

**THE MIDDLE EAST
MILITARY BALANCE
1999-2000**

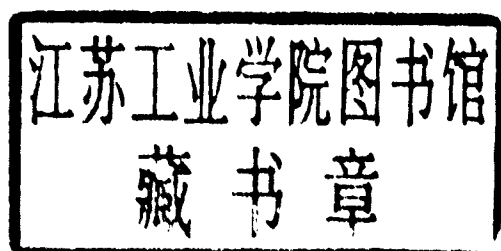


SHLOMO BROM AND

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The Middle East Military Balance 1999–2000

Shlomo Brom and Yiftah Shapir
Editors



BCSIA Studies in International Security



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Preface

During 1999, the Middle East has once again witnessed some interesting developments. In three of the region's states, important changes in government have taken place: in Jordan and Morocco, the deaths of King Hussein and King Hassan were followed by the crowning of King Abdullah and King Muhammad, respectively. In Israel, Ehud Barak defeated Benjamin Netanyahu's bid for re-election as Prime Minister. As this volume goes to print, the latter change has created new hopes that the Middle East peace process will be restarted.

The previous year manifested another US attempt to renew Israeli-Palestinian negotiations. This effort led to the signing of the Wye River Memorandum. But internal developments in Israel led to a suspension of the memorandum's implementation and the Netanyahu government fell soon thereafter.

In late 1998, the efforts to prevent Iraq from rebuilding its weapons of mass destruction capabilities reached a new peak. Iraq's continued efforts to curtail the international inspections and the monitoring of its activities in this realm led the US to launch Operation Desert Fox. But the immediate result of this operation was an end to Iraq's supervision by the United Nations Special Commission (UNSCOM), leaving considerable uncertainty regarding the future of the efforts to contain Iraq.

Other conflicts - some active, others latent - also left their mark during the past year. These include: the guerrilla campaign conducted by the Hizbollah against Israel in South Lebanon; Turkey's efforts to battle the Kurdish movement in the eastern part of the country; the usually dormant conflict between Syria and Turkey; the conflict between Greece and Turkey over Cyprus; and, the civil wars in Afghanistan, Algeria, and southern Sudan.

Thus the Middle East continues to be a hotbed of conflict and war. This merely re-emphasizes the importance of gaining familiarity with, and understanding of the various

facets of the military balance in the region: standing armed forces, paramilitary organizations, weapons of mass destruction and ballistic missiles.

This volume provides our best estimate of the military forces currently possessed by the states of the Middle East. Part I of the book, edited by Brig. Gen. (res.) Shlomo Brom, presents a qualitative assessment of these forces in the land, sea, and air. It also addresses the evolution of defense budgets in the region and a new facet of Middle East terrorism: the "Afghanistan Alumni." Parts II, III and IV of the volume, prepared by Yiftah Shapir, provide the most detailed data available in the open literature regarding the composition of these military forces.

The Jaffee Center launched its study of military forces in the Middle East in the early 1980s. The first volume analyzing these forces was published in 1983, and beginning in 1985 such a volume was produced on an annual basis. Until 1995, these volumes were printed and distributed by the Jerusalem Post, while the 1996 and 1997 volumes were published by Columbia University Press.

The Middle East Military Balance 1999–2000 is the first published by MIT Press in the framework of the BCSIA Studies in International Security. The publication comprises another facet of the growing relationship between Tel Aviv University's Jaffee Center for Strategic Studies and the Belfer Center for Science and International Affairs at Harvard University's John F. Kennedy School of Government. We are grateful to Prof. Graham Allison, Director of the Belfer Center, and to Dr. Steven Miller, Director of the International Security Program at the Center, for having initiated an exciting relationship that has resulted in the production of this volume.

With the inauguration of this new series, we have introduced a number of innovations into the annual *Middle East Military Balance*. First, the *Balance* will be updated until the beginning of the publication year. Thus, this year's volume provides our estimate of the military forces possessed by the region's states in early 1999. Since changes in the region's military balance rarely develop overnight, we expect the *Balance* to remain accurate during most of the following year. Hence, we named it *The Middle East Military Balance 1999–2000*.

Second, in addition to detailing the inventories of the military forces possessed by the region's states, the volume provides a qualitative analysis of these forces. This will not be repeated every year. Rather, such analysis will be provided when sufficient qualitative changes merit a "new look." From time to time, different approaches to such analysis will be introduced. On other occasions, the strategic context within which the region's military balance should be assessed will be provided.

It should be emphasized that the qualitative analysis of the military forces in the Middle East provided here employs different methodologies. There is, in fact, no single agreed upon method for evaluating military forces. Thus, Col. (res.) Dr. Shmuel Gordon uses an innovative approach to assessing the region's air forces while Col. (res.) Moshe Matri and Navy Capt. (res.) Eli Oren, use more traditional methods for analyzing the quality of the region's land forces and navies, respectively.

