POLICY PAPERS

NUMBER 31

ARMING FOR PEACE? SYRIA'S ELUSIVE QUEST FOR "STRATEGIC PARITY"

MICHAEL EISENSTADT

THE WASHINGTON INSTITUTE FOR NEAR EAST POLICY
WASHINGTON, D.C.

Cover design by Jill Indyk
Graphics by Joseph Bermudez Jr.

THE AUTHOR

Michael Eisenstadt is Military Affairs Fellow at The Washington Institute for Near East Policy and author of *"The Sword of the Arabs:" Iraq's Strategic Weapons* (The Washington Institute for Near East Policy, 1990). He recently returned from a leave of absence as an analyst with the United States Air Force Gulf War Air Power Survey, where he examined Iraqi strategy and planning prior to the Gulf War.

CONTENTS

PREFACE

After the historic Camp David Accords ended the decades-long state of war between Israel and Egypt, Syria attempted to block further Middle East peace-making by isolating Egypt and intimidating any other would-be Arab peacemakers through military threats and terrorism. Syria also initiated a major military build-up intended to provide it with the capability to retake the Golan by force, and confront Israel alone, if necessary. This constellation of Syrian power as a whole was made possible by President Hafez al-Assad's well-deserved reputation for cunning and forcefulness, and by then-steadfast Soviet patronage.

With the passage of time Egypt's isolation eased, Syria's Soviet patron collapsed, and its own economic straits worsened. Responding to these pressures, Syria began a rapprochement with the West, a process that culminated with its participation in the coalition effort against its ideological *confrere*, but strategic rival, Iraq.

When, after the Gulf War, new life was breathed into the Middle East peace process, Syria's decision to participate in the Madrid peace conference was an unexpected and positive development. Whether Syria will proceed on the course initiated in Madrid or try once again to hinder peace-making remains to be seen. There can be little doubt that Syria's assessment of its own military capabilities and strategic objectives will play a commanding role in the decision-making of its leadership. Yet it is extremely difficult for Western observers to gain insight into Syria's military thinking and capabilities precisely because it is a closed

garrison state about which little can be learned from standard sources.

In this Policy Paper, Michael Eisenstadt, Military Affairs Fellow at The Washington Institute, draws on exhaustive research into a wide array of Arabic and other sources not generally available in the West, to examine the evolution of Syria's strategic doctrine, the course of its military build-up and the role that Syria's military calculations play in its political and diplomatic maneuverings. He lays particular emphasis on the development of the doctrine of "strategic parity" with Israel, which for years guided Syria's military development, and on Syria's impressive military build-up which, despite its formal entry into the peace process, continues unabated. The result of his efforts are a vital contribution to our understanding of what is potentially the Middle East's most volatile and significant military confrontation.

Barbi Weinberg
President
August 1992

EXECUTIVE SUMMARY

Under the leadership of President Hafez al-Assad, Syria has emerged as the leading Arab military power, and the only Arab state which currently poses a military threat to Israel. Future decisions concerning war and peace in the region are thus likely to be made in Damascus. Syria's decision in July 1991 to join the U.S.-sponsored peace process indicates, however, that at least for now Syria is working to achieve its objectives in its conflict with Israel through diplomatic means. It has, nonetheless, embarked on a major military build-up and continues to devote significant resources to its armed forces, raising questions about the depth of its commitment to the peace process, and its ultimate intentions.

Syria's strategy in the Arab-Israeli conflict is founded on the belief that Israel is an expansionist and aggressive state that seeks regional hegemony by keeping the Arabs weak and divided. It believes, moreover, that relations between Israel and the Arabs have been characterized by a strategic imbalance—due to U.S. support for Israel, Israel's nuclear and conventional military superiority, and divisions in the Arab world. Syria's concerns are compounded by its lack of strategic depth, since most of its major population and industrial centers are located in the vulnerable western part of the country.

Syria has traditionally been committed to the destruction of Israel as an ultimate goal, although this has not precluded it from countenancing the possibility of peaceful coexistence or from concluding formal agreements or tacit understandings with Israel if these facilitate other important ends. Its approach is based on the belief that it must deal with Israel from a

position of strength if it is to achieve its objectives, and to do this it must achieve a strategic balance with Israel.

To accomplish this, Syria cultivated close ties with the Soviet Union in order to counterbalance U.S. support for Israel, offset Israel's military superiority, and assure its supply of advanced weaponry. In addition, it attempted to form military coalitions with the two most powerful Arab states—Egypt and Iraq—in order to augment its own military capabilities. Finally, it relentlessly expanded and modernized its armed forces, in order to create an offensive military option vis-à-vis Israel, or at least a defensive deterrent capability so that it could face Israel alone, if necessary.

Syria's efforts to build up its military have focused on several areas:

• A strategic deterrent, consisting of missiles armed with chemical warheads, to counter Israel's nuclear capability, neutralize the threat that Israel's air and ground forces pose to Damascus and other population centers, and provide a hedge against defeat in wartime.

• Modern conventional forces, including: large standing ground forces in the Golan capable of launching a surprise attack from their normal dispositions or of inflicting heavy losses if attacked; dense air defenses to protect major population and industrial centers and military targets; and coastal defenses to protect Syria's vulnerable coastline.

• Support for terrorist groups employed as surrogates to strike at or intimidate enemies and rivals when the direct use of force would entail unacceptable risks.

The collapse of the Soviet Union, coupled with Syria's inability to form a viable military coalition with Egypt or Iraq and its own military weakness, have denied Syria an offensive military option against Israel and raised questions about its deterrent capability. As a result, Syria joined the peace process initiated by the U.S. after the Gulf War, in the hope that it could achieve a settlement on its own terms and thereby obtain through diplomacy what it has failed to achieve by force. Syria's decision to join the peace process was, moreover, motivated by several additional factors. Syria hoped that its participation would:

• Restrain Israel at a time of heightened vulnerability, and provide a cover for its own military build-up.

- Erode U.S. support for Israel and intensify U.S. pressure on it.
- Enable it to prove to the world that Israel does not really want peace by revealing its unwillingness to give up the Golan.
- Permit it to better influence the peace process and obstruct a settlement that does not advance its interests.
- Ensure continued foreign aid and investment, easing its economic situation and silencing domestic critics of the regime.

Despite Israel's military superiority—which is likely to grow in the coming years—Assad believes that the balance of forces in the region will eventually tilt in Syria's favor. To hasten this process, Syria has forged a strategic alliance with Iran and made tentative moves towards a rapprochement with Iraq. It has continued to build up its military—augmenting both its strategic and conventional capabilities—in the hope that this will enhance its leverage at the negotiating table and thereby facilitate a settlement on its own terms, or provide it with a military option in the event that negotiations collapse or bog down. Accordingly, Assad will keep Syria in the peace process and string out negotiations for as long as possible to buy time until Syria's military situation improves. Because Assad believes that it is in Syria's interest to draw out the negotiations, and because he perceives its security margins to be so narrow, a breakthrough in the negotiations between Syria and Israel is unlikely in the near future.

U.S. policy towards Syria should attempt to strengthen the peace process by limiting Syria's military options, while reducing its political freedom of maneuver by:
- Preventing the formation of a potential new rejectionist bloc consisting of Syria, Iraq, and Iran that could undermine or hamper the peace process, by continuing its support for the disarmament of Iraq—as called for in U.N. resolutions—and encouraging Arab countries such as Egypt, Saudi Arabia, and Kuwait to press Syria to curtail its cooperation with Iran.
- Curbing Syria's military build-up by pressing its primary arms sources—Russia, the former Soviet bloc states of Eastern Europe, North Korea, and China—to halt or limit arms transfers to Syria, while working to stem the flow of Western technology with military applications. These transfers undermine the peace process by encouraging Syria to believe

that its military situation will eventually improve, thereby reducing its incentive to compromise.

• Pressing Syria to cease its support for terrorism by closing down terrorist headquarters, offices, and camps in Syria and the Bekaa and disarming the terrorists, thereby reducing its ability to play the role of spoiler and obstruct the peace process as it has done in the past.

Despite Assad's desire to drag out negotiations and his inflexibility concerning the terms of a settlement, negotiations have set in motion an open-ended process which Syria might not be able to control. Thus, it is possible that its fears of a confrontation with the U.S. and Israel if it is perceived to be obstructing progress towards peace, its concerns about being left behind by the Jordanian-Palestinian-Israeli negotiations, and the realization that it has no viable alternative to achieving its objectives outside of the peace process might eventually cause Syria to accept arrangements that it currently deems unacceptable.

GLOSSARY

ABSP	Arab Ba'th Socialist Party
ADP	Arab Democratic Party
AEW	Airborne Early Warning
ANO	Abu Nidal Organization
APC	Armored Personnel Carrier
ASALA	Armenian Secret Army for the Liberation of Armenia
ASW	Anti-Submarine Warfare
AT	Antitank
ATBM	Anti-Tactical Ballistic Missile
AWACS	Airborne Warning and Control System
COMINT	Communications Intelligence
C3I	Command, Control, Communications, and Intelligence
DFLP	Democratic Front for the Liberation of Palestine
ELINT	Electronics Intelligence
EW	Electronic Warfare
ICV	Infantry Combat Vehicle
JRA	Japanese Red Army
PFLP	Popular Front for the Liberation of Palestine
PFLP-GC	Popular Front for the Liberation of Palestine-General Command
PIJ	Palestinian Islamic Jihad
PKK	Kurdish Revolutionary Workers Party
PLO	Palestine Liberation Organization
PSF	Popular Struggle Front
LCT	Landing Craft, Tank
SAM	Surface-to-Air Missile
SSM	Surface-to-Surface Missile
SSNP	Syrian Social Nationalist Party

When we are strong, our Arab nation becomes strong. If Syria is triumphant, so will the Arabs be triumphant. If it is defeated, so will the Arabs be defeated.

President Hafez al-Assad, March 8, 1988

It is very difficult for Israel to respond to the requirements of a just peace while it feels itself superior.

President Hafez al-Assad, September 21, 1987

In order to talk with Israel you must have a big stick in your hand.

Defense Minister Mustafa Tlas, May 19, 1984

INTRODUCTION

Under the leadership of President Hafez al-Assad, Syria has emerged as the leading Arab military power. With Egypt at peace with Israel and Iraq weakened and isolated, Syria remains the only Arab state which currently poses a military threat to Israel. Future decisions concerning war or peace in the region are thus likely to be made in Damascus. Syria's decision in July 1991 to join the U.S.-sponsored peace process indicates, however, that at least for now Syria has opted for a diplomatic approach to achieving its objectives in the conflict. It has, nonetheless, embarked on a major military build-up and continues to devote significant resources to its armed forces, raising questions about the depth of its commitment to the peace process, and its ultimate intentions.

THE ROOTS OF SYRIAN POLICY TOWARDS ISRAEL

President Assad's views on the Arab-Israeli conflict—which are shared by key members of his inner circle and large segments of the population—are based on the belief that Israel is an expansionist and aggressive state that seeks regional hegemony by keeping the Arabs weak and divided. He believes, moreover, that relations between the Arabs and Israel have been characterized by a strategic imbalance—due to U.S. support for Israel, Israel's nuclear and conventional military superiority, and divisions in the Arab world. Assad's concerns are compounded by Syria's lack of strategic depth, contributing to a sense of vulnerability.

Assad and his inner circle believe that Israel is a bridgehead for imperialism that was created to keep the Arabs weak and divided, and that it is driven by religio-national aspirations, demographic pressures, and its aggressive nature to seek regional hegemony through territorial expansion. Assad has claimed that Israel and international Zionism seek to create a state that extends "from the Nile to the Euphrates" in fulfillment of biblical promises, and that its current borders comprise only a stage in the fulfillment of this program. Thus he sees the threat to the Arabs and Syria in existential terms, as a fight for survival between two irreconcilable movements and value systems.[1] He believes, moreover, that in order to achieve its goals, Israel seeks to divide and weaken the Arab world through separate peace treaties (with Egypt in 1979 and Lebanon in 1983), by dealing with the Arabs "as regions, sects, [and] factions," and by fanning sectarian and communal tensions in the region.[2]

In Syrian eyes, the expansionist and aggressive nature of Israel finds its expression, on the military level, in Israel's development of nuclear weapons—which enable it to impose its will on the Arabs, consolidate its territorial gains, and intimidate its enemies; its creation of armor-heavy ground forces structured to move the war quickly to enemy territory and of a powerful air force that can strike at targets throughout the region; its development of airmobile and amphibious forces

---

[1] According to Assad, Israel and Zionism "want the land from the Nile to the Euphrates" in order to "impose their hegemony," thereby threatening the "present and future existence and generations" of Arabs. The Arabs, consequently, have "no alternative" to the "fateful battle" with the "Zionist enemy" in defense of their "fate, nationalism, nation, and religion." Radio Damascus, May 13, 1988, in *Foreign Broadcast Information Service, Daily Report: Near East and South Asia (FBIS-NES)*, May 16, 1988, p. 34. See also Damascus Television, February 18, 1986, in *FBIS-NES*, February 19, 1986, p. H5; Radio Damascus, January 28, 1987, in *FBIS-NES*, January 28, 1987, pp. H1-H3; *Al-Anba'*, June 30, 1989, pp. 22-23, in *FBIS-NES*, July 13, 1989, p. 44; and most recently Radio Damascus, April 1, 1992, in *FBIS-NES*, April 1, 1992, p. 34.

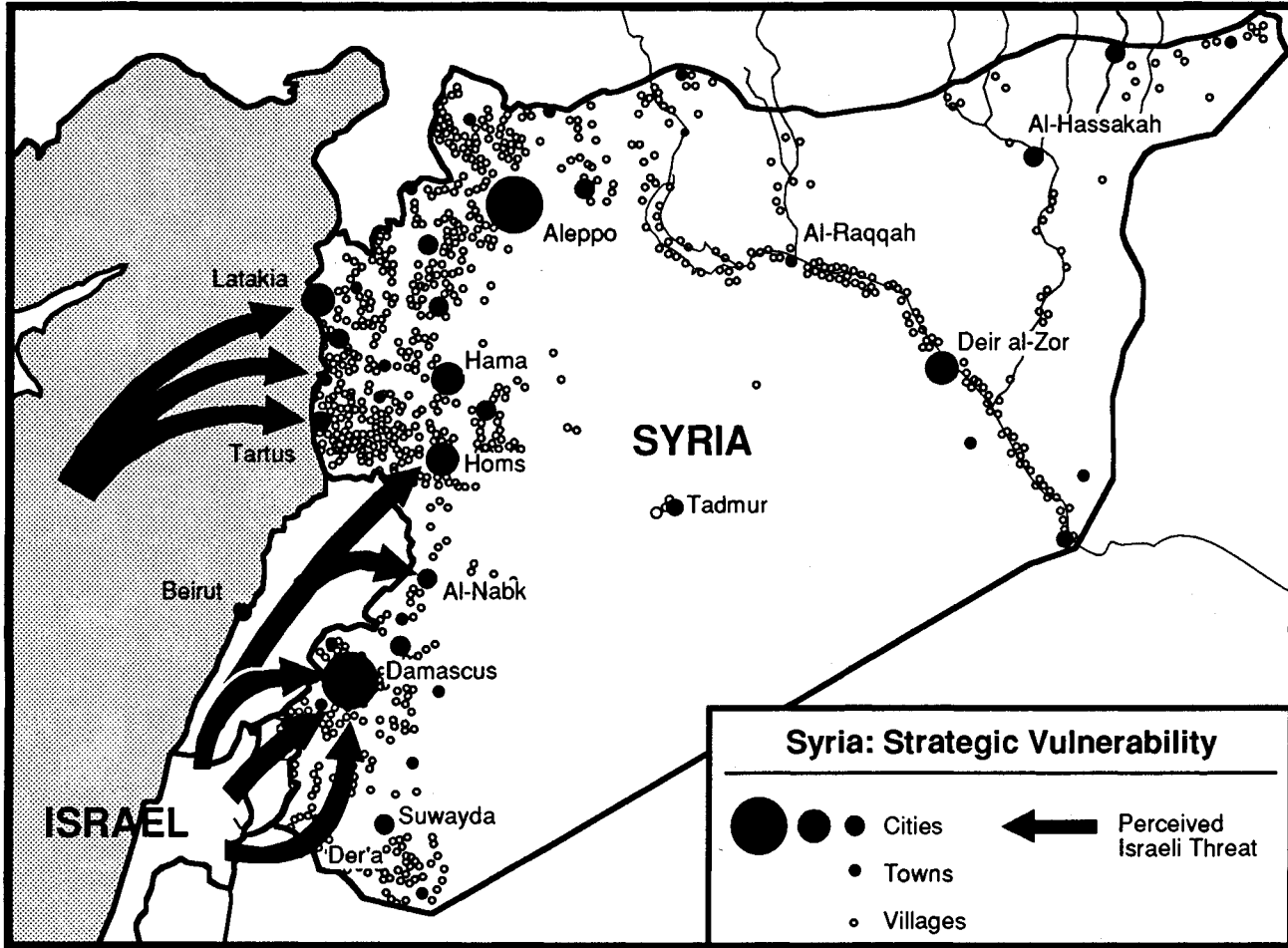[2] Radio Damascus, March 12, 1985, in *FBIS-NES*, March 13, 1985, p. H3.

capable of threatening enemy rear and coastal areas; and the offensive orientation of Israeli military doctrine.[1]

While Syria is concerned by Israel's nuclear capability, it does not perceive it as an immediate threat, since it believes that political and military constraints limit Israel's ability to employ such means, except in extreme circumstances.[2] The offensive capabilities of Israel's ground and air forces are of more direct concern to Syria, since they are seen to constitute an immediate threat to its security because of its lack of strategic depth.

About 80 percent of Syria's population and industry is concentrated in the geographically vulnerable western part of the country. Damascus, Syria's capital and largest city—with about 2.5 million inhabitants—is only 40km from the Golan, and 20km from Lebanon, and was threatened from both

---

[1] Colonel Ibrahim Kikhya, "Recent Developments in Israeli Armaments: 1982-1989," (Arabic), *Al-Fikr al-Istratiji al-'Arabi*, April 1991, p. 141; General Dr. Mustafa Tlas *et al.*, *The Israeli Invasion of Lebanon* (Arabic), (Damascus: Tishrin Publishing House, 1983), p. 170. Lieutenant Colonel Al-Haytham al-Ayyubi, "Israel's Doctrine for Breaching Fortified Defenses," (Arabic), *Al-Fikr al-'Askari*, December 1978, pp. 144-146. Whereas the Syrians tend to see Israel's acquisition of territory in war as a manifestation of what they believe to be its expansionist and aggressive nature, most Israelis argue that the acquisition of territory in war is a means to attaining secure borders and acquiring bargaining chips for use in post-war diplomacy.

[2] Assad and others have claimed that Israel's nuclear superiority cannot be effectively exploited since U.S. imposed constraints and the risk of fallout preclude the use of nuclear weapons, except *en extremis*. Radio Damascus, January 24, 1987, in *FBIS-NES*, January 28, 1987, p. H2. Assad's assessment apparently does not include the possibility that Israel may possess enhanced radiation (neutron) weapons which would significantly reduce the risk of fallout to its own population. See also: Bassam al-'Assali, "Israeli Nuclear Weapons: Policy and Strategy," (Arabic), *Al-Fikr al-'Askari*, May-June 1987, pp. 11-27.

Al-Hassakah

Aleppo

Al-Raqqah

Latakia

Deir al-Zor

Hama

Tartus

Homs

SYRIA

Tadmur

Beirut

Al-Nabk

Damascus

ISRAEL

Suwayda

Der'a

Syria: Strategic Vulnerability

● ● ● Cities   ⬅ Perceived Israeli Threat

● Towns

○ Villages

directions during the 1973 and 1982 wars.[1] In addition, the Lebanese Bekaa Valley offers ground and aerial approaches to central Syria, where Homs—its third largest city with about one million inhabitants—and Hama, and much of the country's industrial infrastructure are located. Finally, the port cities of Latakia, Tartus, and Banias, as well as a number of industrial sites are located along Syria's vulnerable coastline.[2] By comparison, Israel enjoys a number of advantages relative to Syria, since the Golan front is relatively narrow and far from major population centers.

SYRIA'S STRATEGIC CONCEPT: ULTIMATE GOALS AND NEAR-TERM OBJECTIVES

Syria has traditionally been committed to the destruction of Israel as an ultimate goal. Assad has repeatedly stated that Israel—like past invaders in the region—would eventually disappear, although this might take generations, and recently he has reiterated his belief in the ultimate success of the Arab cause, despite Israel's staying power.[3] Arab strengths—a large

---

[1] Vice President 'Abd al-Halim Khaddam has acknowledged the vulnerability of Syria's capital, stating that if Israeli forces "succeed in penetrating Lebanon" they could "get to Damascus in under one hour" or destroy it "using conventional artillery." *Al-Anba'*, June 30, 1989, pp. 22-23, in *FBIS-NES*, July 13, 1989, p. 41.

[2] According to Vice President Khaddam, "Syria's capital is only 25km from the Lebanese border. Syria's heartland in Homs is just 30km from the Lebanese border. Tartus is only 25km. Should Israel manage to control Lebanon, it will in effect be able to break through Syria from the coast, the middle, and the capital." *Al-Anba'*, June 30, 1989, pp. 22-23, in *FBIS-NES*, July 13, 1989, p. 43.

[3] Assad has repeatedly asserted in recent interviews that "the future belongs to (the Arabs)." *Sawt al-Kuwayt*, May 18, 1992; Radio Damascus, April 1, 1992, in *FBIS-NES*, April 1, 1992, p. 34; Radio Damascus, December 4, 1991, in *FBIS-NES*, December 5, 1991, p. 35. To justify his optimism about the ultimate outcome of the conflict, Assad in the past was fond of drawing parallels between the Arab-Israeli conflict and the Crusades, in which the Arabs "stood (their) ground, and struggled" until they "achieved the goal of liberation 200 years after" the invasion

nation with great human and natural resources, an ability to absorb losses, a spirit of steadfastness and self-sacrifice, a long view of history, a belief in the justice of their cause, coupled with Israeli weaknesses—its economic and military dependence on the U.S., the supposed artificiality of Israeli national identity, and its extreme sensitivity to casualties—assure that time is on the side of the Arabs and that they will eventually prevail.[1]

Syria's commitment to the destruction of Israel as an ultimate goal has not precluded it, however, from countenancing the possibility of peaceful coexistence as a near-term objective, or of concluding formal agreements or tacit understandings with Israel if these facilitate other important ends. In October 1973, Syria accepted UN Resolution 338 (and implicitly, UN Resolution 242) as the basis for a "comprehensive settlement" of the Arab-Israeli conflict that would result in a "just peace"[2] marked by "the absence of war" and "the end of belligerency" between the two parties—but not full normalization (diplomatic ties, trade, and tourism), or recognition.[3] Since then, Syria's terms for a settlement have

---

began. Radio Damascus, March 8, 1988, in *FBIS-NES*, March 10, 1988, p. 51. As part of his effort to project an image of moderation, however, Assad has dropped the Crusader analogy from recent speeches and interviews, and has downplayed his past use of this theme, stating that while the "war against the Crusades is something," the Jews "are something else" since they "had nothing to do with the Crusades." Radio Damascus, September 20, 1991, in *FBIS-NES*, September 20, 1991, p. 29.

[1] *Sawt al-Kuwayt*, May 18, 1992; Radio Damascus, March 8, 1988, in *FBIS-NES*, March 10, 1988, p. 55; Radio Damascus, January 24, 1987, in *FBIS-NES*, January 28, 1987, pp. H2-H3; Radio Damascus, February 27, 1986, in *FBIS-NES*, February 28, 1986, p. H6.

[2] Syria had in fact conditionally accepted UN Resolution 242 in March 1972, pending implementation of these conditions. Moshe Ma'oz, *Asad: The Sphinx of Damascus*, (New York: Weidenfeld & Nicholson, 1988), p. 85.

[3] According to Foreign Minister Faruq al-Sharaa, diplomatic ties and recognition, trade, and tourism "cannot be dictated" but must come from "a desire to do them" deriving from a "total change in the area." Judith Miller, "Syrian Official Says Israelis Seek to Sabotage Peace Talks," *The*

remained remarkably constant.[1] They include:
  • Full Israeli withdrawal from all Arab territories occupied since 1967, including the Golan, the West Bank and Gaza, East Jerusalem, and South Lebanon.
  • Palestinian statehood or self-determination, and the repatriation of Palestinian refugees to their homes.[2]
  Syria's strategy is based on the belief that it can only achieve these objectives from a position of strength, after having achieved a strategic balance[3] with Israel, either in

---

New York Times, November 29, 1991, p. A16. This position reflects the traditional Syrian line that "peace need not necessarily lead to recognition" since "recognition is a sovereign right" and even some Arab states "do not recognize each other." Accordingly, it is "unthinkable" that Israelis will ever be seen "walking the streets of Damascus." Vice President Khaddam in *Al-Anba'*, June 30, 1989, pp. 22-23, in *FBIS-NES*, July 13, 1989, p. 44.

[1] The element of continuity in Syrian policy is a theme frequently repeated by Assad and senior government officials. For instance, Nasir Qaddur, state minister for foreign affairs, declared in an interview in 1989, "We in Syria don't change our policies. Our policies are fixed, continuous, and based on principles. They do not change with the seasons." Nora Boustany, "Syria Works to Mend Ties with Moderate Arab States," *The Washington Post*, January 18, 1989, p. A17.

