noted, the United States has become a player in the Middle Eastern arena. It has committed a significant measure of its prestige to the quest for peace and has raised the expectations of all parties in the region of its determination to insure the success of its efforts. Indeed, the United States can take considerable credit for the low level of violence currently prevailing in the region.

But it cannot be expected that a lasting peace can be established exclusively by diplomatic and political means. There are still too many disparate interests which might be tempted to take advantage of opportunities for short-range gain.
by illegal means. The peace process will require time to
develop, and must be undergirded by substantial strength and
staying power. A modest U.S. ground force presence in the
region would provide a visible statement of U.S. interest and
commitment to the achievement of its goals and lend credibility
to the overall effort for peace. It would seem that former
Secretary of State James Baker III had these points in mind in
August 1992 when he reportedly queried Israel and Syria
regarding the stationing of U.S. troops on the Golan Heights.132

In addition, a U.S. force presence on the ground in the
Middle East might be used to offset other types of
commitments which have not proven useful in settling disputes.
Particularly, it might prove reassuring to Israel if that country
were to agree to sacrifice some of its territorial holdings in order
to gain peace agreements with neighbors. Major General
Yehoshafat Harkabi has made this point in roundtable
discussions with U.S. analysts.133

The United States may have an opportunity to increase its
presence in context with the evolving milieu in the wake of the
Israeli elections. Arab and Israeli alike will want to insure that
there is no effort by the other side to take undue tactical
advantage of any concessions which may be conceived in the
peace negotiations. While the circumstances under which U.S.
forces would be welcome vary somewhat according to the
interests of the various players, only Saudi Arabia appears to
have strong objections as a matter of principle to foreign forces.
The Golan Heights, the Jordan Valley and the Sinai Peninsula
have all been suggested by various parties. Indigenous
analysts express different levels of enthusiasm, but many
profess to see distinct advantages to such an arrangement.
Some would insist upon UN sponsorship; others consider such
association irrelevant.

There are many ways in which a force presence might be
undertaken. The various options could be addressed within the
context of the current series of negotiations in order to assure
that the interests of the principal parties are adequately
considered and protected. Generally speaking, the United
States would not wish to station troops in significant numbers
in the region on a permanent basis. More desirable would be
the rotation of brigade size organizations for extended exercise periods—perhaps for 2-3 months at a time. The units might be drawn from Europe or from the United States, or both. Smaller formations, perhaps of battalion size might be detached for shorter periods for training with different host country forces. Base areas for the support of such deployments could be designated in a number of different countries—the more choices the better. Ideally, the bases would be operated by host government forces to minimize implications of a U.S. "occupation" of the area.

However done, certain principles should be established to minimize the pitfalls which may be encountered. Some of these might be:

- In view of cultural differences, contacts between U.S. troops and Arab communities should be held to a minimum.

- U.S. troops should not be employed to interdict terrorist activities. Israeli troops are better trained and better attuned psychologically for this type of duty.

- U.S. troops should be deployed in areas between other national forces where all commanders agree to the allocation of space.

- U.S. forces should be deployed in sufficient strength that they are capable of defending themselves from partisan groups which do not identify with the peace process.

- Adequate immediate close air support should be assured.

- U.S. forces should be deployed where they have sufficient space to exercise their operational capabilities and can maintain their skills.

- Sufficient air or sea transport should be maintained in the vicinity of the troops so that they can be quickly relocated to deal with developing threats.
• Adequate provision should be made for rest and recuperation for the troops during their deployment.
ENDNOTES


3. Anoushiravan Ehteshami, Nuclearisation of the Middle East, London: Brassey's, 1989, p. 57. Some of the conflicts listed by Ehteshami are not within the region of focus of this study. Accordingly, they are not counted.


5. The designated index of militarization is a combination of the order in which the countries under consideration appear on the militarization of citizenry and militarization of public wealth lists. The standings are added together and subtracted from a constant (20) to provide the index.


13. Aharon Klieman and Reuven Pedatzur, Rearming Israel: Defense Procurement Through the 1990s, Jaffe Center for Strategic Studies, Tel Aviv University, Tel Aviv: Jerusalem Post Press, 1991, p. 82.