Finally, we would like to express our gratitude to those who made the preparation of this volume possible. Moshe Grundman, assistant to the JCSS Head of Center, coordinated every aspect of completing this volume and bringing it to press; Carol Cook, Steven Rodan and Emily Landau made invaluable contributions in editing the text; Tamar Malz and Avi Mualem did a masterful job of entering the editing changes into the text. Martin Kat translated the Hebrew version of the articles. Yoel Kozak and Tamir Magal performed the difficult task of compiling, updating and setting the data on the region's military forces. Helpful assistance and comments were provided by JCSS research assistants and documentation managers: Orna Zeltzer, Avi Mualem and Ori Slonim. We are also deeply indebted to Karen Motley, Executive Editor at the Belfer Center, for the time and energy she invested in supervising the entire production process and for the extreme care and patience she demonstrated during the difficult months that resulted in the publication of this volume.

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**The Middle East
Military Balance
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Introduction

Shlomo Brom

Countries usually define their military requirements on the basis of their strategic goals and the threats with which they must contend. The nature and rate of the Middle East arms buildup results from the interaction between the military requirements of the region's states and their ability to meet those needs.

There is a correlation between important political and strategic developments in the Middle East, and changes in the nature and rate of military buildup in the region. Thus, for example, progress in the Israeli-Arab peace process has led to a slower pace of arms acquisition in most of the states involved: Israel, Jordan, and Syria. On the other hand, the 1991 Gulf War led to an acceleration of the arms buildup among the Gulf states, except for Iraq, which has been made subject to international sanctions. In general, postwar periods have been marked by an accelerated arms race between the belligerents. This is motivated by the need to replace losses, to implement the lessons of the war, and to be better prepared for the next round. The defeated side has a strong incentive to enhance its capabilities, while the winning side strives to maintain its advantage.

Political and strategic developments have also led to changes of emphasis in armament programs. Israel, for example, has been affected by two important developments in the past decade. The first is the advancement of the peace process, which has reduced the sharpness of the conflict with Israel's immediate neighbors. The second is the heightened political hostility of the second and third tier states – those with which Israel does not share a border – and their enhanced ability to reach Israel with strategic weaponry (surface-to-surface missiles and long-range aircraft).

These developments have led to a major change in the characteristics of Israel's arms procurement. In recent years, Israel has invested considerable resources in obtaining the capability to confront distant threats and punish the states that pose those threats, at the expense of other military requirements. To that end, Israel is

procuring long-range attack aircraft, acquiring intelligence-gathering satellite capabilities, and developing an early-warning and defense infrastructure against long-range surface-to-surface missiles. At the same time, Israel is examining possible changes in its defense policies and military doctrine, aimed at meeting the new threats.

Algeria furnishes a different example. There, the main strategic threat to the regime is internal, reflected in a civil war that has been raging for several years. Obviously, under such circumstances, investment in the capacity to deal with internal subversion takes precedence over a buildup of military forces geared to meet external threats. Not surprisingly, the Algerian armed forces have not been expanded in recent years.

Lately, significant changes have taken place in the ability of Middle East states to allocate the resources required for an arms buildup. The decline in oil prices, along with structural problems in the economies of the region's states, and the increase in civilian needs due to the rate of population growth, have reduced most states' ability to allocate resources to the military. The only states that still manage to arm at a pace commensurate with their perceived requirements are either recipients of external aid, or oil-producing states with populations small enough to enable them to rearm, despite the fall in oil prices. Yet the sources of external aid have also contracted. The dissolution of the Soviet Union has left only one superpower in the Middle Eastern arena – the United States – which is willing to help finance the buildup of forces of its client states, mainly Israel and Egypt, and to a lesser extent, Jordan.

When contemplating the Middle East in the broad sense of the term, there is little meaning to the idea of a military balance involving all the region's states. Morocco, for example, is not concerned about threats from Israel or Iraq, when it decides upon the size and composition of its armed forces; and vice-versa. For a better understanding of the way in which military power develops in the Middle East, the area may be divided into three sub-regions, each with its actual or potential rivalries and its local arms race: the Persian Gulf, North Africa, and the region of the Israel-Arab dispute. This, of course, is not a perfect breakdown: there are states that play a significant role in more than one sub-region. A good example is Iraq, which is a central actor in the Gulf area but also has a role in the Israeli-Arab conflict. Moreover, some Middle Eastern states cannot be easily assigned to any of the three sub-regions. An example is Yemen, whose force structure is affected by the potential threat of Saudi Arabia, which we define primarily as a Gulf state. However, countries on the Horn of Africa, such as Eritrea and Ethiopia, also constitute potential threats to Yemen.