[2] In recent years, Syrian officials have been vague about the contours of a settlement of the Palestinian issue, de-emphasizing the need for Palestinian statehood and repatriation—reflecting their ambivalence on these issues and their desire to project an image of flexibility—while stressing Palestinian self-determination and rights. "Syrian Policy Evinces Slight Changes Amid Overall Continuity," *FBIS Trends*, August 1 1991, pp. 1, 5. To achieve a settlement conforming to these terms, Assad until recently favored an international conference under UN sponsorship involving the U.S. and the USSR, Europe, and the Arab world, with binding powers to impose a settlement on Israel. "Damascus Takes Hard Public Line on Peace Process Initiatives," *FBIS Trends*, April 10, 1991, pp. 13-17.

[3] The Arabic phrase "*al-tawazun al-istratiji*" can be alternatively translated as either "strategic balance" or "strategic parity," depending on the context. Both phrases are used, as appropriate, in this paper.

conjunction with other Arab states or on its own.[1] Syria
believes, however, that relations between the Arabs and Israel
have in fact consistently been characterized by a strategic
imbalance. U.S. support for Israel, Israel's nuclear and
conventional military superiority, and the divisions and
weakness of the Arab world, have all made it impossible to
achieve a strategic balance.[2] While cooperation between Egypt,
Syria, and Saudi Arabia during the 1973 war enabled the Arabs
to make significant strides toward reaching such a balance, the
Egyptian-Israeli peace treaty in 1979 and the Iran-Iraq war in
1980 removed Egypt and Iraq as potential members of an Arab
military coalition, upsetting the balance and spurring Syria to
build-up its own military in order to unilaterally pursue parity
with Israel.[3]

Although Assad and senior officials ceased their calls for
strategic parity with Israel in 1990, and the slogan—once a
central theme of all major speeches—has almost disappeared
from the regime's public lexicon, the assumption that
underpinned the concept—that Syria must build-up its military
capabilities in order to deal with Israel from a position of

---

[1] For pragmatic as well as ideological reasons, Assad has always
preferred to confront Israel as part of a unified Arab bloc in order to
enhance the Arabs' political, military, and economic potential and
compel Israel to divide its forces between several fronts. Damascus
Television, December 24, 1983, in FBIS-NES, December 27, 1983, p. H5.
According to Assad, "unity strengthens us and without it the Arabs will
remain weak in confronting their enemies." Radio Damascus, March 8,
1989, in FBIS-NES, March 9, 1989, p. 39. On another occasion Assad
stated that the lesson of Arab history is that "whenever there was unity
there was victory, and whenever there was division and isolation there
was a setback." Radio Damascus, June 20, 1989, in FBIS-NES, June 21,
1989, p. 40.

[2] Al-Ayyubi, "Thirty Years of Strategic Imbalance in the Conflict,"
(Arabic), Shu'un Filastiniyya, June 1978, pp. 66-80.

[3] According to Khaddam, "the balance of forces was tipped in Israel's
favor when Egypt and Syria were allied against it, and when Egypt opted
out through the Camp David agreement, the gulf grew even wider." Al-
Anba', June 30, 1989, pp. 22-23, in FBIS, Daily Report: Near East and South
Asia, July 13, 1989, p. 44.

strength, in order to recover occupied Arab territories through military or diplomatic means, and in order to deter Israel—remains a central tenet of Syrian policy.

SYRIA AND THE PEACE PROCESS

Because Syria was historically unable to achieve a strategic balance with Israel and thus lacked the ability to recover occupied Arab territories by military or diplomatic means, Assad did not actively seek to resolve the conflict with Israel. Instead, he has been inclined to bide his time, in the belief that the regional balance of power will inevitably tip in favor of the Arabs, and because the conflict with Israel has served as an important source of legitimization for the regime. As a result, Assad has instead focused almost exclusively on near-term objectives deemed vital to Syria's security or the survival of the regime, such as:
*   Assuring that Syria is able to control or influence developments in Jordan, Lebanon, and among the Palestinians, or prevent developments inimical to its interests.
*   Preventing any Arab state or entity from concluding a separate peace with Israel.
*   Deterring Israel from initiating a preventive war intended to arrest Syria's military build-up and seize additional territory.
*   Managing conflict and competition with Israel in order to prevent an accidental war.

Syria, however, saw U.S. efforts to revive the Arab-Israeli peace process in the spring and summer of 1991 as an opportunity to advance several of these objectives and to seek advantage at Israel's expense. It joined the peace process in July 1991 even though, by its own admission, it had not achieved strategic parity with Israel. In so doing, Assad was moved by several considerations:
*   The collapse of the Soviet Union and the defeat of Iraq weakened Syria politically and militarily, and put it in a vulnerable position vis-à-vis Israel.

• A perceived tilt in U.S. policy toward the Arabs convinced Syria that it could work with the Bush administration to achieve its objectives.[1]

• The Gulf War and other international developments demonstrated a new international consensus against "aggression and occupation" that Syria hoped would work to Israel's detriment.[2]

• The immigration of massive numbers of Soviet Jews to Israel created demographic pressures which Syria believed would result in additional Israeli aggression and expansion.[3]

In light of Assad's track record, his decision to join the peace process and accept face-to-face talks with Israel is an important development, even if his ultimate intentions remain cloudy. It is not clear, for instance, whether Syria has abandoned its long-term goal of destroying Israel, or whether it simply sees the peace process as a means of achieving this goal as well as various near-term objectives. Likewise, there are no indications that Syria is willing to compromise on substantive issues by altering its terms for a settlement. It has shown, however, a certain flexibility on procedural and symbolic matters—concerning the framework for an international conference and face-to-face talks, and the venue of these meetings—and it has toned down its anti-Israel rhetoric and loosened restrictions on Syrian Jews.[4] These positive developments may indicate a potential for a further evolution of the Syrian position, and greater flexibility down the road.

Syria, however, continues to build-up its military, expanding its stockpile of chemical and biological weapons

---

[1] Lally Weymouth, "Assad Speaks," *The Washington Post,* July 28, 1991, p. C4.

[2] Al-Sharaa, MBC Television (London), December 13, 1991, in *FBIS, Daily Report: Near East and South Asia,* December 16, 1991, p. 66.

[3] Khaddam interview in *Sawt al-Kuwayt al-Duwali,* August 4, 1991, pp. 6,7, in *FBIS-NES,* August 7, 1991, p. 42.

[4] Assad's speeches and interviews in the past two years have omitted the once common analogy between Israel and the Crusaders and comparisons of the Arab-Israeli conflict to the anti-colonial struggles of Algeria and Vietnam, with the implicit promise of ultimate victory.

and ballistic missiles, and acquiring large numbers of armored vehicles, aircraft, surface-to-air missiles, and other arms. This continued emphasis on building its military capabilities even while it is negotiating for peace raises a number of important questions:

• Has Syria abandoned its ultimate goal of eliminating Israel? Or has it only altered its strategy for attaining this goal—obtaining through negotiation what it has failed to obtain by force, while postponing the military option for some indefinite future?

• How deep-rooted is Syria's commitment to the peace process? Could Syria resurrect its military option under the cover of peace negotiations? Would it exercise this option if peace talks collapse or bog down?

• How has the collapse of the Soviet Union and the defeat of Iraq affected Syrian perceptions of the Arab-Israeli military balance and its own military capabilities?

• Would Syria—in order to bring about a peace agreement with Israel—be willing to conclude arms control agreements, security arrangements—such as force reductions and demilitarized zones—and abandon its support for terrorism?

This paper will attempt to answer these questions, proceeding from the assumption that an understanding of Syria's national security concept and its perception of the threat, as well as the impact of recent international and regional developments on Syria's military capabilities are essential to a deeper understanding of current Syrian strategy, its motives for joining the peace process, and the prospects for a settlement.

I THE EVOLUTION OF SYRIA'S NATIONAL SECURITY POLICY

Under President Hafez al-Assad, Syria's national security policy has been based on four principal elements: strengthening its ties with the Soviet Union; creating an Arab military coalition capable of confronting and deterring Israel; building up its own military capabilities; and cultivating ties with various terrorist groups to serve as its surrogates when it is unable to act on its own.

THE EGYPTIAN-SYRIAN AXIS

Upon seizing power in November 1970, Hafez al-Assad took steps to extricate Syria from its international and regional isolation and to prepare for a renewed confrontation with Israel. In an effort to mend ties with Egypt—a vital element of these efforts—it joined the Federation of Arab Republics, a loose confederation with Egypt and Libya, in April 1971. Syria's move towards Egypt also helped improve ties with the Soviet Union, resulting in major arms deals in May and July 1972. The turning point in Soviet-Syrian relations, however, followed Egypt's expulsion of Soviet advisors in July 1972. As a result, the Soviet Union tried to turn Syria into its primary base of influence in the region, seeking expanded access to Syrian

port facilities and airfields, and increasing its advisory presence there.[1]

In response to a series of Israeli air strikes and commando raids against terrorist bases in Syria following the massacre of Israeli Olympic athletes in September 1972, the Soviet Union undertook a major airlift of arms to Syria. These shipments enabled Syria to continue its confrontationist policy along the Golan, including air and artillery strikes, raids and ambushes, while preparing its armed forces for a renewal of hostilities, reorganizing them in accordance with lessons learned during the 1967 war. The principal trends in the development of Syria's military prior to the 1973 war included the:

• Reorganization of its ground forces on the basis of a divisional framework to enhance its offensive and defensive capabilities, and the integration of T-62 and T-55 tanks, BTR-152 and BTR-50 armored personnel carriers, and AT-3 antitank missiles into a combined arms framework.

• Creation of a modern, integrated air defense system around Damascus, with MiG-21 interceptor aircraft, SA-2, SA-3, SA-6, and SA-7 SAMS, and ZSU-23/4 mobile air defense artillery.

• Establishment of a modern navy with the acquisition of Osa I missile patrol boats to protect its vulnerable coast.

When in April 1973 Egypt's President Anwar Sadat proposed that Egypt and Syria initiate a two-front war against Israel, Assad eagerly seized the opportunity to more closely bind Syria to Egypt and retake territory occupied by Israel.[2]

---

[1] Soviet Tu-16 bombers were deployed to Syria to conduct maritime reconnaissance operations in support of its Mediterranean fleet, while the number of advisers rose from 700 to 3,000. Jon D. Glassman, *Arms for the Arabs: The Soviet Union and the War in the Middle East*, (Baltimore: The Johns Hopkins University Press, 1975), pp. 96-97; Roger F. Pajak, "Soviet Arms Aid in the Middle East Since the October War," in Congress of the United States, *The Political Economy of the Middle East: 1973-78*, (Washington, D.C.: U.S. Government Printing Office, 1980), p. 477; Ma'oz, *Asad: The Sphinx of Damascus*, pp. 84-88.

[2] Egypt took the decision to go to war in November 1972. The Egyptian decision was followed by the formation of a joint Egyptian-Syrian command in January 1973. Joint war planning commenced in February 1973, continuing until the eve of the war. Mohamed Heikal, *The Road to*

Syria considered Egypt a vital ally in the conflict with Israel because it was the largest and politically most important Arab state, had the largest army in the region, forced Israel to divide its forces between two fronts, and it provided a corridor for Arab expeditionary forces from North Africa.[1] Meanwhile, the Soviet Union and Syria concluded a major arms deal in April 1973, followed by massive arms transfers which continued until the eve of the war.[2]

By the start of the war, Syria had about 150,000 men under arms. Nearly the entire army—which was comprised of five divisions (the 1st and 3d Armored Divisions, and the 5th, 7th, and 9th Infantry Divisions), five independent brigades,[3] and seven commando battalions, with 1,650 tanks, 1,000 APCs, and 1,250 artillery pieces—was deployed across from the Golan. Air and air defense forces operated 280 combat aircraft and

---

Ramadan, (New York: Ballantine Books, 1975), pp. 1-4, 20-24; Anwar el-Sadat, *In Search of Identity: An Autobiography,* (New York: Harper and Row, 1977), pp. 241-242; Lt. General Saad El Shazly, *The Crossing of the Suez,* (San Francisco: American Mideast Research, 1980), pp. 36-37, 177, 201-203, 205; Yehuda Wallach *et al, Carta's Atlas of Israel—The Third Decade: 1971-1981,* (Hebrew) (Jerusalem: Carta, 1983), p. 44.

[1] Al-Ayyubi, "The Egyptian-Israeli Treaty and its Influence on the Balance of Forces," (Arabic), *Shu'un Filastiniyya,* May 1979, pp. 34-37. The importance Syria attached to Egypt's participation in the war effort was expressed by Syrian Chief of Staff Lieutenant General Yusuf Shakur during a planning meeting with the Egyptians prior to the war. According to Shakur, "If there is a failure on the Egyptian front, it will be the end of the Arabs, which means the end of Syria. If there is a failure on the Syrian front this would not be the end. It is on Egypt that all our hopes are pinned." Heikal, *Ibid,* p. 22.

[2] These transfers included T-62 tanks, BMP-1 infantry combat vehicles, AT-3 antitank missiles, MiG-21 fighters and Su-20 fighter-bombers, SA-2, SA-3, SA-6, and SA-7 SAMs, ZSU-23/4 air defense guns, and FROG-7 rockets.

[3] Including Unit 569 (the Defense Companies—the regime's premier praetorian unit), a reinforced armored brigade which was commanded by Rif'at al-Assad, the President's younger brother.

thirty-four SAM batteries (including fifteen mobile batteries). The navy operated nine missile patrol boats.[1]

The Syrian war plan called for a surprise attack to seize and hold the entire Golan within thirty-six hours, followed by a Soviet-sponsored cease-fire that would leave Syria with its territorial gains intact. Initial successes during the first seventy-two hours of the war enabled Syrian forces to retake most of the Golan, although Syrian requests for a cease-fire were rebuffed by the Soviet Union and Egypt, and Syrian forces were subsequently rolled back with heavy losses.[2]

The 1973 war was followed by a Syrian-initiated war of attrition beginning in December 1973, which paralleled U.S. post-war shuttle diplomacy. This included air strikes and air battles, artillery exchanges, and raids culminating in May 1974 with a Separation of Forces Agreement between the two sides. As part of the agreement, the summit of Mount Hermon (Jabal al-Shaykh) and other territory lost during the war, as well as the city of Kuneitra (lost in 1967) were returned to Syria.[3] The War of Attrition reinforced Assad's conviction that

---

[1] Wallach, *op cit.*, p. 48.

[2] Concerning the Syrian plan, see: *Tishrin*, May 17, 1980, p. 3, in *FBIS-NES*, May 21, 1980, p. H6; *Events* February 10, 1978, pp. 20, 21, in *FBIS-NES*, February 7, 1978, p. H2. See also Sadat, *op. cit.*, pp. 252-254; Heikal, *op. cit.*, pp. 212-213, 216-217. Syria's losses included 3,000 killed and 10,000 wounded, 135 combat aircraft, 1,150 tanks, 400 APCs, and 250 artillery pieces destroyed or damaged, and 5 missile patrol boats lost in combat. Wallach, *op. cit.*, p. 98. Despite flaws in planning and execution, Syria's operational concept for the 1973 War has remained its model for the recovery of the Golan, and the Syrians have rehearsed updated and improved versions of the battle plan a number of times since then. Ze'ev Schiff and Ehud Ya'ari, *Israel's Lebanon War*, (New York: Simon and Schuster, 1984) p. 70.

[3] Because the regime wanted to avoid the appearance that it had initiated a political process and was negotiating with Israel, it asserted that the disengagement agreement was a strictly military accord with no political significance, and that it did not in any way foreclose future military options or reduce its military freedom of action. Al-Ayyubi, "The Military Consequences of the Disengagement in the Golan" (Arabic), *Shu'un Filastiniyya*, July 1974, p. 25.

Syria could hope to achieve its objectives only through force, or by negotiating from a position of strength.

Since May 1974, Syrian-Israeli relations in the Golan have been governed by the Separation of Forces Agreement, which provides for an indefinite cease-fire on land, sea, and air, and a separation and thinning out of forces on both sides of the disengagement line. Israel's ratification of the agreement was predicated on an unwritten commitment by Syria not to permit terrorist infiltration through the Golan.

Syria emerged from the 1973 war with a heightened awareness of the importance of its Soviet patron, which had mounted a massive wartime resupply effort, threatened to intervene to save Egypt and Syria, and—following the war—deployed combat troops, pilots, and advisors to Syria to reinforce its defenses.[1] Soviet involvement and support for Syria continued at a high level following the war. Massive arms transfers were subsidized by $650 million in Arab aid, and within several months the Soviets had replaced all of Syria's wartime losses.[2]

The war also highlighted the limitations of Syria's partnership with Egypt. Syria believed that Egypt had abandoned the original war plan—ignoring Syria's requests for a cease-fire after 24 hours of combat, failing to press home its attack against the Sinai passes (enabling Israel to concentrate its forces against Syria during the initial phase of the war), and agreeing to a cease-fire without consulting Syria—thereby preempting a planned Syrian-Iraqi counterattack.[3]

Thanks to the Soviet resupply effort during and after the 1973 war, Syria was able to expand and reorganize its armed forces in accordance with lessons learned during the war, which had a major impact on its subsequent development. In

---

[1] According to Tlas, the Soviet Union was prepared to send 55,000 troops to Syria to prevent its defeat. *Al-Ra'y al-'Amm*, October 28, 1974, cited in Moshe Ma'oz, "Syria Under Hafez al-Assad: New Domestic and Foreign Policies," *Jerusalem Papers on Peace Problems* Number 15, 1975, p. 24.

[2] Pajak, "Soviet Arms," p. 477.

[3] *Tishrin*, May 17, 1980, p. 3, in *FBIS-NES*, May 21, 1980, p. H6; *Events*, February 10, 1978, pp. 20, 21, in *FBIS-NES*, February 7, 1978, p. H2.

particular, the war underscored the need to acquire a strategic deterrent (surface-to-surface missiles capable of reaching Israel's major cities) to counter Israel's nuclear capability and neutralize its air force; strengthen its air defenses and extend coverage beyond the Damascus area; reinforce its armor, infantry, artillery, and antitank forces and better integrate them; and improve its navy to better protect its vulnerable coastline.[1]

The major developments in the evolution of the Syrian armed forces in the period following the 1973 war included the:

- Acquisition of a strategic deterrent with the delivery of SCUD-B missiles.
- Reorganization of the 5th and 7th Infantry Divisions as mechanized divisions and the 9th Infantry Division as an armored division, and the addition of several commando battalions.
- Expansion of the air and air defense forces with the addition of new MiG-23 and older MiG-21 fighters and large numbers of mobile SA-6s, and the extension of its air defenses to heavily populated areas in the center of the country and along the coast.
- Acquisition of new Osa II and additional Osa I class missile patrol boats to replace wartime losses.

Syria, however, suffered from a lack of experienced and trained manpower for some time after the war, particularly tank crewmen and pilots who had taken heavy losses. Soviet, North Korean, and Cuban personnel were introduced as stop-gap measures until new personnel could be trained.[2]

---

[1] Al-Ayyubi, "Revolutionary Features of the Fourth Arab-Israeli War," (Arabic), *Shu'un Filastiniyya*, January 1974, pp. 29-32; Tlas, "Exploits of the October Liberation War: Combat at Sea" (Arabic), *Al-Fikr al-'Askari*, August 1974, pp. 11-28; Schiff, *The Israel Defense Forces Encyclopedia: The Air Force* (Hebrew), (Tel Aviv: Revivim, 1981), p. 171.

[2] These included North Korean and Cuban MiG-23 pilots, Soviet air defense personnel, and Cuban tank crews. Only about sixty experienced Syrian pilots had reportedly survived the war. Pajak, "Soviet Arms," p. 478.

REACTIVATING THE EASTERN FRONT

Despite Syrian suspicions about Egyptian intentions, its alliance with Egypt remained the centerpiece of its post-war foreign policy until the conclusion of the Egyptian-Israeli Sinai II interim accord in September 1975. From Syria's perspective, this agreement—which committed Egypt and Israel to renounce the use of force and to agree to resolve their differences by peaceful means—served to "split and weaken" the Arabs by "neutralizing" the Egyptian front, creating a strategic "imbalance" in the region.[1]

To counterbalance the apparent loss of Egypt's military potential, Syria renewed efforts to create an "Eastern Front" incorporating Syria, Jordan, Lebanon and the PLO, that would extend "from Ras al-Naqura on the Lebanese coast to the Port of Aqaba in Jordan."[2] This grouping, it was thought, would make Syria a center of Arab political influence and improve its position in any future war coalition by opening additional fronts along Israel's borders with Jordan and Lebanon and ensuring that any future war served its interests.[3]

From Syria's vantage point, Jordan was an important potential member of any military coalition, because its long border with Israel enabled it to pose a threat along a broad front where Israel possessed limited depth, thereby tying down large numbers of troops. Moreover, Jordan's army and air defenses could protect the southern flank of Syria's Golan deployments in the Dar'a region and prevent an Israeli flanking movement through there, while its naval forces could blockade the Israeli port of Eilat. Jordan was also a potential

---

[1] Assad on Radio Damascus, September 8, 1975, in *FBIS-NES*, September 10, 1975, p. H1; SANA, September 15, 1975, in *FBIS-NES*, September 19, 1975, p. H3.

[2] Radio Damascus, September 16, 1975, quoted in Reuven Avi-Ran, "The Syrian Military-Strategic Interest in Lebanon," *The Jerusalem Quarterly*, Spring 1988, p. 131.

[3] The concept of an "Eastern Front" had been promoted by Assad since the late 1960s and was a recurrent theme in his strategic thought as enunciated through the mid-1970s.

corridor for Iraqi and Saudi expeditionary forces.[1] Similarly, Lebanon was vital to Syria's security since the Bekaa Valley was a potential route through which Israel could attack Damascus or Homs, offered opportunities to tie down Israeli forces, and could serve as a potential springboard for attacks against northern Israel.[2]

Syrian-Jordanian political and military cooperation was broadened during this period with the formation of a joint military command in April 1975. Joint exercises were held, and both armies standardized their operating procedures, communications, and camouflage to promote interoperability. On the other hand, efforts to promote Syrian-Lebanese and Syrian-Palestinian political and military cooperation foundered with the eruption of the Lebanese Civil War in April 1975, the subsequent collapse of Lebanon's central government and armed forces, and Syria's overt military intervention in Lebanon in June 1976 which brought it into open conflict with the PLO.

MILITARY INTERVENTION IN LEBANON

Syria's military intervention in Lebanon had far-reaching political and military consequences. On the political level, it led to tensions with the Soviet Union and a six-month suspension of shipments of arms and spares. It also created tensions with Iraq, which in June 1976 amassed a large force

---

[1] Al-Ayyubi, "Jordan's Strategic Importance," (Arabic), *Al-Usbu' al-'Arabi*, November 4, 1974, pp. 26-27.

[2] Syrian efforts to station a permanent force in Lebanon to protect the approaches to Damascus and Homs date to 1955. Avi-Ran,"The Syrian Military-Strategic Interest in Lebanon," pp. 131-144. Syrian fears of an Israeli flanking movement through the Bekaa were not unjustified. Before the 1973 war, an Israeli reserve armored division had been earmarked for just such a mission. It was, however, committed to the Golan instead during the urgent early days of the war. Interview with Major General Moshe Bar-Kokhba, *The Jerusalem Post*, February 17, 1989, p. 5.

on its border with Syria, forcing Syria to respond in kind.[1]
Finally, it triggered a dramatic decline in economic assistance
from Saudi Arabia, Kuwait, and other oil states.[2] The political
backlash proved to be short-lived however, as Syria mended its
ties with other key Arab actors at the Arab summit meetings in
Riyadh and Cairo in October 1976. These meetings resulted in
the reemergence of the Egyptian-Syrian axis as the central
factor in inter-Arab politics.[3]

On the military level, however, the intervention had a
significant long-term impact which continues to this day.
Within a year, the Syrian commitment had grown to about
30,000 men (including an armored division, an independent
mechanized infantry brigade, and several special forces
battalions), stripping the Golan front of its operational reserve.[4]
Syria's military intervention in Lebanon also produced an
intensification of anti-regime violence, including a series of
car-bombings and assassinations, that continued through 1982.
The growing scope and intensity of the violence eventually
required the dispatch of key units from the Damascus area
(including units comprising the army's strategic reserve) to
quell violence in Aleppo in April 1980 and in Hama in
February 1982.[5]

---

[1] According to Tlas, Iraq massed six armored divisions on the border,
prompting Syria to dispatch two armored divisions, a motorized brigade,
and antitank units in response. "Revolution... Permanent Spring,"
(Arabic), *Tishrin*, March 7, 1988, pp. 1, 10, in *FBIS-NES*, March 24, 1988,
p. 55. While this claim may exaggerate the size of the forces deployed by
both sides, it clearly indicates Syria's perception of the magnitude of the
threat.

[2] Pajak, "Soviet Arms," p. 479.

[3] Daniel Dishon, "The Web of Inter-Arab Relations: 1973-1976," *The
Jerusalem Quarterly*, Winter 1977, p. 57.

[4] Lieutenant Colonel Daniel Asher, "The Syrian Invasion of Lebanon:
Military Moves as a Political Tool," (Hebrew), *Ma'arachot*, June 1977, p. 7.