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21. Major General Ahron Yariv, Director, Jaffe Center, in remarks to the author, Tel Aviv, February 3, 1992; and Major General Uri Sagi, chief of IDF Intelligence Branch in interview with *Yediot Aharonot*, translated and published in *FBIS-NES-97-078*, April 22, 1992, p. 34.


24. Commentary by U.S. military attache to the author, Tel Aviv, February 3, 1992. Also, with regard to high technology weaponry and the window of opportunity, see Klieman and Pedatzur, p. 27.


27. U.S. military attache.

28. Yariv remarks to the author.
29. Estimates of Israeli 1990 defense expenditures range from 27.2 to 40 percent of the active budget. See Klieman and Pedatzur, p. 61.


37. FBIS-NES-92-085.


43. Yitzhak Rabin, in remarks to the author, Tel Aviv, April 24, 1991.

44. Ehteshami, p. 57.


47. Klieman and Pedatzur, pp. 80-86.


56. Besides Saudi Arabia, membership consists of Oman, Kuwait, Bahrain, Qatar and the United Arab Emirates.


62. Ibid.


70. Uri Sagi.

71. For example, see Aharon Levan, "Declawing the Nuclear Beast," Jerusalem Post, May 23, 1992, p. 7.


87. Smith.


92. Foss.

93. Aharon Levran.


108. The Analytic Sciences Corporation, "Technique for Assessing Comparative Force Modernization."


111. Uri Sagi.


114. Goodman and Carus, p. 139.
115. Ibid., p. 78.


125. Kemp, p. 203.

126. Ibid., p. 224.


LIST OF INTERVIEWEES AND MEMBERS OF DISCUSSION GROUPS

United States

Ambassador (Ret) Robert Newman, CSIS
Mr. David Halevy, Israeli Journalist
Dr. Charles Hill, The Hoover Institute
Dr. Graham Fuller, The RAND Corp.
Dr. Bruce Nardulli, The RAND Corp.
Dr. Joseph Kechichian, The RAND Corp.
Dr. John Harvey, Center for International Studies and Arms Control, Stanford University
Mr. Charles Waterman, Waterman Associates
Rear Admiral Abraham Ben-Shoshan, Israeli Defense Attache
Brigadier General Raji Haddad, Jordanian Defense Attache
Mr. Khalid A. Alkhalifa, 2nd Secretary, Bahrain Embassy

United Kingdom

Dr. John Chapman, Director, IISS
Dr. Roland Danreuther, IISS
Colonel Michael Dewar, IISS
Dr. David Bolton, Director, RUSI
Ms. Rosemary Hollis, RUSI
Major Nicholas Innel, MOD (at RUSI)
Mr. Peter Gail, MOD (at RUSI)
Sir Harold Walker, Amb (Ret) (at RUSI)
Air Vice Marshal Anthony Martin, RAF (Ret)
Ms. Pamela Pohling-Brown, Janes's (IDR)
Dr. Martin Navias, King's College (Dept of War Studies)

Jordan
Lieutenant General Salem Al-Turk, Chief of Army Staff
Lieutenant General Ehsan Shardom, Chief of Air Staff
Field Marshal Abu Taleb, Chairman, JCS
Major General Nabih Ayoub, Director, Joint Staff
Prime Minister/Defense Minister Sherif Zaid Bin Shaker
Colonel Donald Dubay, U.S. Defense Attache

Syria
General Mustafa T'llass, Defense Minister
Major General Jabriel Bitar, Syrian Army (Ret)
Mr. George Mallek, U.S. Embassy Political Officer
Colonel David Anthony, U.S. Defense Attache
Defense Attaches of France, Germany, Canada and Italy in roundtable discussion

Kuwait
Mr. Matthew Tueller, U.S. Embassy Political Officer
Colonel John Macel, Chief, U.S. Liaison Office

Bahrain
U.S. Ambassador Charles W. Hostler
Mr. Tom Williams, U.S. Embassy Political Officer
Mr. Richard Roberts, U.S. Embassy Public Affairs Officer
Major General Al-Kalifa, Minister of Defense

In roundtable discussion:
Mr. Ahmed Kamal (newspaper editor)
Dr. Abdul Laif Al-Rumaihi (University of Bahrain)
Mr. Ahmed Jassim (lawyer)
Mr. Abbas Essa Hilal (lawyer)
Mr. Ali Rabea' (member of suspended parliament)