The division we propose is relevant mainly when considering potential high-intensity or low-intensity military conflicts. It is less relevant when considering

strategic capabilities – surface-to-surface missiles or weapons of mass destruction. The long range of the strategic platforms makes conflict possible between states that are not in the same sub-region, for example Israel and Iran. Despite these qualifications, a division of the Middle East into these three sub-regions provides an appropriate framework for an analysis of the Middle Eastern military balance.

The qualitative assessment of Middle East armed forces presented in this volume examines these forces according to the three generally accepted spheres of warfare: land, air and sea combat. Such a division is convenient because it fits the manner in which the armed forces are divided in most military establishments. But this division is not without problems, because a real battlefield involves combined combat; each of the armed services can operate in virtually all spheres of combat. There is also a synergistic effect between the services, the most salient of which is combined army-air force operations on the land battlefield. But this difficulty can be overcome, if, when examining the balance between the land forces of two sides, the air capability that affects ground combat is taken into account. On the other hand, a land-sea-air division has the advantage of permitting a professional evaluation of each sphere of warfare.

In assessing the strength of military forces, additional methodological difficulties are encountered. These derive primarily from the complex of factors that impact the effectiveness of military power, and from the difficulties of measurement, especially of qualitative factors. Sometimes it is even difficult to compare two weapon systems of the same type. A combat aircraft and a battle tank are both complex systems, each of which comprises a fairly large number of sub-systems. Their characteristics can be gauged, but it is not easy to arrive at the aggregate of these characteristics. An aircraft has a maximum speed, some capacity for maneuver, a payload capacity, a radar with detection and fire-control capabilities, ordnance, guidance systems of given capabilities, and various warning systems. A tank has armor of a given quality, a gun of a certain diameter, shells of various capabilities, a fire-control system, and a mechanical system that determines the characteristics of propulsion and maneuverability. It is difficult to decide, on the basis of a point-by-point comparison of characteristics, which aircraft or tank is superior to its counterpart, and by how much. When factors such as the quality of crews and commanders are added, along with the quality of organization and training, and such force multipliers as C⁴I, the difficulties of measurement become insuperable.

In more purely technological spheres, methods of quantitative measurement are more applicable. The contributors to the *Middle East Military Balance 1999–2000* have chosen different methods for examining the balance in the various spheres. Only in that of air warfare has Col. (res.) Dr. Shmuel Gordon endeavored to develop a quantitative method for gauging air power, which is described in

his article; his analysis of the air forces of the region is based on that method. The other authors, Col. (res.) Moshe Matri in the sphere of land combat, and Navy Capt. (res.) Eli Oren in the sphere of naval power, have preferred an analysis based on the authors' qualitative judgment. In the future, it may be possible to develop, on the basis of Dr. Gordon's work, a similar quantitative method for examining naval forces, which are also highly technological.

The past year saw a continuation of the political and strategic trends that affected the development of military forces in the Middle East since the beginning of the decade. To varying degrees and in different ways, this is true for all three sub-regions of the Middle East. Naturally the Israeli-Arab sub-region is influenced considerably by the progress and setbacks of the Israeli-Arab peace process, while the Gulf area is still immersed in the consequences of the Gulf War and its lessons, and the North African states are pre-occupied with their internal security problems.

The United States continues to function as the only superpower in the Middle East, focusing its activities on the Persian Gulf and the Israeli-Arab peace process. One of its tools is the extension of US military assistance to Middle Eastern states. Russia, especially under Primakov, first as foreign minister and later as prime minister, attempted to "return to the Middle East." It has been able to obstruct US policy related to Iraq by exploiting its status as a permanent member of the UN Security Council. It also transfers technology of surface-to-surface missiles and weapons of mass destruction to Iran. To date, at least, the European Union has not translated its solid economic position in the Middle East into strategic and political influence.

The states involved in the Israeli-Arab conflict have continued to adhere to the peace process during Netanyahu's term as prime minister of Israel despite the deadlock in negotiations between Israel and both Syria and the Palestinians. Clearly, the decision of Arab states to continue to pursue this approach was influenced by their recognition that Israel's military superiority rules out a military option for resolving the conflict. At the same time, as long as these states continue to adhere to the peace process, they have preferred not to increase military spending at the expense of other national or regime priorities.

Economic conditions in these states have continued to impose severe constraints on the level of their military spending. Israel and Egypt, which enjoy considerable assistance from the US, have managed to finance substantial buildup programs, and Jordan too has obtained increased US aid in the wake of its peace treaty with Israel. Yet this falls far short of meeting Jordan's military requirements after years of budgetary drought. A similar drought continues in Syria, where procurement of new weapon systems has been undertaken only sparingly; an expected breakthrough, involving large-scale arms transactions, mainly with