[5] Up to 25,000 troops were involved in these operations, including
elements of the crack 569th and 3d Armored Divisions, the 47th

Syria's military intervention in Lebanon in June 1976 also transformed the nature of its relations with Israel. Since then Syrian-Israeli relations in Lebanon have been governed by a series of tacit understandings, comprised of loosely defined "red lines" demarcating limits on the scope and nature of each side's involvement in Lebanon. The original Israeli "red lines" specified that: Syrian forces in Lebanon would not move south of a line extending eastward from Al-Zahrani to Jazzin and Kafr Mishki; Syria would not introduce surface-to-air missiles into Lebanon; Syrian aircraft would not interfere with Israeli air force operations over Lebanon or support Syrian ground forces there; and the Syrian navy would not operate off the Lebanese coast.[1] While Syria formally denies observing any "red lines," its actions on the ground indicate otherwise.[2]

Syria has also, on several occasions, defined its own "red lines" concerning its vital interests in Lebanon and used a variety of means to pass messages to Israel:

• In April 1981, during the Syrian siege of Zahle, the Syrians built several dugouts in the Bekaa Valley for SA-6 missiles near the border, as a warning to Israel not to intervene in the fighting. Israel did intervene, and Syria introduced the missiles into Lebanon.[3]

• In February 1982, Syrian officials signalled Israel through an Arab journalist that it desired to avoid a war in Lebanon, and that if Israel limited forthcoming operations

---

Independent Armored Brigade, several special forces regiments, and Ba'thist popular militias.

[1] In the mid-1980s, Israel added two more "red lines," consisting of warnings to Syria not to challenge the Israeli "security zone" in South Lebanon or the Army of South Lebanon presence in the Christian enclave of Jazzin. Asher Wallfish, "De Facto Agreements With Syria 'Must Hold'," *The Jerusalem Post*, May 21, 1991, pp. 1, 10.

[2] President Assad once told a Lebanese Front delegation, "Do not concern yourselves with the 'red line' which the Americans and the Israelis are talking about. It does not exist, in any event I cannot see it." Karim Pakradouni, *Stillborn Peace: The Mandate of Elias Sarkis, 1976-1982* (Beirut: Editions FMA, 1985), p. 72.

[3] Schiff and Ya'ari, *op. cit.*, p. 33.

there to attacks on the PLO, Syrian intervention would remain limited.[1]

  • During the April 1981 Syrian-Israeli missile crisis and the June 1982 Israeli invasion of Lebanon, Syria deployed SCUD-B missiles north of Damascus as a warning to Israel not to expand the scope of the conflict.[2]

Syrian and Israeli military and civilian officials have also communicated through secret face-to-face meetings, public statements, private communications conveyed by third parties, and actions in the field in order to limit the possibility of an accidental war in Lebanon, and have thus succeeded in managing conflict between the two sides.[3]

THE "CAMP DAVID CONSPIRACY"

In Syria's eyes, Egypt's rapprochement with Israel, starting with President Anwar Sadat's visit to Jerusalem in November 1977 and culminating with the signing of the Egyptian-Israeli peace treaty in March 1979, marked a turning point in the conflict. The treaty, which Syria believed to be part of a U.S.-sponsored conspiracy, effectively removed Egypt from the ranks of confrontation states, upset the strategic balance in the region that had been created by the Egyptian-Syrian axis and

---

[1] Itamar Rabinovich, "Controlled Conflict in the Middle East: The Syrian-Israeli Rivalry in Lebanon," in Gabriel Ben-Dor, and David B. Dewitt, *Conflict Management in the Middle East*, (Lexington Books: Lexington, MA, 1987), pp. 104-105.

[2] Schiff and Ya'ari, *op. cit.*, p. 34; Major General Avigdor Ben-Gal, "Syrian Forces in Lebanon and the Fighting in the Bekaa" in Ze'ev Klein (Ed.) *The War Against Terror*, (Hebrew), (Revivim Publishing Company: Tel Aviv, 1988), p. 101.

[3] For a brief summary of secret face-to-face meetings see: Yossi Melman, "Since '49 Jerusalem Held Direct and Indirect Contacts with Damascus," (Hebrew), *Ha'aretz*, July 22, 1992, p. A3; Yossi Melman, "Israel's Back Road to Damascus," *The Washington Post*, August 4, 1991, p. C2; and Michael O'Sullivan, "The Secret Syrian-Israeli Dialogue," *Middle East International*, June 1, 1984, pp. 14-15.

left Syria politically and militarily isolated and vulnerable.[1] With Egypt out of the military equation, the Syrians believed that Israel would have a free hand to attack Syria—the only remaining confrontation state, beside Lebanon—in order to eliminate the PLO. Syria believed that if it were defeated, there would be no remaining obstacle to Israeli expansion.[2] Syria believed that its fears were partly confirmed by the Israeli Litani operation in March 1978—initiated in retaliation for a bloody terrorist attack—which aimed to destroy the PLO presence in South Lebanon.

Following Sadat's visit to Jerusalem, Syria initiated a major military build-up in order to redress the strategic balance with Israel and to create an offensive military option as well as a defensive deterrent capability. Major arms deals with the Soviet Union, partly subsidized by cash grants from Saudi Arabia, Kuwait, and several other countries, were concluded in February 1978, January 1979, and October 1979.[3] Major trends in the development of the Syrian military during this period included the:

• Expansion of the ground forces by the reorganization of Unit 569 as an armored division and by increasing the number of special forces battalions to twenty-five.

• Acquisition of large numbers of modern T-72 tanks as well as older T-62 tanks, BMP-1 infantry combat vehicles, and 2S1 and 2S3 self-propelled howitzers.

• Procurement of modern antitank systems, including Soviet Mi-25 and French SA-342L attack helicopters, and MILAN, HOT, and AT-4 antitank missiles.

---

[1] Al-Ayyubi, "The Egyptian-Israeli Treaty and its Influence on the Balance of Forces," (Arabic), *Shu'un Filastiniyya*, May 1979, pp. 26-37.

[2] Brigadier General Dr. Haytham Kaylani, "The Role of the Invasion of Lebanon in Israeli Military Strategy," (Arabic), *Al-Fikr al-'Askari*, September-October 1982, pp. 11-45; Tlas *et al*, *The Israeli Invasion of Lebanon* (Arabic), (Damascus: Tishrin Publishing House, 1983), pp. 70-71, 196.

[3] The Baghdad Arab Summit conference, which was held in November 1978, committed the Arab states to an annual $1.85 billion subvention to Syria, for ten years, to meet its defense needs. Actual donations, however, fell far short of commitments.

• Introduction of modern Su-22 and MiG-23BN strike aircraft, MiG-25 interceptors, and mobile SA-8 and SA-9 SAMs.

While the dramatic expansion of Syria's armed forces during this period was spurred primarily by its desire to redress the strategic balance with Israel and its heightened sense of vulnerability, it was also prompted by a desire to meet the increasingly broad range of commitments—in Lebanon and elsewhere—that the armed forces were called on to fulfill, without drawing down forces in the Golan and sacrificing readiness there.[1] In addition, the expansion of the Syrian army (and thus the number of units liable to be involved in a coup attempt) and continuing anti-regime violence provided the impetus for a major expansion of the principal regime defense and internal security units during this period.[2]

SYRIA LOOKS TO IRAQ

Syria attempted to offset the loss of Egypt by forging a new political and military alliance with Iraq. Because of the size of Iraq's army (twelve divisions), its large fleet of tank transporters (1,700 on hand or on order), and its proximity to the front, it was the only Arab country that could make a significant and timely contribution in wartime, and provide Syria with the strategic depth it lacked.

A Syrian attempt at reconciliation in December 1977 was initially rebuffed by Iraq, and so, lacking any other options, Syria joined the rejectionist front—Algeria, Libya, South Yemen, and the PLO—which had been established at the Arab summit in Tripoli in December 1977. This group, however, hardly constituted a viable military substitute for Egypt or Iraq,

[1] For instance, Syria's extended involvement in Lebanon spurred the dramatic growth of its special forces—elite light infantry units—which were particularly well suited for Lebanon's mountainous and urban terrain. Their limited logistical requirements permitted them to live off the Lebanese economy, thereby easing the burden of Syria's military involvement there. By 1982, Syria had raised six special forces regiments (comprised of twenty-five commando battalions), most of which were deployed in Lebanon, compared to ten battalions in 1976.

[2] Unit 569 was reorganized as a reinforced armored division while the special forces were expanded.

since its membership was widely dispersed and far from the front.

Iraq suddenly reversed its stance in October 1978. The two countries signed a "National Charter for Joint Action," and held a series of meetings to discuss unification. Those negotiations were suspended in August 1979, however, after Iraq accused Syria of plotting to overthrow the regime in Baghdad. Relations between the two countries deteriorated, and Assad was once again forced to fall back on the Soviet Union and the rejectionist front for support.[1]

Despite its inability to organize a viable military coalition, and its regional isolation, Syria apparently felt sufficiently confident of its military position to challenge Israeli overflights of Lebanon on several occasions during this period. In five aerial engagements—in June and September 1979, August and December 1980 and in February 1980—Syria lost a total of thirteen aircraft (twelve MiG-21s and one MiG-25), without downing a single Israeli aircraft. While not achieving any tangible military results, these operations did enable Syria to demonstrate that it remained the only Arab state actively confronting Israel, thus enhancing its regional and domestic standing.

THE TURNING POINT: SYRIA GOES IT ALONE

Syria's assessments of its prospects for achieving a strategic balance with Israel by forming a military coalition underwent a fundamental change in 1980. While still hoping to form a coalition, Syria's leaders began to think in terms of unilaterally redressing the balance.[2] This reassessment resulted in part from a recognition of the military implications of its deepening regional political isolation following the Iraqi invasion of Iran in September and the Soviet invasion of

---

[1] In April 1980, Syria, Libya, Algeria, South Yemen, and the PLO agreed to establish a joint "mobile intervention force" under Syrian command to defend against "the dangers threatening the Arabs." It appears that the decision to establish this force was never implemented. Interview with Khaddam in *Der Spiegel,* April 28, 1980, pp. 157-162.

[2] Chief of Staff General Hikmat Shihabi, *Al-Nahar al-'Arabi wa al-Duwali,* July 28-August 3, 1980, pp. 17-18, in *FBIS-NES,* July 31, 1980, p. H2.

Afghanistan in December of 1980. As a result of the Gulf War, which tied down the armed forces of Iraq, Saudi Arabia, and the other Gulf states, and Syria's near total isolation—which continued throughout the 1980s—Syria realized that it could not realistically expect military assistance from within the region.[1]

This reassessment also derived from a recognition of the obstacles to the effective and timely deployment of Arab expeditionary forces in wartime due to the need for secrecy during prewar planning, inter-Arab political differences, and Israel's ability to interdict these forces while en route to the front.[2]

To compensate for its regional isolation and military weakness, Syria signed a "Treaty of Friendship and Cooperation" with the Soviet Union in October 1980—after having rebuffed Soviet overtures for over a decade. It also attempted to extract explicit Soviet security commitments, including the extension of the Soviet nuclear umbrella to Syria, while pushing for additional arms transfers and increased military cooperation. Syria's relationship with the Soviet Union took on added importance in light of growing strategic cooperation between the U.S. and Israel, which, in Syrian eyes, boosted Israeli military and economic capabilities, encouraged further expansion and aggression, ensured its

---

[1] According to Foreign Minister Khaddam, "Syria aspires to reach the point at which its own strength will enable her to achieve a strategic balance with Israel, without needing to rely on the other Arab states. This is after past experience has proven to Syria that the Arab world, in its present situation, does not constitute a credible support capable of assisting her." Haim Raviv, "The Syrian Goal: Alone Against Israel," (Hebrew), *Bamahane*, September 24, 1980, p. 24.

[2] Tlas stated that "We in Syria know that Israel will not permit Arab countries like Saudi Arabia, Algeria, and Libya, which have an advanced military capability, to reach the theater of military operations should any battle take place." *Al-Mustaqbal*, December 3, 1983, pp. 28-29, in *FBIS-NES*, December 6, 1983, p. H4.

continued supremacy over the Arabs, and reinforced its hold over occupied Arab territories.[1]

This period also saw growing Syrian assertiveness in its relationship with Jordan and Lebanon. In December 1980, Syria massed three divisions and 1,000 tanks along its border with Jordan during the Arab summit in Amman in order to deter Jordan from entering into negotiations with Israel and to compel it to cease its support for Syria's Islamic opposition.[2] Then in April 1981, in response to Israel's downing of two Syrian Mi-8 transport helicopters supporting operations against Lebanese militiamen in Zahle, President Assad ordered the introduction of SAMs into Lebanon, leading to the first Syrian-Israeli missile crisis. This move demonstrated Assad's growing confidence in Syria's deterrent capability vis-à-vis Israel and his determination to preserve Syrian prerogatives in an area it considered vital to its security. It also set the stage for war with Israel one year later.[3]

WAR IN LEBANON

While Israel's invasion of Lebanon in 1982 and its attack on PLO forces there did not come as a surprise to Syria, the attack on its own forces there did.[4] At the outset of the 1982 war, Syria

---

[1] Tlas, "Israeli-American Strategic Cooperation and its Role in Zionist Strategy," (Arabic), *Istratijiyya*, June 1982, pp. 6-9; Tlas, *The Israeli Invasion of Lebanon*, pp. 90-98.

[2] Thomas Mayer, "Syria," in Colin Legum, ed., *Middle East Contemporary Survey 1980-81*, (New York: Holmes and Meier Publishers, Inc., 1982) p. 796.

[3] In addition, the Syrians claimed that the introduction of SAMs into Lebanon restricted Israel's aerial freedom of action over the Bekaa by threatening its manned reconnaissance overflights there, forcing it to rely more heavily on reconnaissance RPVs. Tlas, *The Israeli Invasion*, pp. 178, 183.

[4] According to a Syrian intelligence report dated April 28, 1982 which was later captured by Israeli forces, the Syrian command in Lebanon expected a "wide-ranging offensive operation whose objective is Palestinian and nationalist forces bases in the south, and the conquest of

had 250,000 men under arms. The army included six divisions (four armored, two mechanized), four independent brigades, and six special forces regiments, with 3,600 tanks, 2,300 artillery pieces, and 2,700 APCs. Its air and air defense forces operated about 500 combat aircraft and eighty SAM batteries. Syrian forces in Lebanon included 30,000 troops with one armored division, one independent mechanized brigade, and ten special forces battalions and 300 tanks, 300 artillery pieces, and eighty APCs.[1] Although Syria believed that Israel would attack Syria if given the opportunity, it also believed that it was strong enough to deter any moves against its own forces, and that Israel would restrict military operations to actions against the PLO in the south of the country, as it had during the Litani operation in 1978. However, Israel drew Syrian forces in Lebanon into a trap and succeeded in inflicting heavy losses.[2]

On the political and strategic levels, the 1982 War reinforced Syria's belief that it had correctly assessed Israel's intentions, even if it had erred in its assessment of its own deterrent capability.[3] It also underscored the fact that it could

---

additional Lebanese territory." Reuven Avi-Ran, *The War in Lebanon: Arab Documents and Sources* (Hebrew), (Tel Aviv: Ministry of Defense, 1987), pp. 180-182. Assad and his military apparently believed that Israel would not attack Syrian forces in Lebanon, and failed to prepare for war. Later, Tlas admitted that Syrian forces in Lebanon were "deployed for security and not defensive purposes" and that the Israelis benefitted from "the factor of concealing intentions and deception" as well as "surprise in terms of forces, place, and time." Tlas, *The Israeli Invasion*, pp. 17-18, 203.

[1] Colonel Benny Michaelson, "Operation Peace for Galilee," (Hebrew), *Ma'arachot*, September 1982, p. 26.

[2] Losses included 1,500 killed, 2,500 wounded, and ninety-nine combat aircraft, 400 tanks, ninety APCs, twenty-one SAM batteries, and six helicopters destroyed or damaged. Ze'ev Klein, *op. cit*, (Hebrew), (Tel Aviv: Revivim, 1989), p. 110.

[3] In an article written shortly after the war, Tlas claimed that Israel's "strategic objective" was to "provoke and strike Syria" before it could "complete its preparations" for achieving "strategic parity." Tlas, "Zionist Strategy and South Lebanon," *Istratijiyya*, October 1982, pp. 6-11, in *Joint*

not rely on the Soviet Union or the Arabs for support in wartime, and that it had not yet succeeded in creating a credible deterrent capability vis-à-vis Israel. On the other hand, the war bolstered Syrian confidence by showing that despite unfavorable odds, it had prevented Israel from achieving its objectives and in the process inflicted heavy losses.[1]

On the operational-tactical level, the war highlighted weaknesses in Syria's air and air defense forces and in the command and control of its ground forces in Lebanon, while underscoring the potential of advanced weapons and combat systems and the enduring importance of the human factor in warfare.[2]

Following the war, Syria's leaders began to stress the need to close the qualitative gap between the two countries revealed by the war in the political, socio-economic, and cultural realms. According to President Assad:

> When we raised the slogan of strategic balance several years ago, we realized that this does not only mean balancing a tank with a tank and a gun with a gun, but also balancing all aspects of life—the political, manpower, social, cultural, economic, and military aspects. Neglecting any of these elements will inevitably create a weakness in the body of this balance of which we are speaking.

Publications Research Service—Near East and South Asia (JPRS-NES), December 16, 1982, pp. 167-168.

[1] Writing after the war, Tlas stated that despite Israeli air superiority and unfavorable odds Syrian forces "prevent[ed] Israel from achieving any strategic objective," inflicted "heavy losses," and prevented the enemy from "occupying the Bekaa" or "controlling the Beirut-Damascus highway." Tlas, *The Israeli Invasion*, pp. 18, 218-219; *Al-Majallah*, January 1-7, 1983, pp. 1-7, in *FBIS-NES*, January 6, 1983, pp. H3, H5. He cautioned, however, against drawing exaggerated conclusions on the basis of the fighting in Lebanon, stating that "Despite the far-reaching repercussions of the al-Bekaa battles on the political and military levels, it is difficult to view those battles as having been a comprehensive military confrontation between Syria and Israel." Tlas, *The Israeli Invasion*, p. 225.

[2] Tlas, *The Israeli Invasion*, pp. 174-178, 189-194, 206, 217-227. Staff Brigadier General Ahmad Muhsin al-Muhammad, "The Role of Israeli Weapons and Combat Systems in the 1982 Lebanese War," (Arabic), *Al-Fikr al-'Askari*, January-February 1985, pp. 50-51.

> We also realized that this matter cannot be achieved overnight, but will require the appropriate time and effort.[1]

This emphasis on the need to close the qualitative gap in order to achieve a strategic balance with Israel not only derived from an analysis of the lessons of the 1982 war. It was also motivated by a desire to turn the slogan into a means of mobilizing the population in support of the regime's policies, thereby justifying the sacrifices the regime was requiring of the population, and rationalizing the regime's indefinite postponement of military action against Israel.

Following the war, Syria pressed the Soviet Union for security guarantees to offset the perceived threat posed by U.S.-Israel strategic cooperation, and the U.S., British, French, Italian, and Israeli military presence in Lebanon.[2] While the Soviet Union did not meet Syria's request, it delivered large amounts of arms, enhancing Syria's deterrent capability and permitting a dramatic acceleration of Syria's ongoing military build-up. Principal trends in the evolution of the Syrian military following the 1982 war included the:

• Production of chemical warheads for the SCUD-B missile and chemical bombs filled with the nerve agent sarin, as well as the introduction of the SS-21 missile.

• Creation of two army corps—one in Syria and one in Lebanon—to facilitate wartime command and control on two fronts; the formation of three new divisions—the 10th mechanized, 11th armored, and 14th airborne—dedicated to the defense of the Bekaa; and the reorganization of the

---

[1] Radio Damascus, March 8, 1986, in *FBIS-NES*, March 10, 1986, pp. H1-H2.

[2] Prior to the war, the Syrians had reportedly pressed the Soviets to amend the treaty to include a Soviet commitment to support Syria in the event of fighting in Lebanon, and it continued to press for such an amendment after the war. Amiram Nir, *The Soviet-Syrian Friendship and Cooperation Treaty: Unfulfilled Expectations*, Jaffee Center for Strategic Studies Paper Number 19, May 1983, p. 38.

Republican Guard as an armored division dedicated to the
defense of Damascus and the regime.[1]
*   Procurement of hundreds of modern T-72 tanks, BMP-1
infantry combat vehicles, and large quantities of antitank
weapons.
*   Addition of a fourth brigade to each armored and
mechanized division, enhancing the operational flexibility,
punch, and staying power of these units.[2]
*   Expansion of the reserve forces and the implementation
of measures to facilitate and speed their mobilization in
wartime.[3]
*   Acquisition of additional MiG-23 and MiG-25 fighters,
new jamming pods, and AA-8 and AA-7 air-to-air missiles.
*   Introduction of fixed SA-5s, additional mobile SA-8s and
SA-9s, new early warning radars, improved command and
control systems, and secure communications links.

These massive arms transfers were accompanied by a
dramatic expansion of the Soviet role in Syria and the direct
involvement of Soviet personnel in combat roles. Soviet
personnel manned SA-5 missile batteries (delivered in
December 1982) tied to Soviet air defense headquarters in
Moscow by a satellite data link and flew ELINT missions (in

---

[1] For details about Syria's doctrine for the employment of its corps in
wartime, see Staff Colonel 'Issa Mahmud Salum, "The Corps in the
Offensive," (Arabic), *Al-Fikr al-'Askari*, November 1984, pp. 99-124. Syria
added the 10th Mechanized and 11th Armored Divisions in 1983, the
14th Airborne Division (formed from units drawn from Unit 569 and
the Special Forces) in 1984, and the Republican Guard Division in 1985.

[2] The addition of a fourth brigade to each division brought the total
number of tanks in an armored division to 370, and in a mechanized
division to 300. Aharon Levran, ed., *The Middle East Military Balance:
1986*, (Boulder: Westview Press, 1987), p. 182.

[3] Between 1982 and 1989, the reserves expanded from 100,000 to 270,000
men, and a special reserve of 50,000 men for rapid call-up was
established. Cordesman and Wagner, *The Lessons of Modern War*,
(London: Westview Press, 1990), p. 277; Haim Raviv, "The Syrians are
Improving their Reserve Mobilization System" (Hebrew), *Bamahane*, May
19, 1983, p. 16.

HIP-J and K helicopters) for the Syrians.[1] At the peak of the Soviet involvement in early 1984, there were over 6,000 Soviet combat personnel, advisors, and technicians in Syria. Soviet naval vessels made regular use of port facilities at Tartus, and maritime reconnaissance aircraft flew missions out of Tiyas airfield.[2] This peak-level involvement turned out to be short-lived, however, and approximately 2,000 troops, advisors, and technicians operating Syria's SA-5s were withdrawn in late 1984 and early 1985 when these weapons were turned over to Syrian control.[3]

As a result of extraordinary efforts to expand its order of battle, by 1985 Syria had 500,000 men under arms, twice as many as in June 1982. The army was organized into two corps, consisting of nine divisions (five armored, three mechanized, one airborne), one independent armored brigade, and seven special forces regiments, with 4,100 tanks, 3,500 APCs, and 2,300 artillery pieces. The air and air defense forces operated 620 combat aircraft and 160 SAM batteries, and the navy operated twenty missile patrol boats.[4]

Buoyed by its dramatic recovery from its defeat in 1982 and the Israeli withdrawal from Lebanon in June 1985 under the pressure of Syrian-supported guerillas, Syria responded to Israel's downing of two MiG-23s in November 1985 in Syrian

---

[1] Anthony H. Cordesman, "Syria-Israeli C3I: The West's Third Front?" *Armed Forces Journal International*, March 1984, pp. 87-88. In addition, according to unconfirmed reports, Soviet manned Tu-126 Moss AWACS aircraft and Big Bird early warning radars were deployed to Syria during this period.

[2] Tartus was the primary maintenance facility for Soviet submarines in the Mediterranean. The normal complement there included a submarine tender, a yard oiler, and a water tender. In addition, pairs of Il-38 MAY ASW aircraft periodically deployed to Tiyas airfield, northeast of Damascus. Department of Defense, *Soviet Military Power 1985*, p. 124.

[3] By April 1985, there were about 4,000 Soviet combat personnel, advisors, and technicians left in Syria, including 1,000 army, 2,000 air defense, 800 air force, and 100 navy personnel. *Ibid.*

[4] Heller, *The Middle East Military Balance, 1985*, pp. 235-244.

airspace with the introduction of SA-6 and SA-8 missiles into Lebanon, sparking a second missile crisis which ended with the withdrawal of these missiles in December 1985. Later that month, it reintroduced the missiles, withdrawing them in January 1986 only as a result of intense U.S. pressure and Israeli threats. This new-found self-confidence also expressed itself through rhetorical excesses. In a speech in late February, Assad urged his listeners to "rest assured that victory is ours and time is on our side," promising that "if the Israelis work to put the Golan within their borders," then he would work "to put the Golan in the middle of Syria and not on its borders."[1] Then, in April 1986 Syrian intelligence unsuccessfully attempted to plant a bomb on an Israeli El Al 747 jetliner in London, raising tensions and the possibility of Israeli retaliation. Although these incidents highlighted the potential for conflict, they also demonstrated the degree to which Syria and Israel were able to regulate conflict and competition so as to limit the likelihood of an accidental war.