Saudi Arabia

U.S. Ambassador Charles W. Freeman, Jr.
Major General J.G. Taylor, Manager of Saudi Arabian National Guard Modernization Program
Colonel James Ritchey, U.S. Defense Attache
Mr. William Pierce, U.S. Embassy Counselor for Pol-Mil Affairs
Colonel Ralph Capio, Chief of Staff, U.S. Training Mission, Saudi Arabia
Major General Thomas Rhame, Chief, U.S. Training Mission, Saudi Arabia
Mr. Abdul Aziz bin Mohsin Al Tuwajri, Deputy Commander, Saudi Arabian National Guard
Brigadier General Victor Hugo, USA (Ret), Vinnel Corp. - advisor to Saudi Arabian National Guard

Egypt

James McVerry, U.S. Embassy Pol-Mil Officer
Colonel Joseph Englehardt, U.S. Defense Attache
Mr. Stanley T. Escudero, U.S. Embassy Political Counselor
Major General William Fitzgerald, USA, Chief, Office of Military Cooperation

In roundtable discussion at National Center for Middle East Studies:

Major General Ahmed Fakiher (Ret), Director

Ambassador Mohamed Aafez Ismail (former national security advisor to President Sadat, former foreign minister)

Ambassador Tahseen Basheer (former ambassador to Canada)

Dr. Mahir Khalifa

Mr. Aly Ezz El Din Mourad

Major General Ahmed Abdel Halim

In roundtable discussion at Al Ahram Center for Political and Strategic Studies:

Dr. Mohammed El-Sayed Said, Director

Brigadier General Murad El Dessouki (Ret), military analyst

Dr. Ahmed Ibrahim, military analyst

Dr. Hassan Abau Taleb, Chief of Intl Political Branch

Mr. Emad Gad, international affairs analyst

Mr. Mohamed Abdel Salaam, military analyst

In luncheon discussion:

Mr. Harlan Lee, U.S. Embassy Deputy Political Counselor

Mr. Nabil Fahmy, Office of Foreign Minister Moussa

Mr. Abdel Rahman Salah, Foreign Minister’s Office

Mr. Reda Shehata, Director, Foreign Affairs Office

Mr. Mahdi Fath’allah, Secretary, North American Affairs
Israel

Major General (Ret) Ahron Yariv, Director, The Jaffe Center, Tel Aviv University

Brigadier General (Resv) Aryeh Shalev, Syrian Specialist, The Jaffe Center

Brigadier General (Resv) Ephraim Sneh, Staff Assistant to Yitzak Rabin

Dr. Reuven Gal, Director, Israeli Institute for Military Studies

Lieutenant Colonel Frank Wyman, Assistant U.S. Army Attache

Mr. John Herbst, U.S. Embassy Political Officer

In conjunction with others, April 20-30, 1991:

Major General Avihu Bin-Nun

Defense Minister Moshe Arens

Major General David Ivry

Major General Itzhak Mordechai

Housing Minister Ariel Sharon

Deputy Foreign Minister Binyamin Netanyahu

President Haim Hertzog

Mayor Teddy Kollek

Member of Knesset Yitzak Rabin

Mr. Hanan Alon, Defense Ministry
ABOUT THE AUTHOR

MAJOR GENERAL EDWARD B. ATKESON (USA-Ret.) is a senior fellow at the Institute of Land Warfare, Association of the U.S. Army, and a senior associate of the Center for Strategic and International Studies in Washington, DC. During his military service, 1951-1984, he served as Deputy Chief of Staff Intelligence, U.S. Army Europe, and later as National Intelligence Officer for General Purpose Forces under the Director of Central Intelligence. He also served with the bureau of Politico-Military Affairs, Department of State, and as Commander of the U.S. Army Concepts Analysis Agency. General Atkeson holds a Bachelor of Science degree from the U.S. Military Academy and an MBA from Syracuse University. He is a graduate of the U.S. Army War college, and subsequently served as Deputy Commandant of that institution. He was a fellow at the Center for International Affairs, Harvard University, from 1973 to 1974. He is a frequent writer and speaker on military affairs, having contributed over 60 articles to military journals and other publications. He is the author of The Final Argument of Kings: Reflections on the Art of War, which was published by HERO Books in 1988.