YEARS OF CRISIS

By 1986, political change in the Soviet Union and an economic crisis combined to stall Syria's military build-up. The accession of Mikhail Gorbachev as President of the Soviet Union in 1985 led to major changes in Soviet foreign policy which reflected the influence of "new thinking" in Moscow. The first public sign of this new thinking with regard to Syria appeared during Assad's April 1987 visit to the Soviet Union, when Gorbachev declared that the notion of a military solution to the Arab-Israeli conflict "has become completely discredited" and that the absence of Soviet-Israeli diplomatic relations "cannot be considered normal."[2] This new policy was also accompanied by demands that Syria repay its substantial debt and pay for arms in hard currency, leading to

---

[1] Radio Damascus, February 27, 1986 in *FBIS-NES*, February 28, 1986, p. H6.

[2] John Hannah, *At Arms Length: Soviet-Syrian Relations in the Gorbachev Era*, Policy Paper No. 18, (Washington, D.C.: The Washington Institute for Near East Policy, 1989), pp. 11-12.

a decline in the level of arms transfers to Syria; the rejection of Syrian requests for SS-23 missiles and delays in the delivery of MiG-29s and Su-24s; and improved relations with Israel.[1]

The Soviets also reportedly encouraged Syria to abandon its efforts to attain "strategic parity" with Israel, urging it instead to be content with "reasonable defensive sufficiency" which it defined as the ability to inflict unacceptable losses on Israel if it attacked Syria.[2]

At the same time, Syria faced an economic crisis brought on by years of state control and mismanagement of the economy; a dramatic decline in aid from Saudi Arabia, Kuwait, and Iran and remittances from Syrian laborers abroad; and Soviet insistence that Syria repay its debt and pay for arms in hard currency.[3] For years, Syria's massive military expenditures had been subsidized by foreign financial aid; now it was forced to pare down its military ambitions and adopt various austerity measures. These included deferring plans to add two new reserve armored divisions to its ground forces; reducing a brigade from each division to cadre strength and storing its equipment;[4] releasing large numbers of

---

[1] *Ibid*, pp. 13-14, 32-34, 40-42. Despite strains in the relationship, the Soviet presence continued and in fact, in 1988 it was reported that the Soviet Union was enlarging port facilities at Tartus as a prelude to an expanded presence there. It does not seem that these plans were ever implemented. Robert Pear, "U.S. Says Soviets Are Expanding Base for Warships on Syrian Coast" *The New York Times*, August 28, 1988, pp. A1, A14.

[2] Soviet Ambassador to Syria, Alexander Zotov, quoted in Caryle Murphy, "Syria Urged to Stress Defense," *The Washington Post*, November 20, 1989, pp. A25, A28.

[3] Eliyahu Kanovsky, *What's Behind Syria's Current Economic Problems?* (The Dayan Center for Middle Eastern and African Studies, Occasional Paper Number 89, May 1985); and Patrick Clawson, *Unaffordable Ambitions: Syria's Military Build-Up and Economic Crisis*, Policy Paper No. 17, (Washington, D.C.: The Washington Institute for Near East Policy, 1989).

[4] It is not clear whether these brigades would—or could—be rapidly mobilized in wartime. Aharon Levran, *The Middle East Military Balance:*

conscripts on extended active duty tours as well as active reservists;[1] and curtailing exercises and training in order to reduce expenditures for fuel, ammunition, and spare parts.[2]

Nonetheless, the expansion of the armed forces continued during this period, albeit at a reduced rate. Major trends in the evolution of the Syrian military after 1985 included the:

• Addition of several hundred T-72 and T-62 tanks to the ground forces, replacing older T-55 tanks which were sent to reserve formations.

• Acquisition of modern MiG-29 fighters, Su-24 strike aircraft, and mobile SA-11 and SA-13 missiles.

• Introduction of SS-C-3 Styx and SS-C-1B Sepal missiles, Romeo class submarines, and Mi-14 ASW helicopters.

Syria's continued political isolation and economic straits, coupled with its military problems prompted it to reassess some of its policies and to mend fences with the U.S. and Egypt. In an effort to improve relations with the U.S., which had deteriorated following the 1986 El Al incident, Syria closed the Damascus offices of the Abu Nidal Organization in June 1987. This was followed by the return of the U.S. ambassador to Damascus in September 1987 and the Syrian ambassador to Washington in June 1990. Then, ending a decade of estrangement with Egypt, Syria consented in January 1989 to Egypt's re-admission to the Arab league, and subsequently restored full diplomatic relations with Egypt in December 1989.

This reassessment also produced a new approach towards Israel. In early 1988, Syria reportedly signalled Israel's leadership that in return for a full withdrawal from the Golan it was willing to conclude a settlement with Israel including

---

1986, pp. 178, 182; Aharon Levran, *The Middle East Military Balance: 1987-1988*, pp. 204, 207; and Cordesman and Wagner, *op cit.*, p. 278.

[1] These two categories of personnel together comprised about 20 percent of total military manpower. Levran, *The Middle East Military Balance: 1987-1988*, p. 197.

[2] *Ibid*, p. 198. There was a brief increase in exercise activity and training in 1988, however, as a result of improved economic conditions caused by the end of a period of drought that year.

various security arrangements.[1] This was reportedly followed by a series of secret meetings between October 1988 and January 1990 by Syrian and Israeli representatives in Europe to discuss the prospects for a settlement.[2] Not until Iraq's invasion of Kuwait in August 1990, however, did the full extent of the change in Syrian policy become evident.

SYRIA COMES FULL CIRCLE

Iraq's invasion of Kuwait in August 1990 sparked a crisis that accelerated the reorientation in Syrian policy that had begun several years before.[3] Syria participated in the Gulf War as part of the international coalition and as its contribution to the war effort, it sent the 9th Armored Division and the 45th Special Forces Regiment, with 14,300 troops, to Saudi Arabia. Syria's participation in the coalition yielded a number of political and economic benefits: improved relations with the U.S., closer ties with Egypt and Saudi Arabia—its allies during the 1973 war, and a dramatic increase in aid. During and after the Gulf War, Syria received $2.5 billion in cash grants and loans from Saudi Arabia ($1.4 billion of the total), Kuwait, the UAE, and several western donors, enabling it to initiate a major military build-up and implement long-delayed development plans.[4]

On the other hand, the war constituted a major military setback for Syria, which had in the past looked to Iraq as a potential coalition partner in the event of a war with Israel. Although Syrian-Iraqi relations were strained, Iraq remained the only country which could make a significant and timely

---

[1] IDF Radio, February 7, 1988, in *FBIS-NES*, February 8, 1988, p. 25; *Hadashot*, February 19, 1988, p. 1, in *FBIS-NES*, February 19, 1988, p. 25.

[2] *Mideast Mirror*, February 23, 1990, p. 20.

[3] Daniel Pipes, *Damascus Courts the West: Syrian Politics, 1989-1991*, Policy Paper No. 26, (Washington, D.C.: The Washington Institute for Near East Policy, 1991), pp. 19-20, 40-49.

[4] David Butter, "Syria Reaps Rewards of Regional Policies," *Middle East Economic Digest*, September 27, 1991, p. 4.

contribution in the event of a war. It had the largest military establishment in the Arab world (with 1.2 million men, 68 divisions, 5,800 tanks, and 650 combat aircraft) and its defeat was a major blow to Syrian military aspirations.

Despite this setback, Assad believes that the balance of forces in the region will eventually tilt in his favor. To hasten this process, Syria has forged a new strategic alliance with Iran, taken tentative steps towards a rapprochement with Iraq, and initiated a major military build-up.

In September 1991 Syrian Chief of Staff General Hikmat Shihabi headed a large military delegation to Tehran. During his stay he concluded a strategic accord with Iran, and although the provisions of the accord are unknown, the scope of military cooperation between the two countries has since then broadened dramatically to include the joint production of SCUD-C missiles (with North Korean and Chinese technology and assistance), Syrian assistance with the integration and maintenance of Russian equipment (including former Iraqi combat and transport aircraft) recently acquired by Iran, and the use of Iranian ports and airfields to transship North Korean SCUD-C missiles destined for Syria.[1]

For Syria, Iran is useful as a counterweight to Iraq and as a conduit for weapons, technology, and expertise. Iran is currently engaged in a $10 billion five-year military build-up.[2] Its extensive strategic weapons program—which in the nuclear field is more advanced than Syria's—is benefitting from Chinese and North Korean assistance, as well as assistance from a number of Western firms, while its conventional forces are being bolstered by massive arms transfers from the former eastern bloc.[3] To the extent that both Syria and Iran share a perceived need to develop strategic weapons, modernize their conventional forces, and expand their military-industrial base,

---

[1] *The Middle East Today*, October 1, 1991, p. 1; *The Middle East Today*, October 3, 1991, p. 1; *Ha'aretz*, November 22, 1991, p. 5.

[2] Gerald F. Seib, "Iran is Re-emerging as a Mideast Power as Iraqi Threat Fades," *The Wall Street Journal*, March 18, 1992, p. 1.

[3] Jim Mann, "Iran Determined to Get A-Bomb, U.S. Believes," *Los Angeles Times*, March 17, 1992, p. 1.

this strategic axis is likely to play an increasingly important role in the future.[1]

Syria meanwhile has been hedging its bets with Iraq. Despite its defeat in the Gulf War, Iraq remains a potential regional power. Consequently, Syria has taken tentative steps towards a reconciliation with the regime of Saddam Hussein—reportedly reexporting Iraqi oil in violation of U.N. sanctions—possibly with an eye towards establishing a new rejectionist front in the event that the Arab-Israeli peace talks collapse or bog down. At the same time, it is sponsoring several Iraqi opposition groups committed to the removal of Saddam Hussein and the Ba'th.[2]

Finally, Syria initiated a major military build-up following the Gulf War. The centerpiece of this build-up consists of a $2 billion arms deal with Russia—which continues to be a major source of weaponry.[3] Syria has also concluded agreements with a number of Eastern European countries, China and North Korea, in an effort to diversify its arms sources. The main trends in the development of the Syrian military since the Gulf War include the:

• Purchase of 150 SCUD-C missiles from North Korea and possibly M-9 missiles from China, and missile production equipment and technology from both countries.[4]

---

[1] Tony Walker, "Syria-Iran Defence Links Arouse Western Suspicion" *London Financial Times*, March 9, 1992, p. 1; Bill Gertz, "Iran-Syria Deal Revealed as Scuds Near Gulf Ports," *The Washington Times*, March 10, 1992, p. A3.

[2] Thomas W. Lippman, "Iraq is Said to Consider Exporting Oil Via Syria," *The Washington Post*, April 21, 1992, p. A15.

[3] Barbara Opall, "Syria to Buy $2 Billion in Soviet Weapons," *Defense News*, July 8, 1991, pp. 3, 29.

[4] About 60 North Korean SCUD-Cs have arrived since March 1991. "North Korea Corners Middle East Missile Market," *MEDNEWS*, May 18, 1992, pp. 1-2. It is not clear whether China's reported accession to the Missile Technology Control Regime (MTCR) will affect the delivery of the M-9s, since China has sent Syria chemicals required for the production of rocket fuel in violation of this commitment. Elaine Sciolino with Eric Schmitt, "China Said to Sell Parts for Missiles," *The*

• Formation of two new active armored divisions, with one reaching operational status in 1992 and the second still forming.[1]

• Acquisition of over 600 modern T-72 tanks from Russia, Czechoslovakia, Yugoslavia, Poland, Hungary, and Romania, (with more on order), 300 self-propelled howitzers from Bulgaria, and various armored vehicles captured from Iraq during the Gulf War.[2]

• Purchase of forty-eight MiG-29 fighters and twenty-four Su-24 strike aircraft from Russia, as well as modern SA-10 surface-to-air missiles, early warning radars, and command and control systems.

Syria currently has 400,000 men under arms. Its army is organized into two corps, including eleven divisions (seven armored, three mechanized, one airborne)—with another still forming, four independent brigades, and seven special forces regiments, with 4,800 tanks, 4,150 APCs, and 2,700 artillery pieces. Its air and air defense forces operate 530 combat aircraft and 250 SAM batteries, and its navy operates twenty-one missile patrol boats.[3] Syria's armed forces will, moreover, continue to grow, as orders placed after the Gulf War are filled. And because it now earns about $2 billion a year from oil exports, and is determined to increase its oil export earnings in coming years, it will be able to rely on domestically generated income to sustain its military build-up for the foreseeable future.[4]

New York Times, January 31, 1992, pp. A1, A2; Ehud Ya'ari, "No M-9s to Syria," The Jerusalem Report, January 9, 1992, p. 13.

[1] Israel's Head of Military Intelligence Major General Uri Sagi, in Yediot Aharonot, April 17, 1992, pp. 1-2, 28, in FBIS-NES, April 22, 1992, p. 35.

[2] Ibid, p. 35.

[3] Shlomo Gazit, The Middle East Military Balance 1990-1991, p.358-363.

[4] Syrian oil exports are currently 300,000 b/d and it intends to increase this figure by 150,000 b/d in the next three years. Philip Finnegan and Sharone Parnes, "Arab-Israeli Power Balance Teeters in Gulf War's Aftermath," Defense News, March 16, 1992, p. 29.

CONCLUSIONS

Under President Assad, Syria has relentlessly expanded and modernized its armed forces despite various obstacles, and it continues to do so since it considers military power as a prerequisite for achieving vital regional and domestic objectives. The dramatic expansion of the armed forces under Assad has been influenced by the complex interplay of several factors, including Syria's drive to achieve strategic parity with Israel, lessons learned in various wars, and a desire to meet the increasingly broad range of commitments that the armed forces have been called on to fulfill.

Since taking power, President Assad has, however, almost constantly been preoccupied with a series of challenges—the Lebanese crisis, the rise of the domestic opposition, a protracted economic crisis, the decline and collapse of the Soviet Union, and the defeat of Iraq—which have prevented him from concentrating on the Arab-Israeli conflict and pursuing his own agenda in this and other areas. Nevertheless, Assad has displayed great endurance, tenacity, and patience in working to create new options and increase his freedom of maneuver in order to achieve his objectives.

Thus, Assad's past conduct suggests that despite recent setbacks, he will continue to work to find new ways to advance Syria's interests and achieve his objectives, while Syria's current military weakness will only prompt him to continue to expand and modernize its armed forces.

II SYRIAN MILITARY CAPABILITIES: AN ASSESSMENT

>   The Soviet Union no longer exists, but nations adapt to their
> circumstances. And they can always find and create ways to
> defend themselves.
>
> *President Hafez al-Assad, June 2, 1992*
>
>   The defeat of Iraq was a defeat for the entire Arab nation.
>
> *President Hafez al-Assad, April 7, 1991*

As part of Syria's efforts to achieve a strategic balance with Israel it cultivated close ties with the Soviet Union in order to counterbalance U.S. support for Israel, offset Israel's nuclear and conventional military superiority, and assure its supply of advanced weaponry. In addition, it attempted to form military coalitions with the two most powerful Arab states—Egypt and Iraq—in order to augment its own military capabilities. Finally, it relentlessly expanded and modernized its armed forces, in order to create an offensive military option vis-à-vis Israel (i.e., the ability to retake all or part of the Golan by force), or at least a defensive deterrent capability so that it could face Israel alone, if necessary. An assessment of Syria's current military capabilities must therefore consider the impact of the collapse of the Soviet Union, the defeat of Iraq, and the state of Syria's military on its ability to undertake limited offensive military action against Israel, or to deter Israel from actions that would harm its interests.

THE COLLAPSE OF THE SOVIET UNION

The collapse of the Soviet Union in December 1991 constituted one of the major turning points of the Arab-Israeli conflict, and had a profound effect on Syria's strategic situation.

The Soviet Union was important to Syria as a counterbalance to U.S. support for Israel, a guarantor of the Assad regime, a hedge against defeat in wartime, and a provider of modern arms on easy credit terms.

Senior Syrian officials stated on several occasions that the Soviets had pledged that in the event of an Israeli nuclear attack they would provide nuclear weapons with which to retaliate, and would not permit them to be defeated.[1] During the 1973 war, the Soviet Union mounted a massive resupply effort to Egypt and Syria and threatened to intervene on their behalf, and following the war, it dispatched combat personnel to Syria to bolster its defenses.[2] Again, following the 1982 war the Soviet Union mounted a massive resupply effort and dispatched combat personnel to Syria.

The Soviet Union was also Syria's primary source of modern arms. Over the years, the Soviet Union provided over $20 billion in arms on easy terms (much of it on a grant or barter basis) and at subsidized prices. In addition, aircraft and other complex systems were sent to the Soviet Union for periodic overhaul, while Soviet technicians in Syria assisted with critical maintenance chores.

Syria's past reliance on the Soviet Union as an arms source, however, also entailed certain drawbacks. Many weapons were not available for export until years after their initial introduction into Soviet service, and only less capable export versions were provided.[3] In recent years, moreover, the Soviet

---

[1] *The New York Times*, November 20, 1983, pp. A1, A18; *The New York Review of Books*, November 22, 1984, p. 40.

[2] During the 1973 War, the Soviet aerial and seaborne resupply effort to Egypt and Syria totalled 946 sorties by 225 aircraft (mainly An-12 and An-22 transports) over a 30 day period, transferring about 15,000 tons of equipment by air and up to an additional 200,000 tons by sea, including 1,200 tanks, 300 combat aircraft, and 600 missiles of various types. Wallach, *op. cit.*, p. 97; Department of Defense, *Soviet Military Power: 1988*, (Washington, D.C.: Government Printing Office, 1988), p. 121.

[3] They also delayed the delivery of certain systems (such as the MiG-29 and Su-24 in the late 1980s and the MiG-23 in the early 1970s) for political or military reasons, and refused to transfer those (such as the

Union has insisted on payment in cash, eroding Syria's purchasing power and resulting in a decline in sales to about $1 billion per year since the mid-1980s.

With the collapse of the Soviet Union, however, Russia is now offering top-line systems such as the MiG-31, MiG-29, and Su-27 to anyone willing to pay in hard currency, as well as large quantities of CFE-surplus arms at bargain prices, in order to earn needed foreign exchange.[1] While financial constraints may limit Syria's ability to purchase large numbers of advanced combat aircraft, it has purchased large numbers of surplus tanks and other arms which are available at bargain prices.[2]

Moreover, the breakup of the Soviet Union and the ensuing economic chaos has forced many factories there which reconditioned and repaired military equipment and produced spares for foreign clients to shut down or curtail operations. Consequently, Syria is now experiencing maintenance problems and a shortage of spares which could have a significant effect on its ability to wage war.[3]

While Syria will continue to seek arms from Russia, it will also seek alternative sources of weapons, support services, and spares to reduce its vulnerability to supply disruptions. Syria has, in the past two years, concluded or discussed arms agreements with China, North Korea, Poland, Czechoslovakia,

---

SS-23 missile in the mid-1980s and the SS-12 missile in the mid-1970s) which they considered potentially destabilizing.

[1] The CFE (Conventional Forces in Europe) treaty requires the former members of the Warsaw Pact to reduce their forces, and many are selling their surplus equipment at bargain prices.

[2] The fly away price of a MiG-29 is currently about $25 million, while T-72 tanks—which normally sell for about $1.2 million—have reportedly been sold as surplus for $500,000, and in some instances as little as $60,000 dollars.

[3] Paul Mann, "Soviet Defense Crumbling, U.S. Intelligence Says," *Aviation Week and Space Technology*, June 15, 1992, p. 35; Testimony of Edward Djerejian, Assistant Secretary of State for Near Eastern and South Asian Affairs, before the Europe and Middle East Subcommittee of the House Foreign Affairs Committee, on Developments in the Middle East, March 17, 1992.

Hungary, Romania, Bulgaria, Yugoslavia, India, and Pakistan, and has scoured Western Europe for advanced electronics components.[1] It is unlikely, however, to find a source capable of providing affordable high technology systems in sufficient numbers to close the qualitative gap with Israel, or of undertaking the type of massive and rapid wartime resupply effort mounted by the Soviet Union after the 1973 and 1982 wars. As a result, Syria is likely to resort to overstocking as a way of reducing its need for wartime resupply, and as a way of dealing with the shortage of spares.

Syria has also intensified its efforts to expand its military-industrial base in order to achieve a degree of self-sufficiency. It hopes to thereby reduce its dependence on foreign suppliers, and develop a capability to upgrade or modify weapons in its inventory. Syria's efforts to expand its military-industrial base might benefit as well from the brain drain in the former Soviet Union, as scientists, engineers, and technicians formerly employed in the military industries there might be tempted by monetary inducements to work in Syria. Syria is reported to have already approached a number of former Soviet nuclear scientists with offers of employment.[2] Syria is currently establishing a ballistic missile production line, hopes to build a

---

[1] Through the 1970s and 1980s Syria purchased small quantities of arms from a few non-Soviet sources, such as Czechoslovakia (L-39 and L-29 jet trainer aircraft, and OT-64 APCs), France (SA-342L attack helicopters, MILAN and HOT AT missiles, and communications systems), Great Britain (coastal radars, and communications systems), and Poland (Polnochny class LCTs). Concerning recent Syrian efforts to acquire advanced technology from Great Britain, Germany, France, and Belgium, see: "Syria Buys Nuclear in Belgium," *MEDNEWS*, May 18, 1992, pp. 3-4. See also: Douglas Frantz and Murray Waas, "U.S. to OK High-Tech Sales to Iran and Syria," *Los Angeles Times*, February 13, 1992, p. 1. Concerning Syrian efforts to forge military ties with India and Pakistan, see: "Syria Seeks Help From Indian Air Force," *Defense & Foreign Affairs Weekly*, May 7-13, 1990, p. 1; Ze'ev Schiff, "Syria and Iran Have Decided to Jointly Develop a Surface-to-Surface Missile," (Hebrew), *Ha'aretz*, October 1, 1991, p. 1; Tony Walker, "Syria-Iran Defence Links Arouse Western Suspicion," *London Financial Times*, March 9, 1992, p. 1.

[2] "Aspin: In Former Soviet Nuclear Arsenal, 'Anything Is For Sale'," *Aerospace Daily*, January 17, 1992, p. 86.

tank refit and modification facility, and produces chemical and biological weapons, artillery, tank, and small arms ammunition and military electronics.

Finally, the breakup of the Soviet Union and the collapse of Communism in Eastern Europe have also afforded the West—including Israel—unprecedented access to former Soviet bloc military equipment and personnel. For instance, following German reunification, the German military and intelligence services invited Israeli specialists to participate in technical assessments of former East German MiG-29s, and transferred weapons and equipment formerly owned by the East German armed forces to Israel for technical evaluation.[1]

This development poses serious problems for Syria. The ability to conceal the capabilities and limitations of one's weapons, as well as one's tactics—to prevent the enemy from developing means to defeat or neutralize them—is critical to success on the battlefield.[2] As a result of the recent flow of intelligence to the West following the collapse of the former Soviet bloc (as well as the defection of a Syrian pilot with his MiG-23ML fighter to Israel in October 1989 and Israel's own routine intelligence activities), the capabilities and characteristics of many weapons Syria now possesses are

---

[1] Germany reportedly transferred 82 items, including a MiG-29 radar, AA-10 and AA-8 air-to-air and AS-14, AS-12, and AS-11 air-to-surface missiles, an SA-5 guidance system, FROG-7 rocket warheads, 125mm tank and 122mm artillery rounds, AT-5 Spandrel and AT-4 Spigot antitank missiles, P22, P21, and P15 naval surface-to-surface missiles, and a Saet-40 antisubmarine torpedo. Heinze Schulte, "Germans Lift Lid on Arms Swap Deal," *Jane's Defence Weekly*, December 14, 1991, p. 1129.

[2] Syrian successes during the 1973 war were in part attributable to the fact that Syria employed new tactics and weapons (such as the SA-6, the ZSU-23/4, and the AT-3) whose effectiveness was not properly understood by Israel. For instance, Syria's restraint in not employing its SA-6 missiles during a major air battle with Israeli aircraft off the coast of Syria in September 1973 or against Israeli reconnaissance overflights, effectively safeguarded its air defense tactics and the capabilities of the SA-6, enabling it to achieve tactical and technological surprise during the war. Al-Ayyubi, *Military Studies of the October War* (Arabic), (Beirut: Dar al-Haqiqah, 1975), p. 61.

probably known to the Israelis, putting Syria at a serious disadvantage in a future war.[1]

THE IMPACT OF THE DEFEAT OF IRAQ

Syria's preferred partner in a military coalition against Israel had always been Egypt, followed by a Syrian-led eastern front coalition including Iraq, Jordan, and Lebanon. But with Egypt at peace with Israel, and Jordan and Lebanon militarily weak, Assad pinned his hopes on Iraq—despite his visceral hatred of Saddam Hussein—as the one state that could aid Syria in wartime. Thus, while the defeat of Iraq during the Gulf War in 1991 left Syria as the preeminent Arab military power and eliminated a leading Arab rival, it also struck a blow at Syrian hopes that Iraq—with its nuclear weapons potential, its arsenal of chemical and biological weapons and ballistic missiles, as well as the largest army and air force in the region—would be a potential Arab asset in the event of a war with Israel.[2]

Prior to the Gulf War, Iraq had 1.2 million men under arms, organized into sixty-eight divisions, with 5,800 tanks, 5,100 armored personnel carriers, and 3,850 artillery pieces, and over 650 combat aircraft. In the event of an Arab-Israeli war, it could have contributed at least ten divisions, with three heavy divisions arriving in Syria on its huge fleet of 2,800 tank

---

[1] The Syrians appreciate the importance of this factor, and attribute Israel's successful suppression of Syrian air defenses in Lebanon in 1982 to the compromise of the SA-6 system. According to Defense Minister Tlas, "When he signed the peace treaty with Israel, [Egyptian President Anwar] al-Sadat handed over the SAM-6 surface-to-air missiles he had [to the U.S.—which] hastened to dismantle them and devise electronic countermeasures that neutralized ours against the enemy." *El Pais*, May 19, 1984, p. 4, in *FBIS-NES*, May 24, 1984, p. H1.

[2] Ahmad Hamrush, "Meeting with Hafez al-Assad," (Arabic), *Ruz al-Yusuf*, December 10, 1990, pp. 20-21. Following the defeat of Iraq, Assad bitterly lamented that "the Arabs lost a great deal, and Israel won a great deal, politically, economically, and militarily" as a result of Iraq's defeat. Radio Damascus, March 12, 1992, in *FBIS-NES*, March 13, 1992, p. 31.

transporters within the first seventy-two hours of combat.[1] In addition, it possessed perhaps 500 Al-Husayn missiles—some with chemical warheads—capable of hitting Israel from Iraqi territory, as well as twenty-four Su-24, 150 Su-20/22, and sixty Mirage F-1E strike aircraft capable of conventional or chemical strikes against rear area targets in Israel.

In the wake of the Gulf War, Iraq now has about 400,000 men under arms, organized into about thirty understrength divisions, with about 2,500 tanks, 3,500 APCs, 1,500 artillery pieces, and 300 combat aircraft, and has a very limited ability to project and sustain any portion of this force far from its borders, given its uncertain domestic situation and logistical limitations.[2] In addition, while it may retain some 150 Al-Husayn missiles—perhaps even some with chemical or biological warheads—its unconventional warfare capabilities were significantly reduced during the war and by UN inspections afterwards. Iraq's potential contribution in the event of an Arab-Israeli war has thus been significantly reduced, at least for the foreseeable future.

The Gulf War dramatically confirmed the potential of Western high technology arms, first used by Israel on a limited basis—but with great effect—during the 1982 war, and now fielded by Israel's armed forces in great numbers. Assad and his generals may believe that the Gulf War raised new doubts about the capabilities of Syria's armed forces— particularly the efficacy of its air and ground defenses—and its ability to deter Israel.[3]

---

[1] Department of Defense, *Conduct of the Persian Gulf War: Final Report to Congress*, April 1992, p. 9; Colonel (Res.) Dr. Ze'ev Eytan, "The Iraqi Army After the War With Iran," (Hebrew) *Ma'arachot*, December 1990, p. 27; and Colonel (Res.) Dr. Ze'ev Eytan, "The Role of the Iraqi Army in a Future Arab-Israeli War," in Tzvi Ofer, ed., *The Iraqi Army in the Yom Kippur War*, (Hebrew), (Tel Aviv: Ministry of Defense Publishing House, 1986), p. 274. During the 1973 war, an Iraqi expeditionary force played a critical role in blunting an Israeli counterattack which threatened Damascus.

[2] Voice of Israel, March 12, 1992, in *FBIS-NES*, March 13, 1992, p. 18.

[3] In its 43 day air and ground campaign against Iraq, U.S. and coalition forces destroyed much of the Iraqi armed forces (including nearly 3,800

Despite its defeat, Iraq remains a potential regional power. Consequently, Syria is pursuing a two track policy towards Iraq, taking tentative steps towards a rapprochement with Saddam Hussein and his regime while simultaneously sponsoring several Iraqi opposition groups committed to the removal of Hussein and the Ba'th. Although Syria's Assad and Iraq's Hussein remain bitter enemies, Assad continues to see Iraq as a potential asset and this will remain an important factor in his political and military calculations.

THE SYRIAN ARMED FORCES

As part of its efforts to create a strategic balance with Israel, Syria has attempted to build a force capable of undertaking offensive military action against Israel in the Golan, or at least providing a defensive deterrent capability. The major elements of this force include:
• Strategic weapons, consisting mainly of missiles armed with chemical warheads to counter Israel's nuclear capabilities, offset Israeli air and ground forces threatening Damascus and other population centers, and provide it with a hedge against defeat in wartime.
• Large standing ground forces capable of launching a surprise attack from their normal dispositions on short notice, in order to seize and hold the Golan before Israeli reserve forces can be mobilized. These forces are normally deployed in a formidable series of fortifications in the Golan and the Bekaa, astride the approaches to Damascus and Homs, to make an Israeli attack as costly as possible.
• Deep strike forces, including strike aircraft, operational-tactical missiles, and airmobile and special forces. These would attempt to isolate Israel's ground forces in the Golan by suppressing its air force and interdicting reserve units en route to the front, in support of offensive action by ground forces.
• Air and air defense forces to prevent Israel's air force from striking population centers and industrial targets

---

tanks, 1,450 armored personnel carriers, 2,900 artillery pieces, and 200 combat aircraft) while suffering light losses. For a pre-war Syrian perspective on the potential of new and emerging technologies, see Major General Karim Daghir, "Modern Technology and Military Operations," (Arabic) *Al-Fikr al-'Askari*, January-February 1987, pp. 63-81.

throughout the country, and to protect the ground forces from attack.

• Naval and coastal defense forces to protect Syria's vulnerable coastline and prevent Israel's navy from opening another front.

• Terrorist organizations which—while not under direct Syrian control—have been employed as adjuncts to its armed forces and as surrogates to strike at enemies and rivals when the direct use of force would entail unacceptable risks.

The capabilities of Syria's armed forces in each of these areas are examined in detail below.

STRATEGIC WEAPONS

Syria has invested significant resources in its strategic forces, including chemical and biological weapons, and long-range delivery systems. These forces serve as a strategic deterrent to offset Israel's nuclear capabilities, counter the threat posed by Israel's air and ground forces to Damascus and other population centers, and act as a hedge against defeat in wartime due to their ability to threaten Israeli civilian population centers. In addition, with the collapse of the Soviet Union, Syria may now see its strategic forces as a means to compensate for the loss of its superpower patron.

Ballistic Missiles

During the 1973 War, Israel launched a wide-ranging strategic bombing campaign against Syria, hitting the general staff and air force headquarters in Damascus and economic targets throughout the country, in retaliation for the launch of Syrian FROG-7 rockets which hit civilian settlements in northern Israel.[1] Since Syria lacked SCUD-B missiles or an air

---

[1] Although the strategic bombing campaign did not succeed in achieving its principal goal (the removal of Syria from the war), it did inflict painful losses on Syria. In less than 100 sorties, Israeli aircraft caused about $1.2 billion dollars damage, destroying about 50 percent of Syria's oil supplies and about 45 percent of its electrical power generating capacity. Brigadier General (Res.) Aharon Levran, "The Strategic Bombing of Syria Did Not Fulfill a Single Expectation" (Hebrew), *Ha'aretz*, September 23, 1985, p. 10.

force capable of striking at major Israeli population centers, it was unable to deter Israel or retaliate in kind. Syria thus acquired a strategic deterrent capability when it acquired its first SCUD-B missiles in 1974.

Syria's SCUD-B and -C missiles are the backbone of its strategic forces, providing it with a credible retaliatory capability against Israeli civilian population centers. It currently possesses about 600 SCUD-Bs and -Cs (of these about sixty are the longer-range SCUD-Cs with over ninety more on order) and it is developing a capability to produce SCUD-Cs as well as M-9s domestically.[1] The Gulf War highlighted the survivability and effectiveness of these mobile missiles, and despite the limited physical damage caused by them, it is clear that they had a significant impact on the Israeli economy and population. The Gulf War experience thus encouraged Syria to acquire more of these missiles.

Because Syria's SCUD-Bs and -Cs serve as its strategic deterrent, they are kept in hardened underground shelters located in hillsides and tunnels which are reportedly not vulnerable to conventional air strikes, protecting them against an Israeli preventive or preemptive strike, and enhancing their survivability in wartime.[2]

In addition, Syria's acquisition of both SCUD-Bs and -Cs provides it with a mix of capabilities which significantly complicates Israeli planning and increases the likelihood that

---

[1] Syria is reportedly constructing underground factories with North Korean and Chinese assistance near Aleppo and Hama. Bill Gertz, "Iran-Syria Deal Revealed as Scuds Near Gulf Ports," *The Washington Times*, March 10, 1992, p. 3; Bill Gertz, "Iran-Bound Mystery Freighter Carried Parts for Missiles," *The Washington Times*, July 16, 1992, p. 3; William Safire, "China's 'Hama Rules'," *The New York Times*, March 5, 1992, p. A27.

[2] Dror Marom, "War in the Missile Age," (Hebrew), *Bita'on Heyl HaAvir*, October 1988, p. 27. Some analysts have claimed that the proliferation of ballistic missiles in the Middle East is destabilizing because they increase the likelihood of Israeli preemption during a crisis. Because of Syrian efforts to protect and hide its missiles, however, Israel could not expect to locate and destroy most of them until *after* they had been removed from their shelters—while being prepared for launch. Thus, as long as Syria's missiles remain sheltered, they are unlikely to reinforce the temptation to preempt during a crisis.

at least some missiles will penetrate Israeli defenses. Because Syria's SCUD-Bs (with a 290km range) must be launched from vulnerable forward locations in the Damascus area in order to reach key targets in Israel, they are susceptible to detection and attack while being prepared for launch. However, due to the short flight-times and distances involved, Israel might not receive sufficient advanced warning of launches from these areas to implement defensive measures.[1] Syria's acquisition of SCUD-Cs (with a 600km range), however, which can reach key targets in Israel from launch sites almost anywhere in Syria, significantly increases the area that Israeli forces must search in order to locate these missiles, enhancing their survivability. If Syria launches these missiles from its vast hinterland, however, it will increase the amount of warning time available to Israel—due to the extended flight-times and distances involved, providing sufficient time to implement defensive measures.

Syria currently possesses enough SCUD-B and -C missiles (with several score armed with chemical warheads) to launch a massive strike that would saturate and overwhelm Israel's limited missile defenses. Its ongoing efforts to acquire additional SCUD-Cs as well as M-9s and to produce these missiles locally assures that it will retain such a capability in the future. Given the limited capabilities of currently deployed missile defenses, moreover, even a successful intercept of a missile armed with a chemical warhead might result in casualties among the civilian population below.[2]

---

[1] If Israel were to receive sufficient advanced warning from U.S. Defense Support Program satellites or other means and adopt civil defense measures similar to those taken during the Gulf War, such as sealed rooms, protective masks, and antidote kits for its civilian population, casualties from a chemical attack against a civilian population center could be limited—perhaps to several tens of people per missile. But the psychological effect of these attacks—even if they fail to produce heavy casualties—could be politically significant. Reuven Gal, "Social and Psychological Fallout: How Israelis Cope with Iraq's Missiles" *Israeli Democracy*, Spring 1991, pp. 17-19.

[2] Because Israel's Patriot PAC-2 missiles intercept incoming missiles at relatively low altitudes, even a successful warhead intercept would disperse chemical agents on the population below. The Patriot PAC-3, which is

In a demonstration of their deterrent role, Syria has on several occasions used its missiles to send warnings to Israel. During the Syrian missile crisis in April 1981 and the Israeli invasion of Lebanon in June 1982, Syria removed several SCUD-Bs from their hardened bunkers and deployed them to launch sites near Damascus (where they could be observed by Israel) to warn Israel not to threaten or provoke it.[1] To reinforce these warnings, Defense Minister Tlas warned Israel after the 1982 war—at a time when Israeli forces were only 20km from Damascus—that if they attacked the capital, they would "see what happens to Tel Aviv" since Syria's missiles "can strike anywhere in Israel."[2]

Nuclear, Biological, and Chemical Weapons

In recent years Syria has taken steps toward the creation of a civilian nuclear program which could have military implications. In 1988, the Syrian Atomic Energy Commission initiated a $3.6 billion program for the construction of six nuclear power reactors with a total output of 6,000 megawatts, scheduled to commence operation in the late 1990s, and it has attempted to enlist the assistance of the Soviet Union, Belgium,

---

currently under development, will reportedly intercept incoming missiles at much higher altitudes, where the agent will dissipate before reaching the ground, and if warhead intercepts can be assured, the threat posed by chemical warheads could be significantly reduced. Barbara Starr, "PAC-3 Patriot Will Double Capability," *Jane's Defence Weekly*, October 26, 1991, p. 749. The Israeli Arrow ATBM currently under development is specifically intended to intercept missiles with chemical warheads at sufficiently high altitudes to eliminate the threat to the population below. Even if produced, however, the Arrow is unlikely to enter service before the late 1990s. Marvin Feuerwerger, *The Arrow Next Time? Israel's Missile Defense Program for the 1990s*, Policy Paper No. 28, (Washington, D.C.: The Washington Institute for Near East Policy, 1991). For now, Israel must ultimately rely on passive defensive measures (sealed rooms and masks) to defend against missiles armed with chemical warheads.

[1] Schiff and Ya'ari, *op. cit.*, p. 34; Major General Avigdor Ben-Gal, "Syrian Forces in Lebanon and the Fighting in the Bekaa," in Klein, *op. cit.*, p. 101.

[2] *The New York Times*, November 20, 1983, p. A18.

and Switzerland in this effort.[1] Syria subsequently tried to purchase up to four VVR-1000 nuclear power reactors as well as uranium fuel from the Soviet Union in April 1990, although it is not known whether this sale went through, or how far other parts of the program have advanced.[2] Syria has also approached the Soviet Union, Italy, China, and Argentina concerning the purchase of a research reactor, and in December 1991 it purchased a miniature 30kw neutron source reactor (which is reportedly not suited for the production of the highly enriched uranium used in weapons) and 980.4 grams of highly enriched uranium from China.[3] Together, these steps mark the beginning of efforts by Syria to create a nuclear infrastructure and a cadre of nuclear scientists, although it would take at least ten years—probably more—to produce a nuclear weapon if it decided to do so now.

Syria also has full fledged offensive chemical and biological warfare programs. It not only has scores of chemical warheads filled with the nerve agent sarin for its SCUD-B and -C missiles, but also hundreds of chemical bombs filled with the nerve agents VX and sarin which can be carried by Su-24, MiG-23BN, and Su-20/22 aircraft, for use against both strategic

---

[1] Emanuel Rosen, "Syria is Preparing to Build Six Nuclear Reactors," (Hebrew), *Ma'ariv*, September 17, 1989, p. A6.

[2] Pazit Rabina, "The Soviet Union is Considering a Syrian Request to Purchase a Nuclear Power Plant," (Hebrew), *Davar*, November 25, 1991.

[3] "U.S. Has No Plans to Block Sale of Chinese Reactor to Syria," *Mideast Mirror*, December 3, 1991, p. 10. In February 1992, Syria agreed to negotiate a safeguards accord with the International Atomic Energy Agency (IAEA), paving the way for the transfer of the Chinese reactor. *The Washington Post*, February 11, 1992, p. A16. Previously, the IAEA had refused to approve the sale of the Chinese reactor since Syria—which is a signatory to the Nuclear Non-Proliferation Treaty—did not have a safeguards agreement. Initially, Syria had linked its agreement for IAEA safeguards to Israel's acceptance of safeguards for its reactor at Dimona. Michael Z. Wise, "U.N. Agency Blocks Sale of Reactor to Syria," *The Washington Post*, December 7, 1991, p. A26. See also: Kenneth R. Timmerman, *Weapons of Mass Destruction: The Cases of Iran, Syria, and Libya*, (Los Angeles: Simon Wiesenthal Center, 1992), pp. 74-76.

and operational-tactical targets.[1] It may also be producing tube and rocket artillery rounds filled with mustard-type blister agents intended for use against tactical targets.[2] Syria also is reported to have an offensive biological warfare capability, although little is known about the nature of the program.[3]

Syria has thus succeeded—by acquiring mobile SCUD-B and -C missiles and arming some of them with chemical warheads—in acquiring a strategic deterrent which is likely to remain viable for the foreseeable future.[4]

---

[1] Syria reportedly produces several hundred tons of agent a year at two facilities near Damascus and Homs, and possibly several other locations. Ze'ev Schiff, "Syria is Producing Poisonous Gases," (Hebrew) Ha'aretz, June 18, 1986, p. 7; Ze'ev Schiff, "Chemical Weapons in the Arab-Israeli Conflict," (Hebrew) Ha'aretz, August 14, 1986, p. 7; Timmerman, op cit., pp. 60-61. Syria produced the missile warheads with the assistance of Western European and North Korean engineers and technicians, and it is believed to be seeking help from China and from Western firms for the development of more advanced chemical and biological warheads. Testimony of CIA Director Robert Gates, The Senate Governmental Affairs Committee: Weapons Proliferation in the New World Order, January 15, 1992.

[2] Gazit, The Middle East Military Balance: 1990-1991, p. 361; Gordon M. Burck and Charles C. Flowerree, International Handbook on Chemical Weapons Proliferation, (New York: Greenwood Press, 1991), pp. 210, 212; and Anthony H. Cordesman, Weapons of Mass Destruction in the Middle East, (London: Brassey's, 1991), pp. 145-146.

[3] Statement of Rear Admiral Thomas A. Brooks, Director of Naval Intelligence, before the Seapower, Strategic, and Critical Materials Subcommittee of the House Armed Services Committee, March 7, 1991.

[4] At least until Israel develops and fields a more effective missile defense in the late 1990s.

GROUND FORCES

Syrian ground forces are organized into two corps, one in the Golan and one in Lebanon, consisting of eleven divisions (seven armored, three mechanized, and one airborne), two independent brigades, and seven independent special forces regiments. I Corps consists of five divisions (the 1st, 3d and 9th Armored, and 5th and 7th Mechanized Divisions), and is responsible for the Golan. II Corps consists of three divisions (the 10th Mechanized, 11th Armored, and 14th Airborne Divisions), as well as seven special forces regiments (the 35th, 41st, 44th, 45th, 46th, 53d, and 54th), and is responsible for Lebanon. In addition, two praetorian units—the Republican Guard Division and the 569th Armored Division—which are directly subordinate to the President, are deployed in and around Damascus and would defend the capital in wartime.[1] Syria enjoys a decisive advantage in standing forces since Israel keeps only three armored divisions and four paratroop and infantry brigades on active status. Thus, on the Golan front, Syria normally has seven divisions facing two Israeli divisions. This significantly enhances Syria's ability to surprise Israel.[2]

Syria's advantage in standing forces is mitigated, somewhat, by the fact that Syrian forces are divided between two fronts—the Golan and the Bekaa—and that the rapid mobilization of Israeli forces would soon transform the balance of forces between the two sides. Unless Syria successfully disrupted this process, Israel could, within twenty-four to forty-

---

[1] The subordination and location of a newly formed armored division, and a second that is still forming is currently unknown.

[2] Upon mobilization, Israel's total order of battle can expand to twelve armored divisions (five in the Northern Command, four in the Central Command, and three in the Southern Command), as well as a large number of independent paratroop and infantry brigades. In wartime, Israel's Northern Command would be augmented with divisions and brigades belonging to the other area commands, as required. Mark Urban, "Fire in the Galilee: Israel," *Armed Forces*, April 1986, p. 170.

eight hours, field up to nine armored divisions and several independent paratroop and infantry brigades.[1]
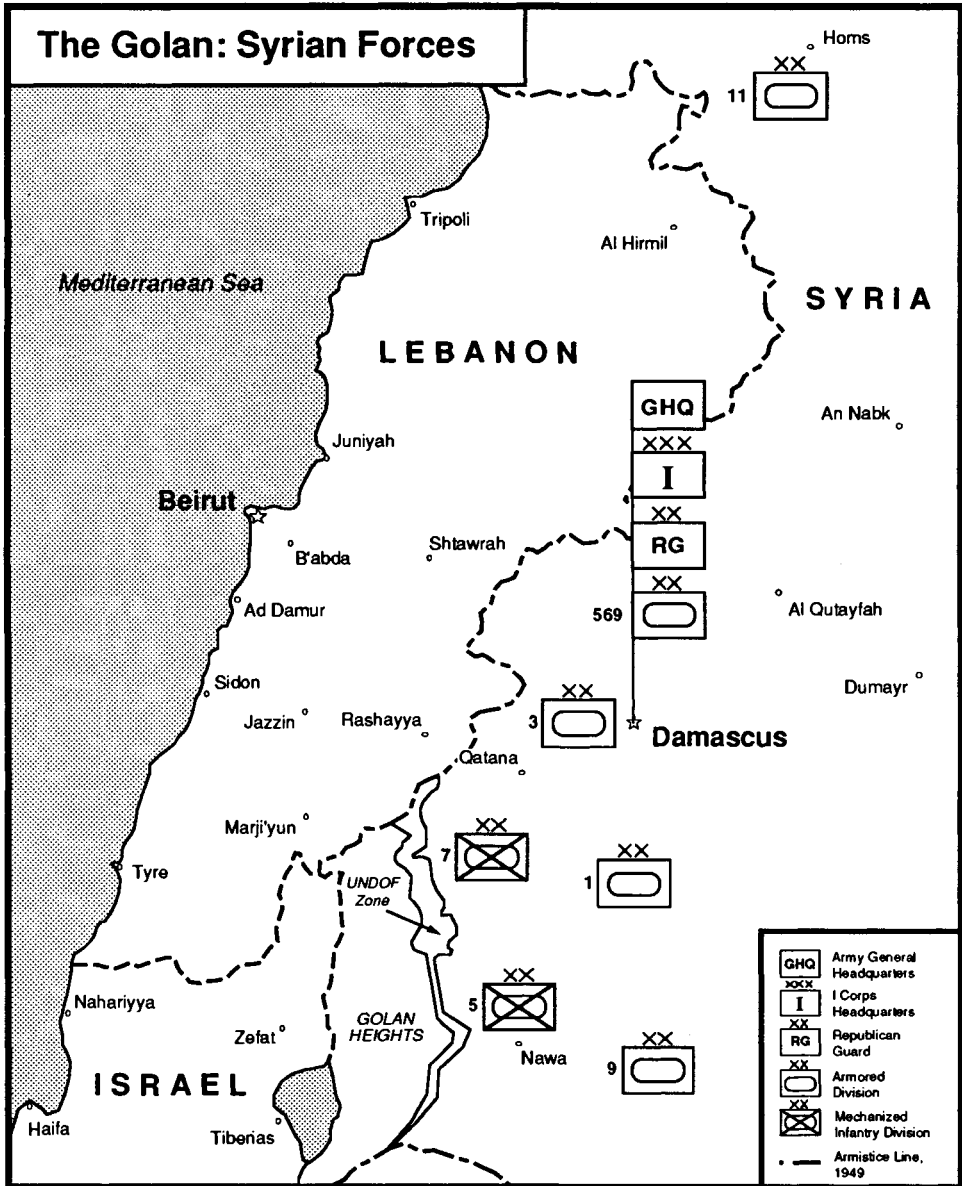
The presence of Syrian forces in Lebanon is, from the point of view of Syria's offensive potential, a liability, since they do not directly contribute to the army's offensive potential in the Golan, except perhaps as a diversionary force to tie down Israeli forces along the border with Lebanon. Syrian forces in Lebanon currently include 40,000 men and 300 tanks, and consist of one mechanized division, one airborne division, and seven independent special forces regiments.

The deployment in Lebanon complicates the command and control of forces, a problem exposed during the 1982 war and only partially mitigated by the creation of a separate corps for Lebanon in 1984—since the corps commander must still clear key military decisions with Damascus.[2] Syria would find it difficult to shift forces between fronts in wartime, since the Beirut-Damascus highway is vulnerable to interdiction by air or special forces, and its forces in Beirut and the north are vulnerable to being cut off from the main force in the Bekaa. (During the 1982 war, Israeli forces reaching the Beirut-Damascus highway cut off and encircled Syrian forces in Beirut.) Moreover, units in Lebanon are not able to maintain high standards of readiness or training because of their involvement in internal security duties, as well as in smuggling and drug-running. Finally, while the planned redeployment of Syrian forces in Lebanon in September 1992—if carried out—will enable Syria to consolidate the 10th Mechanized Division in the Bekaa, and focus exclusively on the task of defense, the relatively small number of special

---

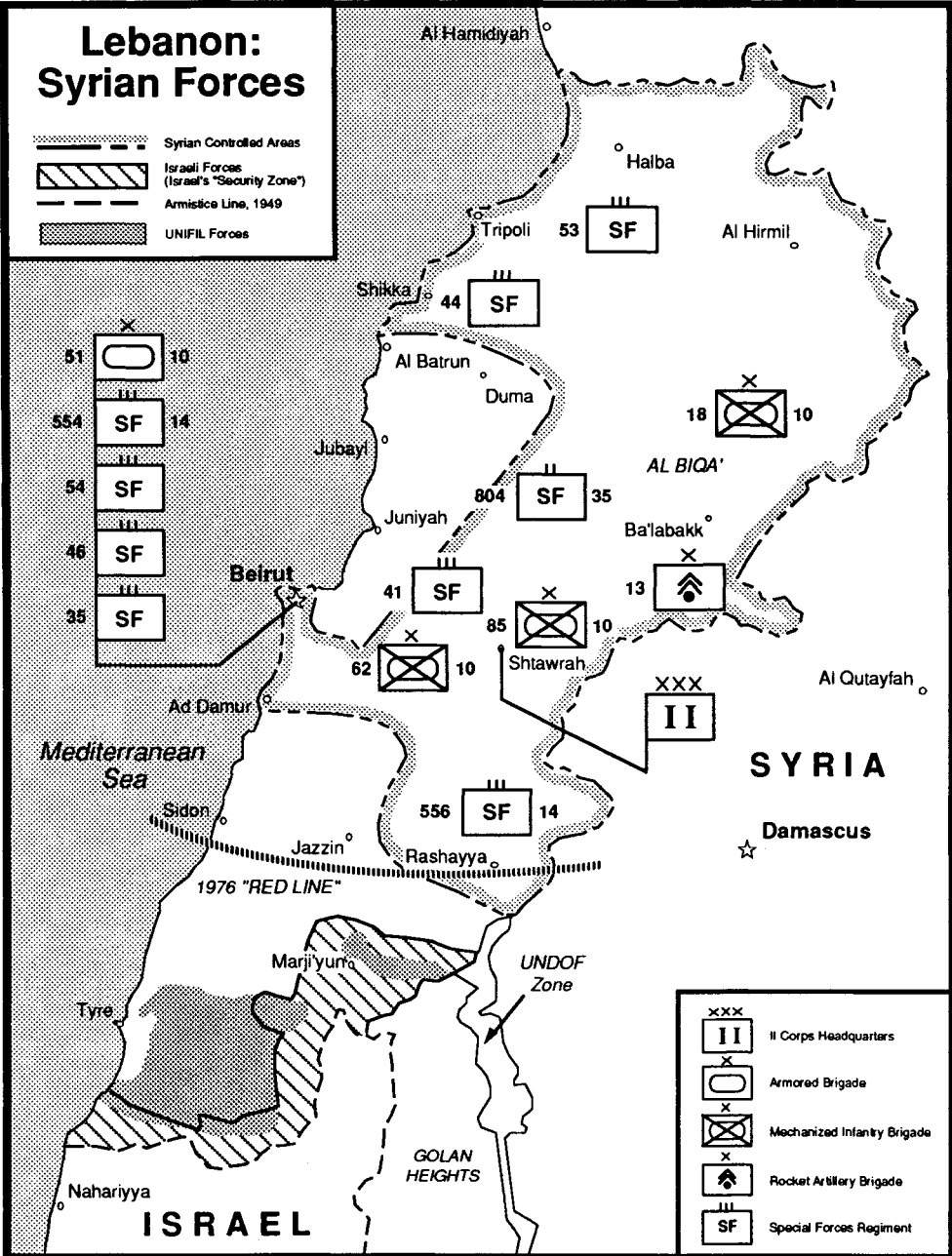[1] Alpher, *The Middle East Military Balance: 1986*, p. 184.

[2] On the second day of the 1982 war, Assad sent his Deputy Chief of Staff, General 'Ali Aslan to Lebanon to assess the situation there and recommend a Syrian response, indicating that the flow of information back to Damascus may not have been sufficiently detailed or accurate to permit a correct assessment of Israeli moves. By dispatching Aslan to Lebanon, however, Assad wasted precious time and forfeited any possibility of responding in a timely manner to the rapidly unfolding events there. The establishment of a separate corps for Lebanon after the war may have been intended in part to remedy this problem. Schiff and Ya'ari, *op. cit.*, p. 155.

The Golan: Syrian Forces

Homs

11

Tripoli

Al Hirmil

Mediterranean Sea

SYRIA

LEBANON

GHQ

An Nabk

Juniyah

I

Beirut

RG

Shtawrah

B'abda

569

Al Qutayfah

Ad Damur

Dumayr

Sidon

3

Damascus

Jazzin   Rashayya

Qatana

Marji'yun

7

1

Tyre

UNDOF
Zone

Nahariyya

5

Zefat

GOLAN
HEIGHTS

Nawa   9

ISRAEL

Haifa   Tiberias

GHQ	Army General Headquarters
I	I Corps Headquarters
RG	Republican Guard
	Armored Division
	Mechanized Infantry Division
— —	Armistice Line, 1949

Lebanon:
Syrian Forces

Al Hamidiyah

Halba

Tripoli   53 | SF | Al Hirmil

Shikka   44 | SF |

Al Batrun

Duma

51 | ⬭ | 10

554 | SF | 14

54 | SF |

46 | SF |

35 | SF |

Jubayl

18 | ⊠ | 10

AL BIQA'

804 | SF | 35

Juniyah

Ba'labakk

Beirut

41 | SF |

13 | 🔺 |

85 | ⊠ | 10

62 | ⊠ | 10   Shtawrah

Ad Damur

×××
| II |

Mediterranean
Sea

Al Qutayfah

SYRIA

Sidon

Jazzin   Rashayya

556 | SF | 14

Damascus
☆

1976 "RED LINE"

Marji'yun

UNDOF
Zone

Tyre

GOLAN
HEIGHTS

Nahariyya

ISRAEL

forces units likely to be freed up by the redeployment will only marginally enhance Syria's offensive capabilities against Israel.

Syria's problems here are not limited to its deployment in Lebanon. The Republican Guard and the 569th Armored Division—which are tasked with the defense of the regime and are the best equipped and trained units in the army—would see major combat only if the capital were threatened, since the regime would not otherwise risk its survival by subjecting these units to intense combat.[1] In addition, rivalries and competition between the Republican Guard, the 569th Armored Division, and other elite units, such as the 3d Armored Division and special forces units have sometimes resulted in open conflict, and could complicate command and control in wartime. Finally, while the 11th Armored Division near Homs is well placed to defend central Syria against an Israeli thrust through the Bekaa, it would have trouble fulfilling its secondary role as a strategic reserve for the Golan and Lebanon fronts. It would have to travel some distance to get to either front and would be vulnerable to interdiction by Israeli air and special forces *en route.*[2]

Strategic Surprise

Strategic surprise is vital in order for Syria to successfully exploit its superiority in standing forces before Israel can mobilize its reserves. Key decisions in Syria are made by President Assad, in conjunction with a small, tight-knit group of trusted advisors, and the authoritarian nature of the regime enables it to make major decisions quickly and in secret. Recently, Assad surprised Israel with his decisions to join the coalition during the Gulf War, and later, to join the peace

---

[1] For this reason only token contingents from the 569th were committed to combat in 1973 and 1982.

[2] Significantly, during the 1982 war, the Israeli air force destroyed most of the Syrian 47th Independent Armored Brigade as it moved on tank transporters from its garrison near Homs in central Syria (where the 11th Armored Division is now located) through the Bekaa. Schiff and Ya'ari, *op. cit.*, p. 168.

process—decisions which were preceded by a period of consultation with military and party officials.[1] There is no reason to believe that Assad could not surprise Israel again with a decision to go to war, which would—for security reasons—necessarily involve a much smaller circle of people.

It would take Syria several days to ready its armed forces for war—tanks and other armored vehicles must be fueled and armed, combat engineer, artillery, and air defense assets must be deployed well forward prior to the commencement of hostilities, and hospitals must be readied for casualties. It would undoubtedly take steps to ensure that these preparations remain undetected or were misinterpreted, through secrecy and deception, while certain preparations would be delayed until immediately prior to the commencement of hostilities.[2] Syrian forces are located relatively close to the cease-fire line, and once preparations were completed, they could cross it within hours of receiving orders to move.

Although Israeli intelligence has significantly improved its collection and analytical capabilities since 1973, senior officers believe that the possibility of surprise has not been eliminated, and even if they correctly assess Syria's intentions prior to hostilities, political considerations could prevent Israel from taking the steps (such as mobilization or preemption) required to defend itself.[3]

While strategic surprise would undoubtedly confer significant advantages on Syria, the effect of surprise in a future war is likely to be less dramatic than in 1973, since the separation of forces agreement in the Golan provided for the separation and thinning out of forces on both sides of the disengagement line, increasing the amount of warning time

---

[1] Ze'ev Schiff, "The Golan Paradox," (Hebrew), *Ha'aretz*, September 22, 1991, p. B2, in *FBIS-NES*, September 24, 1991, pp. 20-23.

[2] Major General Ehud Barak on Israel TV, October 16, 1985, in *FBIS-NES*, October 17, 1985, p. 11.

[3] Major General Ehud Barak, "On Intelligence," *IDF Journal*, Winter 1987, pp. 11-15. In the mid-1980s, senior Israeli intelligence officers put the likelihood of Syria surprising Israel at 50 percent. Reuven Pedatzur, "Those Responsible for the National Intelligence Estimate," (Hebrew), *Ha'aretz*, April 17, 1985, p. 7.

available to Israel in the event of a Syrian attack. In addition, Israel has taken steps to reduce the amount of time required to mobilize. Call-up procedures have been streamlined, and vehicles and equipment are kept in dry storage, fueled and armed, so that they can be readied for combat in minutes.[1]

Fortifications

Due to its geographic vulnerability, Syria has long feared an Israeli attack on Damascus, and to a lesser extent on Homs and other cities in the center of the country. These insecurities were reinforced during the 1973 and 1982 wars, when Israeli artillery threatened the capital. As a result, Syria has constructed a formidable series of fortifications southwest of Damascus (following the 1973 war) and in the lower Bekaa (after the 1978 Litani operation) along the primary approaches to the capital and the center of the country, in effect creating the strategic depth which it otherwise lacks. These multi-layered fortifications cover the breadth of the front and consist of numerous strongpoints with vehicle and weapon positions and infantry bunkers, antitank ditches and berms, minefields, and wire entanglements.[2] Attempting to breach these fortifications by traditional means would exact a heavy price in men and materiel.[3] And while Israel could outflank these fortifications by moving through northern Jordan, political considerations—particularly the implications of such a move for its relationship with the U.S., the peace process, and the

---

[1] Aharon Ben-David, "Controlled Humidity Storage," *IDF Journal*, Summer 1986, pp. 19-20.

[2] For details about a typical Syrian "pita" type strongpoint see: Captains Wayne J. Sabo and Edwin L. Kennedy, Jr. "Attack of a Desert Strongpoint," *Infantry*, July-August 1982, pp. 25-29.

[3] According to Tlas in an interview in 1984, Syrian strategy relies on "inflicting the heaviest human losses" on Israel, which Syria can do "powerfully at present." As a result, an Israeli preventive strike "will not be" a "military picnic" but will exact "an exorbitant price in losses." Eventually, the "continued infliction of heavy human losses" on Israel will cause it "to collapse from within." *Al-Sayyad*, September 19-25, 1984, pp. 26-27.

stability of the Hashemite kingdom—would almost certainly prevent it from doing so.

In addition, in the mid-1980s, Syria commenced implementation of a plan to develop the Golan. This plan calls for the creation of new settlements and housing in the area for up to half a million people by the year 2000 (some of whom have already been settled there), and the exploitation of the resources of the Yarmuk River and its tributaries as part of a massive irrigation scheme, consisting of more than twenty dams, numerous man-made lakes and ponds, and countless irrigation ditches criss-crossing the landscape. If fully implemented, the Syrian plan will effectively transform the topography of the Golan. While the ultimate implications of these developments are unclear, the settlement of civilians and the creation of large numbers of water obstacles and ditches in the area further complicates Israeli military planning by limiting its freedom of maneuver in wartime. Significantly, these obstacles also would limit Syria's military freedom of action, thus raising interesting questions about Syria's intentions.[1]

Combined Arms

Under President Assad, Syria has more than doubled the size of its army to enable it to assume multiple commitments on several fronts, increased the number of armored and mechanized divisions in order to enhance the mobility and firepower of the army, and taken steps to create a modern combined arms force.

Tanks form the backbone of Syria's ground forces.[2] Syria now owns about 4,800 tanks—the largest inventory in the

---

[1] It should be recalled in this regard that Jordan's decision to develop the Jordan River valley in the early 1970s and Egypt's decision to develop the Suez Canal zone in the mid-1970s provided, in each case, an early indication that the leadership of these countries was committed to ending the state of belligerency with Israel. Israel Television, June 26, 1987, in *FBIS-NES,* June 30, 1987, pp. L3-L5.

[2] Major General Sa'id al-Tayyan, "The Tank and Antitank Weapons After the October War," (Arabic), *Al-Fikr al-'Askari,* July 1979, p. 98.

region—including about 1,700 modern T-72s, 1,000 older T-62s, and 2,100 obsolete T-55s (about 1,000 of these are kept in storage due to a lack of trained crews). The main trends in the evolution of its armored force in recent years have been the dramatic increase in the total number of modern T-72s in its inventory, an increase in the total number of tanks in its inventory and in its armored and mechanized units, and the upgrading of older T-62s and T-55s. Since 1991, Syria has purchased 600 T-72s from Russia, Czechoslovakia, Yugoslavia, Poland, Hungary, and Romania. The T-72 is the top tank produced for export in the former Soviet bloc, and these imports significantly improve the overall quality of Syria's tank inventory, allowing it to move obsolete T-55 tanks from active to reserve units. In addition, in recent years, Syria has modernized some of its older T-62 and T-55 tanks with the addition of improved fire control systems, including new laser rangefinders and night vision equipment.[1]

Syria's inventory of 4,150 armored vehicles includes about 2,500 modern BMP-1 and BMP-2 infantry combat vehicles, which are replacing almost 1,500 older BTR armored personnel carriers in armored and some mechanized divisions. The BMP-1 offers improved survivability for mounted infantry, and enables them to keep up with and support the armor, but it lacks adequate protection against modern anti-armor systems.

Syria now has 2,700 artillery pieces in its inventory, including about 500 modern 2S1 and 2S3 self-propelled howitzers acquired from the Soviet Union and Bulgaria, supplementing the large number of towed pieces it owns. It has also attempted to improve the accuracy and responsiveness of its artillery by acquiring automated fire control systems from the West.[2] Its reliance on large numbers of towed pieces, however, remains a significant shortcoming: self-propelled artillery can shoot and move more quickly than towed artillery and so it can rapidly relocate on the battlefield in

---

[1] Levran, *The Middle East Military Balance: 1986*, p. 178.

[2] Haim Raviv, "Syria's Goal: Alone Against Israel," *(Hebrew)*, *Bamahane*, September 24, 1980, p. 24.

order to evade counterbattery fire, and provides better crew protection against a range of threats.

Syria has saturated the battlefield with massive numbers of antitank systems (over 3,750 AT missile launchers) creating corps-level antitank reserves, and acquiring SA-342L and Mi-25 attack helicopters and large numbers of vehicle mounted and manportable MILAN, AT-5 Spandrel, AT-4 Spigot, and AT-3 Sagger missiles. Syrian tank-killer teams achieved some notable successes during the 1973 and 1982 wars, and it continues to emphasize this component of its armed forces as a way of countering Israel's offensive armored might. Most of Syria's antitank systems, however, are dated, lack effective night sights, and are not able to penetrate many types of modern armor.

Thus, while Syria continues to acquire large numbers of relatively modern tanks, infantry fighting vehicles, artillery, and antitank systems, it has failed to match its commitment to quantity with a similar commitment to quality. It is not known to have significantly upgraded the armor protection of any of its principal armored combat vehicles. Most of the reported upgrades—the installation of secure communications systems in its T-72s, and the addition of fire control system enhancements to its T-62s and T-55s—are limited in nature.[1] This raises questions about Syria's ability to respond to the emerging anti-armor threat and field a force that can fight and survive on the modern battlefield.[2]

---

[1] Syria is aware of this shortcoming. It has been negotiating with the French firm Giat for at least ten years to build a tank refit facility in Syria, although financial and political problems have precluded a deal. "Syria Tank Plant Cancelled," *MEDNEWS*, May 18, 1992, p. 4.

[2] During the Gulf War, U.S. anti-armor penetrator rounds were able to destroy dug-in Iraqi T-72Ms after passing through 1.5 meter sand berms, while the T-72Ms often lost their turrets when hit. In addition, their active infra-red night vision equipment was effective only at short ranges and ineffective during poor weather. Barbara Starr, "U.S. Armour Study Praises M1A1," *Jane's Defence Weekly*, August 24, 1991, p. 298. Nearly a decade earlier, during the 1982 war, Syria learned that the frontal armor of its T-72s could be penetrated by Israeli TOW missiles and 105mm penetrator rounds, yet it has not taken steps to improve the T-72's armor protection since then.

DEEP STRIKE FORCES

A Syrian attempt to retake the Golan would hinge on its ability to exploit its advantage in standing forces during the initial phase of the war by suppressing Israel's air force and disrupting and delaying the mobilization of its reserves so as to isolate the Golan battlefield. Efforts to accomplish this during the 1973 war were limited and largely unsuccessful.

During the 1973 war, a small number of Syrian aircraft attempted to attack targets in northern Israel. On October 6, the first day of the war, six Su-20s penetrated Israeli airspace; four were shot down and two fled before they could accomplish their mission. No further air strikes against Israeli rear targets were attempted.[1]

Syria also launched up to twenty-five FROG-7 rockets between October 6-9 at Ramat David air base, hitting peripheral facilities there and causing significant damage to several nearby civilian settlements. The strike had little effect on air base operations.[2]

Finally, Syrian helicopter-borne special forces conducted at least three airmobile assaults between October 6-9 in an effort to disrupt Israeli intelligence gathering activities on Mount Hermon, and degrade Israeli command and control.[3] The assault on Mount Hermon was an outstanding success, and resulted in the capture of the Israeli observation post there. The other assaults, however, were less successful. The Syrians failed to significantly hinder Israeli operations, while taking heavy losses (thirteen helicopters and perhaps hundreds of

---

[1] Wallach, *op. cit.*, p. 66.

[2] Joseph S. Bermudez, Jr., "The Syrian Missile Threat," *Marine Corps Gazette*, January 1985, p. 55; Wallach, *op. cit.*, p. 66.

[3] On October 6 against the Israeli intelligence post on Mount Hermon; on October 7 against an intelligence post at Tel Faris; and on October 9 against northern command forward headquarters at Kfar Naffakh. Yossef Bodansky, "Syrians in Combat," *Defence Helicopter*, August-September 1990, pp. 43-44; Wallach, *op. cit.*, p. 66.

commandos), highlighting the risks of daylight airmobile operations.[1]

Because deep strike capabilities would be vital to the success of any Syrian attempt to recover the Golan by force, Syria has expanded its inventory of strike aircraft, missiles and rockets, and airmobile and special forces.

Strike Aircraft

Syria possesses various types of strike aircraft, including about twenty Su-24s, which have sufficient range to reach targets throughout Israel without refueling, and sixty MiG-23BNs and ninety Su-20/22s, which can reach targets in northern Israel. These aircraft can deliver greater payloads (including chemical bombs) with greater accuracy and over greater distances than any missile or rocket in Syria's inventory. While the large number of aircraft which could be committed to strike operations complicates Israeli air defense planning, only the Su-24 possesses the low-level penetration capability that would make it a significant threat. Consequently, Syria could count on no more than a small number of aircraft penetrating Israeli air defenses and an even smaller number reaching their targets and accurately delivering ordnance—certainly not in sufficient numbers to significantly disrupt air base operations or mobilization.

The future acquisition of a new generation of highly accurate, long-range stand-off weapons currently under development in the West—such as the French Matra APACHE container weapon and similar systems—could, however, have a significant impact on Syrian capabilities, permitting it to target Israeli air bases and armories without penetrating Israeli airspace. The first of this new generation of weapons will, however, not be available before the mid-1990s.[2]

---

[1] Staff Brigadier General Mustafa Antaki, "Airborne and Airmobile Forces in the Modern Combined Arms Battle," (Arabic), *Al-Fikr al-'Askari*, February 1990, pp. 65-66.

[2] Erich H. Biass, "The Guided Dispenser: The Ultimate Attack Weapon?" *Armada International*, April 1991, pp. 6-14.

Operational-Tactical Missiles and Rockets

Syria possesses several operational-tactical missiles and rockets, including SCUD-B and -C missiles armed with both chemical (sarin) and conventional warheads, as well as conventionally armed SS-21 missiles and FROG-7 rockets which it could launch against Israeli air bases, command and control facilities, and armories in an attempt to disrupt and delay mobilization. Although Syria's SCUD-Bs and -Cs are sufficiently accurate to deliver conventional and chemical payloads against large area targets—such as cities—throughout Israel, or chemical payloads against relatively small military targets such as air bases and armories, they lack sufficient accuracy to deliver conventional payloads against these military targets.[1] Only Syria's SS-21s are sufficiently accurate to threaten Israeli air bases and armories in the northern part of the country with conventional strikes. Of Israel's eleven major air bases, however, only one is located within range of SS-21s. Of Israel's twelve armored divisions—the backbone of its army—five are based in the north, with equipment for these divisions dispersed in some fifteen armories. Many of these are probably within range of SS-21s.[2]

In light of this threat, Israel has taken great pains to protect its air bases against chemical or conventional strikes. Aircraft shelters and other critical facilities are located underground, air- and ground-crews train to fight in a chemical environment, and runways are hardened and can be quickly

---

[1] The SCUD-B has a range of about 290km and is accurate to about 1,000m; the SCUD-C has a range of about 600km and is accurate to about 500m; the SS-21 has a range of about 100km and is accurate to about 100m; and the FROG-7 has a range of about 70km and is accurate to about 500m. Because chemical payloads are typically delivered by an air burst which disperses the agent over a large area (up to several thousand square meters), a much lower level of accuracy is required than to deliver a conventional high explosive payload, which has a very small lethal burst radius which is measured in tens of meters.

[2] Michael A. Ottenburg, "Ballistic Missile Effectiveness: The Syrian Case," *American Sentinel,* May 3, 1992, p. 14.

cleared and repaired.[1] Armories are much more vulnerable, although the storage sheds and canvas covers used to protect vehicles and other equipment from the elements would significantly reduce the risk of contamination. Many reservists, however, could become casualties while moving from their homes to their units if not provided with adequate protection against a chemical attack prior to mobilization.

In the future, missiles armed with advanced submunition warheads might become a significant threat as well; they might not only prove to be very difficult to intercept (since the break-up of the warhead and the dispersion of submunitions during the terminal phase of the flight could confuse missile defenses) but submunitions or bomblets could pose unique hazards to equipment and personnel in congested armories.[2]

Thus, while Syria could potentially hamper Israeli mobilization efforts by resorting to chemical strikes during the opening phase of a war, it would probably be deterred by the threat of massive retaliation by Israel.[3] Its ability to disrupt Israeli mobilization efforts by conventional means alone will, however, improve if it succeeds in acquiring modern missiles—such as the Chinese M-9—with greater range, accuracy, and lethality than missiles currently in its inventory. For this reason, the acquisition of these missiles is a Syrian priority.

Airmobile and Special Forces

Drawing on the lessons of the 1973 and 1982 wars and its protracted military involvement in Lebanon, Syria has in recent years dramatically expanded its special forces and its

---

[1] W. Seth Carus, *The Threat to Israel's Air Bases*, (Washington, D.C.: American Israel Public Affairs Committee, 1985), pp. 43-47.

[2] Ottenburg, *op. cit.*, pp. 14, 15; Barbara Opall, "Scud Variants Pose New Threat to SDIO Plans," *Defense News*, July 20-26, 1992, pp. 40-41.

[3] Rabin has warned "the Arab world and its leaders" that "the use of missiles and gases" would prompt Israel to "hit them back 100 times harder." Israel Radio, July 21, 1988, in *FBIS-NES*, July 21, 1988, p. 29.

rotary-wing lift capacity.[1] Its current order of battle includes an airborne division and seven independent special forces regiments (comprising about 15,000 commandos in all), and about 150 Mi-17 and Mi-8 HIP medium transport helicopters.[2]

In wartime, commandos would likely conduct airmobile assaults and raids against key objectives, such as Israeli command posts and intelligence facilities near the front, to degrade their command and control and their ability to read the unfolding Syrian attack. Additional forces would be inserted behind Israeli lines to disrupt and delay the arrival of reserve units by demolishing bridges and laying ambushes.

Syria possesses sufficient lift capacity to transport a large number of commandos (up to 2,500) behind Israeli lines during the opening phase of a war, although it would have to be willing to accept heavy casualties in the process.[3] The survivability of airmobile forces in a high threat environment like the central Golan—which would be saturated by Israeli air defenses—is poor, and many helicopters flying through the main battle area—day or night—would probably be downed *en route* to their objectives.[4] While it is possible that surviving

---

[1] Jan Al-Kassan, What Happened in October (Arabic), (Damascus: Dar al-Ba'th, n.d.), pp. 92-104; Tlas, "The Struggle for the Summit of Jabal Al-Sheikh During the War of Attrition" (Arabic), *Al-Fikr Al-'Askari*, October 1977, pp. 3-10; Al-Ayyubi, "Special Forces in the Battle for Beirut" (Arabic), *Istratijiyya*, April 1983, pp. 29-32.

[2] Israelis consider Syria's special forces to be tough and tenacious fighters, on par with some of their own troops. For an Israeli assessment see: Emanuel Rosen, "Face to Face with the Syrians" (Hebrew), *Bamahane*, July 7, 1982, p. 43, in *JPRS-NEA*, October 20, 1982, p. 106.

[3] This assumes that not all of Syria's 150 Mi-17 and Mi-8 HIP helicopters—each of which can transport 26 men—would be used in airmobile operations, since Syria would reserve some of its HIPs for internal security, transport, and medical evacuation duties.

[4] Most Syrian airmobile operations would probably be restricted to daylight hours because its Mi-17s and Mi-8s are believed to lack the advanced navigation and night vision aids required for low-level penetration at night. While this shortcoming could be corrected by procuring advanced navigation and night vision equipment from abroad,

commandos could harass Israeli reserves moving to the front, most would probably be killed or captured unless Syrian success on the ground makes a link-up possible.

AIR DEFENSES

The Arab-Israeli wars have demonstrated that control of the skies, or at least denying the enemy control of the skies is essential to success in war. While the Syrians were subjected to a punishing strategic bombing campaign during the 1973 war because they were unable to control the airspace throughout the country (air defenses were concentrated around Damascus and in the Golan area), they were able to achieve significant gains on the ground during the opening phase of the war because they neutralized Israeli air power over the battlefield.[1] Following the 1973 war, Syria created an integrated air defense system to protect major population centers, industrial sites, and air bases throughout the country, and thereby prevent a recurrence of its experience during the war.

Syria re-learned this lesson during the 1982 war when—after losing control of the skies of Lebanon (and over eighty-five aircraft and twenty-one SAM batteries in only three days)—its ground forces there were defeated.[2] Since then, Syria has devoted about 70 percent of its annual procurement budget to air defense modernization and taken steps to better integrate its air defenses, and enhance its effectiveness and survivability.[3]

Syria's air defenses are currently built around three air defense operations centers and the Vector II automated

---

it would, however, only marginally reduce the risk to the slow and vulnerable helicopters.

[1] Al-Ayyubi, "Revolutionary Features of the Fourth Arab-Israeli War" (Arabic), *Shu'un Filastiniyya*, January 1974, pp. 29-32.

[2] In an interview shortly after the 1982 war, Tlas stated that "if not for the gap in air defenses, we would have prevailed in Lebanon." *Bamahane*, May 19, 1983, p. 16.

[3] Steven J. Zaloga, *Soviet Air Defense Missiles: Design, Development, and Tactics*, (Surrey, England: Jane's Information Group, 1989), p. 107.

command and control system, which links scores of early warning and target acquisition radars, 350 fighter and interceptor aircraft, 250 fixed and mobile SAM batteries, and 1,750 anti-aircraft artillery pieces into an integrated air defense and air battle management system.[1]

Fighter Aircraft

Syrian aerial defenses include about forty modern MiG-29s, and a much larger number of older, less capable aircraft, including 100 MiG-23s, forty MiG-25s, and 175 MiG-21s, which are located at twenty-one major air bases—many equipped with hardened aircraft shelters (built after the 1967 war to prevent a repetition of the preemptive strike that destroyed Arab air forces on the ground at the outset of the war).[2] While the MiG-29 is a highly capable fighter, and the version in Syrian service is believed to incorporate most of the features of the Soviet version, the versions of the MiG-25, MiG-23, and MiG-21 provided to Syria reportedly do not include the advanced radars, computers and software, communications, or countermeasures provided on versions of these aircraft in Soviet service.[3] Syria, moreover, still relies on vulnerable ground-controlled intercept procedures which have proved susceptible to jamming.[4]

Syria's inferiority in the air has repeatedly been demonstrated in every Arab-Israeli war, and in numerous isolated aerial engagements, and it is not likely that Syria has closed the gap. It has proved unable to effectively integrate the aerial and ground components of its air defenses, and it

---

[1] Cordesman and Wagner, *op. cit.*, p. 285.

[2] Alpher, *Middle East Military Balance 1989-90*, pp. 337, 341.

[3] Cordesman, "Syrian-Israeli C3I," p. 89.

[4] Tlas *et al, The Israeli Invasion of Lebanon*, pp. 185-194. The Syrians upgraded their MiG-23s following the 1982 war with French Marconi Jaguar secure communications systems, in an attempt to remedy the shortcomings in their ground-controlled intercept procedures exposed during the war.

·continues to rely on outdated equipment, doctrine, and training methods. Moreover, the U.S. shelter-busting effort during the Gulf War raises the possibility that the Syrians must once again be concerned about the vulnerability of their air force to a 1967-style preemptive strike by Israel.

Ground-Based Defenses

Syria's ground-based air defenses are the backbone of its air defense system and are among the densest in the world. Since the 1973 war, Syria has consistently expanded, modernized, and thickened its ground-based air defenses, which include over 250 fixed and mobile SAM batteries (with about 1,000 SAM launchers) and over 1,750 mobile and fixed air defense artillery pieces.[1] High and medium altitude coverage is provided almost entirely by obsolete SA-2, SA-3, SA-5, and SA-6 missiles, which account for over half of Syria's entire inventory of SAMs. As of the mid-1980s the Soviets had not provided block upgrades for any of these missiles.[2]

Syria hopes to purchase the SA-10 to augment or replace these older SAMs and close the gaps in its capabilities and coverage. The SA-10 is a highly capable long-range, all-altitude SAM which can engage several targets simultaneously, including tactical ballistic missiles, low altitude aircraft, and

---

[1] Cordesman and Wagner, *op. cit.*, pp. 285-287; Goodman and Carus, *The Future Battlefield*, p. 31

[2] Syria currently fields about 350 SA-2/3 launchers, 48 SA-5 launchers, and 250 SA-6 launchers. Cordesman and Wagner, *op. cit.*, p. 286; Cordesman, "Syrian-Israeli C3I," p. 88. The SA-2 was first delivered to Syria in 1968, the SA-3 was first delivered in 1972, and the SA-6 was first delivered in 1973. The SA-5, which was first delivered in 1982, is a long-range, high altitude SAM which was probably acquired to engage large high value aircraft such as Israel's E-2C AEW aircraft and modified Boeing RC-707s, Arava transports, and CH-53 helicopters configured for COMINT, ELINT, and stand-off jamming duties. Reports that the SA-5 possesses a limited maneuver envelope, suffers from ECM vulnerabilities, and is unreliable, raise questions, however, about its effectiveness. Cordesman, "Syrian-Israeli C3I," p. 88.

cruise missiles.[1] The SA-10 is available in both fixed and mobile versions and would truly represent a new capability for the Syrians. It would, however, have to be deployed in large numbers in order to significantly affect the balance in the air, and this could take years.

Syria has also acquired very large numbers of mobile air defense systems. In the 1982 war, Syria learned the vulnerability of fixed, highly centralized air defenses, and since then has taken steps to enhance the survivability and flexibility of their air defenses through the acquisition of large numbers of modern mobile systems, including SA-8, SA-9, SA-11, and SA-13 missiles, and ZSU-23/4 guns. Because nearly all these systems mount surveillance and in some cases fire control radars on the missile launch vehicles, they can operate autonomously, thereby enhancing their survivability. And because they are mobile, they can support offensive as well as defensive operations and are potentially difficult to locate.[2] As of the mid-1980s, however, the Soviets reportedly had not provided advanced infrared seekers for mobile SA-8s or SA-9s, or SA-7s.[3]

Thus, despite the tremendous resources that Syria has invested in its air and air defense forces, it still remains the weak link in its defense. In addition to gaps in its capabilities, the quality of training received by air defense personnel, and questions about their ability to function in an EW environment, there are serious gaps in Syria's air defense coverage. In accordance with Israeli "red lines" set down in 1976, Syria has no SAMs in Lebanon (except for manportable SA-7s), and its air defense coverage there is consequently quite limited. The lack of Syrian air defense coverage over Lebanon means that in the event of a war, Israel could use the Bekaa as an aerial corridor into Syria, while Syrian forces in the Bekaa would be vulnerable to attack from the air nearly from the

---

[1] Lieutenant Colonel A. Dokuchayev, "The S-300 is More Effective Than the Patriot" (Russian), *Krasnaya Zvezda*, June 27, 1991, p. 2, in *JPRS— UMA*, July 25, 1991, pp. 30-33.

[2] Goodman and Carus, *op. cit.*, pp. 31-32.

[3] Cordesman, "Syrian-Israeli C-31," p. 88.

outset.[1] In addition, nearly every SAM in Syria's inventory has been employed in combat by Syria, Iraq, or Libya against U.S. or Israeli forces, and thus it must be assumed that their capabilities and technical characteristics have been compromised.

Nonetheless, the density of Syria's air defenses would force Israel's air force to devote significant resources to air defense suppression, limiting its ability to provide ground support during the crucial initial phase of a war. In addition, the suppression of Syrian air defenses will be more complicated than in the past as a result of Syrian efforts to create a more decentralized, flexible, and survivable air defense. These factors are unlikely, however, to alter the outcome of a war.

Because Syria's air defenses consist mostly of obsolete SAMs, and because there are major gaps in its air defense coverage, it is likely that in the event of a war with Israel, Syria's air defenses would be quickly neutralized, and thus its major population and industrial centers as well as its ground forces would be vulnerable to attack from the air.

COASTAL DEFENSES

Syria's Mediterranean coastline constitutes one of its principal vulnerabilities. Syria's two primary ports—Latakia and Tartus—are located on the coast, and a large percentage of Syria's refining and bulk oil storage capacity is concentrated there as well. The coast also provides an aerial approach to Homs and Hama and surrounding industrial centers, as well as the Jabal al-Nusayriyah region—the country's Alawite

---

[1] While Syrian SAMs located along the border with Lebanon certainly can cover Lebanese airspace, their effectiveness is limited by terrain masking. Syrian accounts of the 1982 war stress the fact that the geography of Lebanon—particularly the Mount Lebanon and Anti-Lebanon ranges which run roughly north to south—favor Israel, since these ranges mask Israeli aircraft from long-range early warning radars based in Syria, while facilitating the early detection of Syrian aircraft which have to climb to altitude to traverse the Anti-Lebanon range when entering Lebanese airspace. By contrast, Israeli use of E2C Hawkeye AEW aircraft obviates the effect of terrain on Israeli early warning. Tlas *et al, The Israeli Invasion of Lebanon*, pp. 174, 179.

heartland, home to President Assad and most of his inner circle.

During the 1973 war Israeli air and naval forces attacked military and economic targets along the Syrian coast, disrupting Syrian naval operations, hindering the Soviet resupply effort, and reducing Syria's oil stocks.[1] During the 1982 war, Israel's navy demonstrated a growing amphibious capability by conducting its first major amphibious assault in wartime along the Lebanese coast north of Sidon, near the mouth of the Awwali River.[2] Following the war, the Syrians—recognizing Israel's growing amphibious capabilities and the vulnerability of their coastline—took steps to create a multi-layered, integrated coastal defense.[3] These coastal defenses consist of:

• Two coastal missile brigades—including a SSC-1B Sepal and SSC-3 Styx brigade (each with thirty-six launchers)—for long- and medium-range coverage.[4]

• Sixteen Osa I and II and five Komar class missile patrol boats, three Romeo class diesel submarines, two Petya II class ASW frigates, and Mi-14, Ka-25 and Ka-27 ASW helicopters for medium range surface and subsurface coverage.

---

[1] For a Syrian account of naval operations during the 1973 war, see Tlas, "Exploits of the October Liberation War: Combat at Sea" (Arabic), *Al-Fikr al-'Askari*, August 1974, pp. 11-28.

[2] Brigadier General Ahmad Muhsin, "The Role of the Israeli Navy During the Invasion of Lebanon" (Arabic), *Jaysh al-Sha'b*, June 15, 1983, pp. 22-23.

[3] According to a Syrian assessment of the 1982 War, "(t)he possibility of an (Israeli) amphibious landing has become relatively great and constitutes a real threat in the Mediterranean Sea at this stage, and this must be taken into consideration in planning the defense of the coast...." Staff Brigadier General Ahmad Muhsin Ahmad, "The Role of Israeli Weapons and Equipment in the War in Lebanon in 1982" (Arabic), *Al-Fikr al-'Askari*, January 1985, p. 51.

[4] The Sepal has a maximum effective range of 275km and carries a 1,000kg warhead. It thus has sufficient range to hit large coastal targets as far away as Tel Aviv. The Styx provides medium-range coverage out to its maximum effective range of 35km and carries a 500kg warhead.

• Coastal patrol craft and minesweepers of various types, as well as coastal artillery, coastal surveillance radars, and coastal observation posts for close-in defense and detection.
• Two coastal defense brigades to counter amphibious landings or raids.
• Air defense forces (including interceptors, SAMs, and anti-aircraft artillery) to protect key coastal targets.

Despite Syrian efforts after the 1982 war to improve its coastal defenses, its capabilities in this area remain limited. While they are sufficient to deter a major Israeli amphibious landing, they could not prevent Israeli air and naval forces from attacking ports and other coastal targets or conducting small seaborne raids in wartime.[1]

SUPPORT FOR TERRORISM

Syria has long used terrorism as an instrument of policy, to strike at enemies and influence regional developments.[2] Syria provides sanctuary to a number of Palestinian and other surrogate groups and in the past has provided them with the political, military, and financial means to engage in terrorist acts which serve its interests, and which it could not directly engage in itself without significant risk.

---

[1] Even Syria's modest mine warfare capability would be sufficient to deter an Israeli amphibious operation, since even a single, chance mine-strike could sink a large amphibious transport with hundreds of troops aboard. During the Gulf War, Iraq—which possessed only a rudimentary mine warfare capability—was in this way able to hinder coalition naval operations in the Gulf and deter an amphibious landing. Department of Defense, *Conduct of the War*, p. 286.

[2] Assad rejects the accusation that Syria supports terrorism, distinguishing "terrorism," on the one hand, from "acts of national liberation" or "national resistance" on the other. According to Assad, "We reject terrorism, condemn and confront it because we do not want it. We have suffered from some of its acts. However, we clearly distinguish between terrorism and acts of national liberation against occupation, which we support, because it is the right of every people whose land has been occupied or whose rights have been usurped, especially when they carry out these acts in the true arena of struggle." Damascus Television, May 26, 1986, in *FBIS-NES*, May 27, 1986, p. H2.

At least four Syrian intelligence and security organizations—Military Intelligence (*Al-Mukhabarat Al-'Askariyya*) headed by Major General 'Ali Duba; Air Force Intelligence (*Al-Mukhabarat al-Jawiyya*) headed by Major General Muhammad Al-Khuli; the General Intelligence Directorate (*Idarat al-Mukhabarat al-'Ammah*) headed by Major General Majid Sa'id; and the Directorate of Political Security (*Idarat Al-Amn al-Siyassi*) headed by Major General 'Adnan Badr Hassan—maintain overseas logistical infrastructures which have in the past supported terrorist operations in Europe and the Middle East.[1] To this end, intelligence personnel are assigned to embassies under military or civilian diplomatic cover, or pose as employees of the state airline or as students enrolled in foreign universities. Syrian intelligence personnel posted overseas have directly participated in terrorist acts, and provided logistical assistance to surrogate organizations supported by Syria.[2]

The primary Syrian-supported terrorist groups include the Palestinian Abu Nidal Organization, the Popular Front for the Liberation of Palestine-General Command, the Popular Front for the Liberation of Palestine, the Democratic Front for the Liberation of Palestine, the Popular Struggle Front, the Abu Musa Group, Al-Sa'iqa, Palestinian Islamic Jihad, the Kurdish Revolutionary Workers Party, the Armenian Secret Army for

---

[1] Although Khuli was formally removed as head of Air Force Intelligence in 1986 following the Hindawi affair and replaced by his nephew Colonel Ibrahim Huwayji, he remains effectively in charge. Middle East Watch, *Human Rights in Syria*, (New York: Human Rights Watch, 1990), pp. 60-64.

[2] In an interview in 1986, Pierre Marion, head of France's General Directorate of External Security (DGSE) from 1981 to 1983 provided details concerning the conduct of Syrian-sponsored terrorism on French soil during his tenure as chief of foreign intelligence. According to Marion, "Arms and bombs enter the country by diplomatic pouch. The terrorist arrives in the country by aircraft or train, hands in pocket. He meets his contact, who provides him with his targets and the means for accomplishing the mission." During Marion's tenure, the DGSE identified six contacts of this type. Serge Raffy, "Former Secret Service Chief Pierre Marion: Mitterrand Refused Punitive Actions" (French), *Le Neuvel Observateur*, September 12-18, 1986, p. 30.
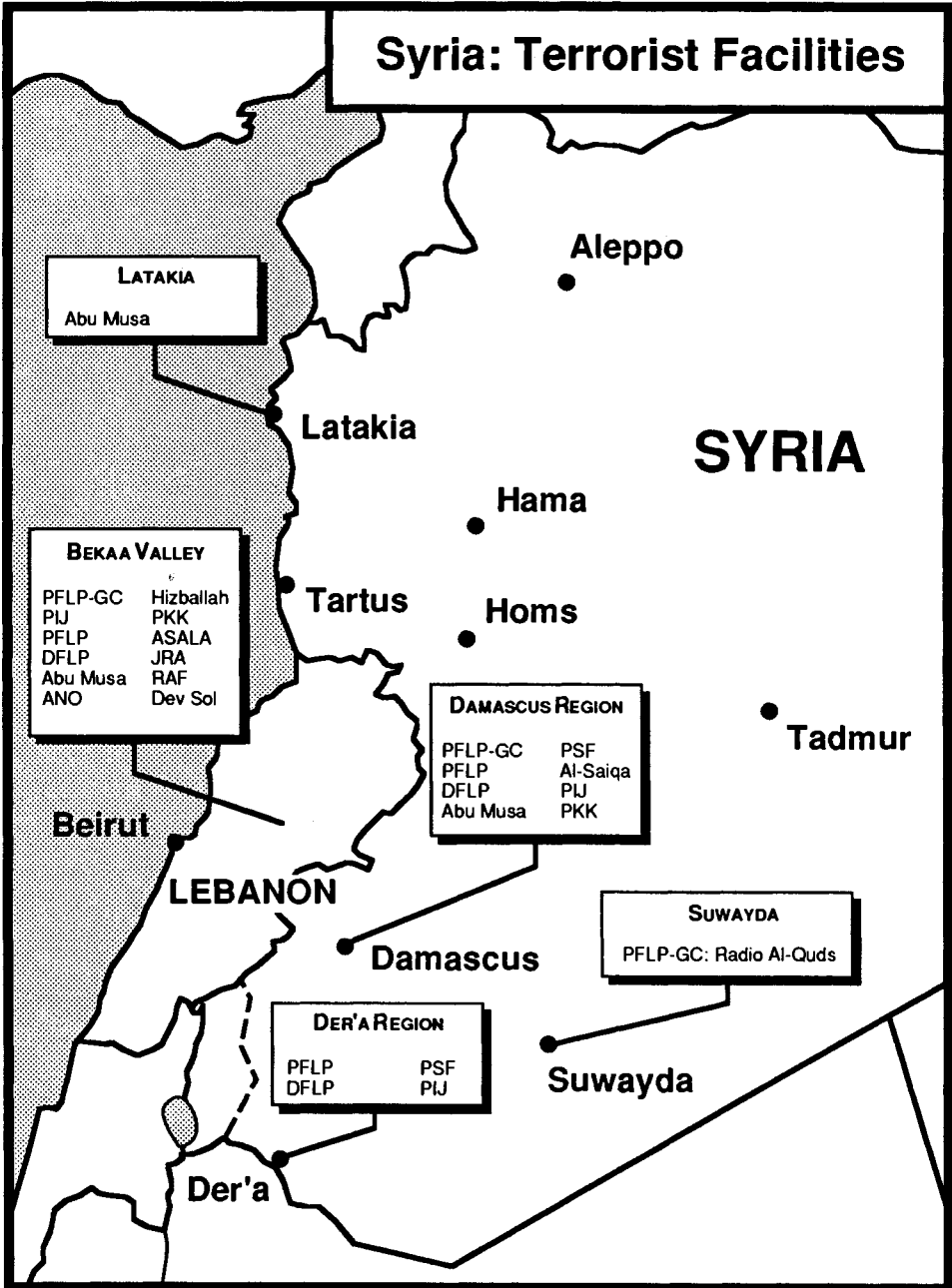
the Liberation of Armenia, and the Japanese Red Army. These organizations maintain offices in Damascus and training camps in Syria or the Syrian-controlled Bekaa Valley.[1] Syria also directly or indirectly supports and sustains a number of Lebanese organizations and militias, including Hezbollah, the Syrian Social Nationalist Party, the Arab Ba'th Socialist Party, and the Arab Democratic Party. All of these Lebanese organizations, save the last, have, at one time or another, conducted operations against Israeli forces in Lebanon.

Syrian support for terrorist organizations includes training, logistical support (the provision of official papers and travel documents and the use of diplomatic pouch to transport weapons and explosives into foreign countries), and the provision of target intelligence, and it permits members of these groups to freely pass through Syrian territory. However, it does not permit these groups to initiate operations which could drag it into a confrontation with Israel (the Golan is thus off-limits to these groups), or initiate operations which do not serve its interests.[2] In addition, while Syria provides significant support to these organizations, it rarely controls operations or selects targets itself. Rather, it prefers to support organizations whose activities are more or less in line with Syrian objectives,

---

[1] United States Department of State, *Patterns of Global Terrorism: 1990*, April 1991, pp. 35-36.

[2] Tlas once explained the rationale behind this policy in an interview, stating that "We will not have any party drag us into a war, the place and timing of which are not decided by us," adding that "We have told our brother commandos to come to the Syrian front and coordinate with us. This is because I will be the one who will provide blood and cover and be the target of Israeli retaliation; therefore, I am entitled to be privy to the goal, date, and place of any operation so that I am not caught unawares." *Al-Anba'*, August 15, 1989, p. 23, in *FBIS-NES*, August 17, 1989, p. 31. Syrian influence over the various surrogate groups it supports was confirmed by an assistant to Hussein Mussawi, leader of Islamic Amal in the mid-1980s, who admitted in an interview that "We don't have freedom of action. Our operations are not approved if they do not serve the interests of Damascus." Mohamed Selhami, "Meeting with a Suicide Bomber" (French), *Jeune Afrique*, January 25, 1984, p. 45.

Syria: Terrorist Facilities

Aleppo

Latakia

Abu Musa

Latakia

SYRIA

Hama

Bekaa Valley

PFLP-GC	Hizballah
PIJ	PKK
PFLP	ASALA
DFLP	JRA
Abu Musa	RAF
ANO	Dev Sol

Tartus

Homs

Damascus Region

PFLP-GC	PSF
PFLP	Al-Saiqa
DFLP	PIJ
Abu Musa	PKK

Tadmur

Beirut

LEBANON

Suwayda

PFLP-GC: Radio Al-Quds

Damascus

Der'a Region

PFLP	PSF
DFLP	PIJ

Suwayda

Der'a

so that it can disavow knowledge of specific terrorist acts.[1] Syrian intelligence and security personnel have nonetheless been involved, in the past, in a large number of operations against various Western governments, rival Arab regimes, and exiled opposition figures, including bombings, assassinations, and abductions.[2] It has also occasionally directed operations against Israel.[3]

In recent years, Syria has attempted to improve its relations with the West by a series of token gestures—including the removal of Air Force Intelligence Chief Major General Muhammad Khuli following the unsuccessful bombing of the El Al jetliner in 1986 (although Khuli reportedly retains his influence, if not his actual post), closing the Abu Nidal Organization offices in Damascus in June 1987 (although the organization still maintains bases in the Bekaa) and expelling the semi-retired Venezuelan terrorist Illych Ramirez Sanchez ("Carlos") in September 1991 (although he reportedly returned in December). Syria's support for terrorism, however, continues.

Syria still maintains a large number of terrorist bases on its own territory and in parts of Lebanon it controls, as well as an overseas infrastructure which would enable it to resume

---

[1] United States Department of State, "Syrian Support for International Terrorism: 1983-1986," Department of State Bulletin, February 1987, p. 73.

[2] A partial list, for instance, would include the assassination of former Syrian Defense Minister Muhammad 'Umran in Lebanon in March 1972, Lebanese Druze chieftain Kamal Jumblat in Lebanon in March 1977, former Syrian Premier Salah al-Din al-Bitar in Paris in July 1980, French Ambassador to Lebanon Louis Delamare in Beirut in September 1981, and Lebanese President Bashir Jumayyil in Beirut in September 1982, as well as the attempted assassination of Jordanian Premier Mudar Badran in Amman in September 1980, opposition leader Issam al-'Attar in West Germany in March 1981, and possibly the downing of Pan-Am Flight 103 over Lockerbie, Scotland in December 1988.

[3] For instance, in April 1986, Syrian Air Force Intelligence was directly implicated in an unsuccessful attempt at Heathrow Airport in London to bomb an El Al 747 jetliner with nearly 400 people aboard.

terrorist operations at any time in the future.[1] And despite its participation in the peace process, it has continued to permit the Lebanese Hezbollah—which maintains bases in Syrian-controlled regions of Lebanon—to conduct operations against Israel's security zone in South Lebanon and northern Israel, as it sees these operations as a way of increasing its leverage over Israel at the negotiating table.

CONCLUSIONS

Syria currently lacks a credible offensive military option against Israel. The collapse of the Soviet Union and the defeat of Iraq have dashed all Syrian hopes for assistance in the event of a war with Israel—at least for now—and it must assume that it would have to face Israel alone. Moreover, although Syria enjoys a significant advantage in standing forces, and could— under certain conditions—achieve surprise, it could not realistically expect to retake the Golan by force. Syria's forces in the Golan and possibly the Bekaa would eventually face formidable Israeli ground forces and would be subject to punishing air strikes, while its coastline would be subject to attack from the sea. Syria would thus probably incur heavy losses in any attempt to retake the Golan. For Assad, the potential risks of war, including the destruction of much of his military—the principal pillar of his rule—are probably unacceptable.[2]

While Syria will continue its efforts to create an offensive military option, it will concentrate primarily on maintaining its defensive deterrent capability. Syria may eventually decide

---

[1] According to Pierre Marion: "There exists in the West, in Western Europe, and France in particular, permanent, dormant, logistical infrastructures" which are "activated for this or that particular operation." Rene Backmann, "A Former Secret Service Chief Reveals the States which Control the Terrorists" (French), *Le Nouvel Observateur,* September 26-October 2, 1986, p. 26.

[2] Israel's new Prime Minister Yitzhak Rabin has in the past warned Assad that "if he will initiate a war" his armed forces—the main pillar of his regime—"will be defeated in such a decisive way" that his regime "will be in danger." IDF Radio, November 20, 1987, in *FBIS-NES,* November 20, 1987, p. 29.

to develop nuclear weapons to counter Israel's own nuclear capability and to supplement its growing stockpile of chemical and biological weapons in order to offset Israel's growing conventional advantage. And, although Syria will find it increasingly difficult to compete with Israel in the conventional arena, it will, nonetheless, continue its efforts to close the conventional gap. The continued expansion of its forces, the assimilation of large quantities of surplus Soviet-bloc equipment, and limited technology transfers from the West in the coming years are not, however, likely to fundamentally alter the conventional balance.[1]

The possibility that Assad might launch a limited war should peace talks collapse or bog down cannot be entirely ruled out, however, since the decision to go to war is ultimately a political one, and is not determined by military considerations alone. Assad might believe that SCUD missiles armed with chemical warheads provide him with the means to avert defeat if he launches a war, and that even if his army cannot retake the Golan, a war might favorably alter the regional military balance, create new political realities, and increase his leverage at the bargaining table. At present, however, this remains an unlikely possibility and Syria will probably continue to use terrorist surrogates to strike at Israeli interests in Lebanon and elsewhere in order to influence the peace process and enhance its leverage at the bargaining table.

While failing to create an offensive military option, Syria's efforts to achieve strategic parity with Israel have succeeded in creating a relatively stable deterrent balance between the two countries, and in reducing Israel's military freedom of action. Israel no longer has the option of launching a preventive war against Syria or of undertaking a strategic bombing campaign as it did during the 1973 war. Syria possesses missiles capable of hitting all of Israel's major cities if Damascus and other population centers or strategic targets are threatened. Moreover, because an Israeli attack would have to break through large standing forces in heavily fortified positions along the main avenues of approach into Syria, such a war would inflict

---

[1] Carus and Goodman, *The Future Battlefield*, pp. 173-174. See also Appendix I.

greater costs on Israel than it would be willing to incur under almost any circumstance, at least for the foreseeable future.

III SYRIA AND THE PEACE PROCESS: TOWARDS A NEW STRATEGY?

> The future is ours. There is no doubt about that. This conviction, however, should not make us rest assured and sleep. We should work for it.
>
> *President Hafez al-Assad, April 1, 1992*

Syria's decision in July 1991 to join the U.S.-sponsored peace process derived more from an attempt to adjust to the new political and military realities that flowed from the collapse of the Soviet Union, its continued inability to create a viable military coalition, and its continued military weakness, than from any fundamental reassessment of its attitude towards Israel.[1] Lacking a credible offensive military option, Syria believed that it had much to gain and nothing to lose by trying to obtain through diplomacy what it had been unable to recover by force.[2] Syria's decision to join the peace process

---

[1] For instance, in an interview following Syria's decision to join the peace process, Assad asserted that Syria has "changed nothing" regarding its attitude towards Israel. SANA, July 29, 1991, in *FBIS-NES*, July 29, 1991, p. 45.

[2] Assad explained his reasoning in a recent interview, stating that "if peace is achieved and UN resolutions are implemented," Syria can say "that is what we wanted." If, however, "peace is not achieved and UN resolutions are not implemented," then "Israel's intentions will be exposed to the world," while its leaders "will be exposed as expansionist

was, moreover, motivated by several additional factors. Syria hoped that its participation would:

- Restrain Israel at a time of heightened vulnerability, and provide Syria with a cover for its military build-up.
- Erode U.S. support for Israel and intensify U.S. pressure on it.[1]
- Enable it to prove to the world that Israel does not really want peace by revealing its unwillingness to give up the Golan.
- Permit it to better influence the peace process and obstruct a settlement which does not advance its interests.
- Ensure continued foreign aid and investment, easing its economic situation and silencing domestic critics of the regime.

On the other hand, rebuffing the U.S. by refusing to join the peace process would have left it isolated and vulnerable at a time when its own military capabilities vis-à-vis Israel were in question.

While participating in the peace process, Syria has nevertheless commenced a major military build-up, and it is likely to continue the build-up as long as resources permit, because the use or the threat of force have always been central to Assad's regional and domestic policies. Even if Syria and Israel conclude a peace agreement, the regional balance of power will remain central to Syrian calculations, and it will still need a large and powerful military in order to continue to dominate its weaker neighbors, deter its enemies, and protect the regime.

While Syria has always emphasized that a favorable balance of power is a necessary condition for achieving peace, it did not join the peace process from a position of strength, but rather from one of weakness. From Syria's perspective, the current peace process is based not on Arab strength, but rather on a new U.S. policy towards the region and a favorable international environment—factors which could rapidly

---

invaders who are hostile to peace." Radio Damascus, December 4, 1991, in *FBIS-NES*, December 5, 1991, p. 33.

[1] According to Assad, "the United States and every official in the United States must push Israel to" implement UN Resolutions 242 and 338. Radio Damascus, September 20, 1991, in *FBIS-NES*, September 20, 1991, p. 29.

change, thereby undermining the basis of the peace process. Syria, therefore, is using the cover provided by the peace process to build up its military capabilities in order to enhance its bargaining power, restore its deterrent capability, and create a military option should the talks bog down or collapse. Thus, even though Syrian leaders no longer publicly call for the attainment of strategic parity with Israel, their actions indicate that the governing assumption of Syrian foreign policy and of its efforts to achieve strategic parity in the past—that it can achieve its objectives only from a position of strength—remains unaltered.

Despite Israel's military superiority—which is likely to grow in the coming years—Assad believes that the balance of forces in the region will eventually tilt in Syria's favor.[1] To this end, Syria has forged a strategic alliance with Iran and has made tentative moves towards a rapprochement with Iraq. It has continued to build up its armed forces—augmenting both its strategic and conventional capabilities—in the hope that this will enhance its leverage at the negotiating table and thereby facilitate a settlement on its own terms, or provide it with a military option in the event that peace talks collapse or bog down. Specifically, Assad may reason that:

• The strategic alliance with Iran will result in increased military cooperation, including joint production arrangements and technology transfers which will benefit Syria's armed forces. Likewise, a reconciliation with Saddam Hussein or a change of leadership in Baghdad might strengthen Syria's hand as well.

• Syria's armed forces will continue to expand and modernize in the coming years as it absorbs large quantities of new arms from the former Soviet bloc and other sources and assimilates foreign technology and expertise.

• Syria's economic recovery, which is linked to increased oil exports and foreign aid and investment, is likely to continue, promising domestic stability and providing it with the means to sustain its military build-up.

---

[1] For instance, in a recent speech, Assad optimistically told his people that he had "no doubt" that "the future is ours." Radio Damascus, April 1, 1992, in *FBIS-NES*, April 1, 1992, p. 34.

• The planned redeployment of Syrian forces in Lebanon in September 1992—if carried out—will enable it to consolidate its forces in the Bekaa and withdraw units no longer needed there, strengthening its military position in Lebanon and increasing its military freedom of action.

For these reasons, Assad will keep Syria in the peace process and try to string out negotiations for as long as possible, to buy time until Syria's military situation improves.[1] Because Assad believes that it is in Syria's interest to draw out negotiations, and because he perceives its security margins to be so narrow, a breakthrough in the negotiations between Syria and Israel is unlikely in the near future.

Syria, at present, continues to insist on the unconditional return of all occupied Arab territories—including the Golan—as a precondition for peace, and while it has hinted that it is willing to consider symmetrical demilitarization and possibly other arrangements that could facilitate a solution, its lack of strategic depth and its sense of vulnerability make flexibility on its part unlikely at this stage.[2] Syria, moreover, is unlikely to countenance conventional standing force reductions (since its standing forces are essential for projecting its power in the region, for deterrence, and for propping up the regime at home),[3] or the elimination or reduction of its chemical and

---

[1] Accordingly, Assad claimed in a recent speech that Syria is "not in a hurry" to conclude a peace agreement with Israel. Radio Damascus, March 12, 1992, in *FBIS-NES*, March 13, 1992, p. 33.

[2] Syria has stated that it is willing to countenance security arrangements that are "balanced and mutual." Consequently, any demilitarized zone would have to straddle "both sides" of the border. Press Conference by Al-Sharaa in Madrid, November 1, 1991.

[3] Even if Israel were willing to accept arms limitations, Syria would probably not agree to reduce its conventional standing forces (as has been proposed by some Israelis) since these have been created, in part, for reasons unrelated to the Israeli threat. For instance, according to one Israeli analyst, "there is no major responsible security figure in Israel who can envision territorial concessions on the Golan Heights without reductions in the Syrian standing army and deep demilitarization arrangements substantially eastward beyond the current Israeli-Syrian cease-fire line." Dore Gold, *Towards Middle East Peace Negotiations: Israeli*

biological weapon and ballistic missile inventories (since these offset Israel's nuclear and conventional capabilities)—unless Israel is willing to eliminate or reduce its nuclear weapons inventory, curtail the offensive capabilities of its air and ground forces, and alter the offensive orientation of its military doctrine.

Syria, likewise, is unlikely to end its support for terrorism, which it has found to be a useful policy tool. Syria has in the past resorted to terrorism as a means of achieving important policy objectives and striking at its enemies, particularly during periods of weakness and vulnerability. It is thus unlikely to abandon its terrorist assets as long as it believes that they may be useful in the future.

Syria, finally, is unlikely to agree to withdraw its forces from Lebanon for the foreseeable future. Since the mid-1950s, every Syrian regime has worked for a permanent military presence there.[1] There is no reason to believe that the Assad regime—which has succeeded in converting Lebanon into a security buffer—would willingly terminate its military presence in Lebanon, which it perceives as vital to its defense.[2]

In light of this, U.S. policy towards Syria should attempt to strengthen the peace process by limiting Syria's military options, while reducing its political freedom of maneuver by:

• Preventing the formation of a potential new rejectionist bloc consisting of Syria, Iraq, and Iran that could undermine or hamper the peace process, by continuing its support for the disarmament of Iraq—as called for in U.N. resolutions—and

---

Postwar Political-Military Options in an Era of Accelerated Change, Policy Focus No. 16, (Washington, D.C.: The Washington Institute for Near East Policy, 1991), p. 18.

[1] Avi-Ran, *The Syrian Military-Strategic Interest in Lebanon*, p. 143.

[2] According to one report, Syria made a secret promise to Saudi Arabia in October 1989 at the time of the conclusion of the Taif Accords that it would eventually withdraw from Lebanon at an undetermined future date. However, according to the report, Syria linked its withdrawal to undefined "changes in the Middle East," raising questions about the sincerity of its commitment. Nora Boustany and Caryle Murphy, "Syria Signed Secret Pledge on Pullout from Lebanon," *The Washington Post*, January 12, 1990, p. A30.

encouraging Arab countries such as Egypt, Saudi Arabia, and Kuwait to press Syria to curtail its cooperation with Iran.

• Curbing Syria's military build-up by pressing its primary arms sources—Russia, the former Soviet bloc states of Eastern Europe, North Korea, and China—to halt or limit arms transfers to Syria, while working to stem the flow of Western technology with military applications. These transfers undermine the peace process by encouraging Syria to believe that its military situation will eventually improve, thereby reducing its incentive to compromise.

• Pressing Syria to cease its support for terrorism by closing down terrorist headquarters, offices, and camps in Syria and the Bekaa, and disarming the terrorists (including Hezbollah), thereby reducing its ability to play the role of spoiler and obstruct the peace process as it has done in the past.

Despite Assad's desire to drag out negotiations and his inflexibility concerning the terms of a settlement, negotiations have set in motion an open-ended process which Syria might not be able to control. Thus, it is possible that its fears of a confrontation with the U.S. and Israel if it is perceived to be obstructing progress towards peace, its concerns about being left behind by the Jordanian-Palestinian-Israeli negotiations, and the realization that it has no viable alternative to achieving its objectives outside of the peace process might eventually cause Syria to accept arrangements that it currently deems unacceptable.[1]

---

[1] For instance, some Israelis have suggested that as part of a peace agreement, Syria could be awarded sovereignty over the Golan, while Israel could be permitted to retain a military presence there for a fixed time through a lease agreement. Ze'ev Schiff, "The Golan Paradox," *Ha'aretz*, September 22, 1991, p. B2, in *FBIS-NES*, September 24, 1991, p. 20. Syria has thus far rejected such arrangements.

APPENDICES

APPENDIX I

ISRAEL: A GROWING MILITARY CHALLENGE TO SYRIA

The Israeli military is currently undergoing what its Chief of Staff, Lieutenant General Ehud Barak, calls "a revolution begotten through evolutionary means," with the development of a variety of advanced weapons, combat systems, and munitions, which could, when fielded, undermine Syria's conventional deterrent capability.[1]

Israel's doctrine for fighting the conventional land battle has traditionally emphasized prevention, preemption and offensive action. Israel's military will, when feasible, move the war quickly to enemy territory by a series of deep flanking movements through gaps in the enemy's deployments, or—if no other options exist—by breakthrough battles to create gaps in the enemy's deployments and cut off his forces, disrupt his communications, defeat him in detail, and capture territory for use as a bargaining chip in post-war negotiations.

Battlefield conditions in the Golan and Bekaa are not conducive to the implementation of Israel's traditional operational concept and pose particularly difficult challenges. Geographic constraints (particularly the narrowness of the fronts), the size and density of Syrian forces there, and the depth and complexity of the Syrian fortifications limit Israel's maneuver, precluding the fast-paced war of movement at which Israel excels, and raise the possibility that a breakthrough battle would produce unacceptably high losses.[2]

---

[1] Barak interview in *Davar*, April 21, 1988, pp. 16, 17, in *FBIS-NES*, April 22, 1988, p. 32.

[2] See the discussions concerning the "saturated battlefield" and the "crisis of maneuver," and their implications for Israeli doctrine in Brigadier General (Res.) Dov Tamari, "Thoughts on Tactics," (Hebrew), *Ma'arachot*, May-June 1980, pp. 2-5; Lieutenant Azar Gat, "On the Crisis of Maneuver," (Hebrew), *Ma'arachot*, October 1980, p. 43; Colonel S., "Who Needs a Pyrrhic Victory? The Principle of Economy of Force—The Basis for a Change in Israeli Doctrine," (Hebrew), *Ma'arachot*, February 1983, pp. 34-37.

Israel, however, is developing methods for defeating Syria's formidable ground defenses, suppressing its air defenses, and neutralizing the missile threat (all key elements of Syrian deterrence) while minimizing losses to its own forces.

While the Israeli military is likely to maintain its emphasis on preemption, it may, in response to these challenges, considerably alter the way it fights on both the operational and tactical levels, shifting emphasis from maneuver to fire during the initial phase of a war.[1]

While Israel's ground forces would initially remain in defensive dispositions, it would initiate massive air and artillery strikes against Syrian armor and troop concentrations and air defenses, in concert with airmobile operations and naval raids against vulnerable Syrian rear areas, to attrite Syrian front-line units, and compel Syria to divert second and third echelon units for rear area protection. The air force would, in addition, launch long-range preemptive strikes to destroy Syrian ballistic missiles before launch (those that escaped would be dealt with by its missile defenses), and to interdict any expeditionary forces en route to the front.[2]

After preparing the battlefield, Israeli air and ground forces would initiate the initial phase of the breakthrough battle by rapidly shifting and massing fires from stand-off range, to create gaps in Syrian deployments while minimizing direct

---

[1] Dr. Tzvi Lanir, "The Qualitative Factor in the Arab-Israeli Arms Race of the 1980s," (Hebrew), *Ma'arachot*, February 1983, pp. 26-33; Colonel S., "Who Needs a Pyrrhic Victory?," pp. 34-37; Shmuel Gordon, "Principles of Combat with Precision-Guided Munitions," (Hebrew), *Ma'arachot*, April 1987, pp. 22-26; Interview with Chief of Staff Lieutenant General Dan Shomron, *Davar*, September 11, 1988, p. 18, in *FBIS-NES*, September 12, 1988, p. 39; Major General Israel Tal, "The Offensive and the Defensive in Israel's Campaigns," *The Jerusalem Quarterly*, Summer 1989, pp. 41-47; Reuven Pedatzur, "Updating Israel's Military Doctrine," *IDF Journal*, Winter 1991, pp. 32-35.

[2] The outlines of this approach are discussed in: Benny Morris, "Changed Options," *The Jerusalem Post Magazine*, June 8, 1979, pp. 7, 8; Major General Israel Tal in R.D.M. Furlong, "Israel Lashes Out," *International Defense Review*, August 1982, p. 1006; James Doyle, "In the Shadow of War: Israeli Generals See Future Clashes Fought on Changed Battlefields," *Army Times*, August 15, 1988, pp. 27, 31.

contact with the enemy, thereby reducing friendly losses.[1]
The maneuver phase of the breakthrough battle would then be
initiated once Syrian first echelon forces had been sufficiently
attrited—at least at select breakthrough points—and second and
third echelon forces reduced by deep strike systems or diverted
to protect vulnerable rear areas. Committed Israeli forces in the
Golan or Bekaa could then breach Syrian defenses and defeat
Syrian forces in detail through traditional means of fire and
maneuver and close-in combat, with minimal losses.[2]

While the conceptual seeds of this new operational
approach date to the late 1970s, the weapons and means
required to implement this new operational approach will not
be available until the late 1990s, barring severe economic
problems.[3] As a result of these developments, Syria will find it
increasingly difficult to match Israel in the conventional
arena and it will increasingly come to rely on unconventional
weapons to maintain its deterrent capability.

---

[1] Brigadier General Oded Tira, "Artillery: Weapon of Destruction,"
(Hebrew), *Ma'arachot*, September 1983, pp. 15-17.

[2] Operation Desert Storm would appear to have validated aspects of this
approach, since it demonstrated that it is possible to destroy massive
enemy formations with stand-off firepower.

[3] Interview with Deputy Chief of Staff Major General Ehud Barak, *Davar*,
April 21, 1988, pp. 16-17, in *FBIS-NES*, April 22, 1988, p. 32.

APPENDIX II

Syrian Arms Expenditures and Imports 1971-1991
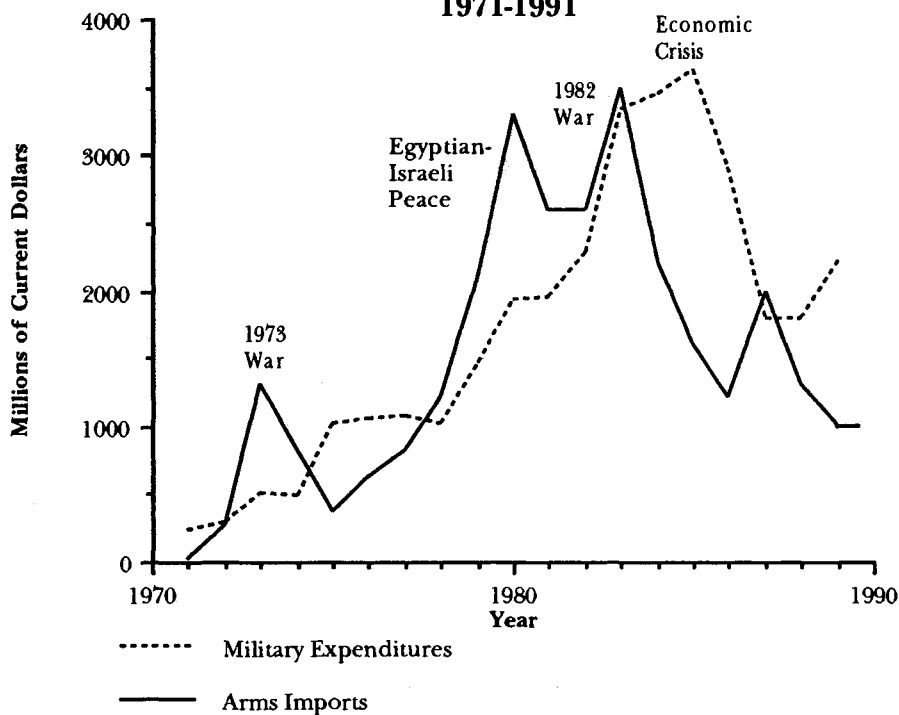
Source: Arms Control and Disarmament Agency, World Military Expenditures and Arms Transfers 1990 (Washington, D.C.: Government Printing Office, 1992), pp. 83, 125, and other sources. Internal inconsistencies in the data, such as when the value of arms imports exceeds the value of arms expenditures, may be due in part to the fact that stated value of arms imports represent $ value of imports, not actual amount paid.

APPENDIX III

SYRIAN FORCES: DEPLOYMENT PATTERNS

In peacetime Syria's army is deployed to enable it to counter both external and internal threats. Currently, most of the army is located in the Golan (five divisions), with units also located in Lebanon (two divisions and several special forces regiments), Damascus (two divisions), Homs (one division), and the coastal region (two brigades). Syria has, moreover, committed forces elsewhere in pursuit of regional objectives, during times of tension with neighboring states, or in response to domestic unrest:

- In March 1975 and June 1976 Syria deployed troops to its border with Iraq as a result of tensions related to its damming of the Euphrates River and its intervention in Lebanon.
- In March-April 1980 and again in February 1982 Syria dispatched two reinforced divisions to Aleppo and Hama to quash anti-regime violence.
- In December 1980 Syria deployed three divisions to its border with Jordan in an effort to compel it to cease its support for anti-regime elements.
- From June 1982 through June 1985 Syria deployed three divisions to Lebanon to reinforce its presence there following the Israeli invasion in June 1982.
- From February-June 1984 three key divisions and several other units faced-off in a tense standoff in Damascus following President Assad's hospitalization with a heart attack.
- From October 1990 through April 1991 Syria sent an armored division and a special forces regiment to Saudi Arabia to participate in the war against Iraq.

Despite the dramatic expansion of Syria's army since 1973, the number of divisions deployed in the Golan has not increased (see table) since newly formed units have been deployed elsewhere. The commitment of a large part of the army to the pursuit of the regime's ambitious regional policies, to fend off external threats, and to protect the regime and maintain internal security have thus been major obstacles to its efforts to develop an offensive option in the Golan.

SYRIAN DEPLOYMENTS

Year	Total Divisions	Golan	Damascus	Lebanon	Homs	Internal Security	Other
1970	5	5	+	−	+	−	−
1971	5	5	+	−	+	−	−
1972	5	5	+	−	+	−	−
1973	5	5	+	−	+	−	−
1974	5	5	+	−	+	−	−
1975	5	5	+	−	+	−	1a
1976	5	3	+	+	+	−	1
1977	5	3	+	1+	+	−	−
1978	5	3	+	1+	+	−	−
1979	6	5	1	1	+	+b	−
1980	6	4-5	1	1	+	1+	−
1981	6	4-5	1	1	+	+	−
1982	6	4-5	1	2+	+	1+	−
1983	8	3-4	1	3+	+	−	−
1984	9	3-4	1	3+	+	−	−
1985	10	4-5	2	3+	+	−	−
1986	10	5	2	2+	1	−	−
1987	10	5	2	2+	1	−	−
1988	10	5	2	2+	1	−	−
1989	10	5	2	2+	1	−	−
1990	10	4	2	2+	1	−	1+c
1991	10	4	2	2+	1	−	1+
1992	11d	5	2	2+	1	−	−

a Forces sent to border with Iraq.

b Forces sent to Aleppo, Hama, and elsewhere to quash antiregime violence.

c Forces sent to Saudi Arabia as part of Desert Storm.

d Location of newly formed armored division unknown.

APPENDIX IV

Major Soviet Systems Transferred to Syria: Dates of Initial Delivery to the Soviet Union and Transfer to Syria

Weapon	USSR	Syria
T-62	1961	1972
T-72	1971	1979
BMP-1	1967	1972
BMP-2	1980	1990
2S1	1974	1979
2S3	1973	1979
BM-21	1964	1972
AT-3	1961	1972
AT-4	1974	1979
MiG-23	1971	1974
MiG-25	1971	1979
MiG-29	1983	1987
Su-22	1971	1979
Su-24	1974	1989
Mi-8	1964	1972
Mi-25	1973	1979
SA-2	1957	1968
SA-3	1961	1972
SA-5	1963	1983
SA-6	1967	1972
SA-7	1966	1972
SA-8	1974	1982
SA-9	1974	1982
SA-10	1986	1991
SA-11	1983	1986
SA-13	1977	1982
ZSU-23-4	1966	1972
FROG-7	1965	1972
SCUD-B	1965	1974
SS-21	1976	1983
SS-C-1B Sepal	1960	1985
SS-C-3 Styx	1984	1985
Osa I	1959	1972
Romeo SSN	1958	1986

APPENDIX V

The Wages of War: Syrian and Israeli Losses in 1973 and 1982

	1973		1982[c]	
	Syria	Israel[a]	Syria	Israel
Killed	3000	772	1500	214
Wounded	10000	2453	2500	1114
Tanks	1150	250	400	140[d]
APCs	400	40	90	135
Aircraft	135	51	86	1
Helicopters	13	2-3	12	–
Sam Batteries	3	–	21	–
Economic Cost	?[b]	$7.1b	?	$1.26b

a. Israeli figures for 1973 include losses on the Golan front only.
b. Syrian financial losses in 1973 include $1.2 billion in damage from Israeli strategic bombing of economic targets.
c. Figures for the 1982 War cover period of June 8-11 only, except for economic cost, which covers the entire war.
d. Of 140 Israeli tanks destroyed or damaged during 1982 War, only 40 were destroyed beyond repair. The remainder were eventually repaired and returned to service.

APPENDIX VI

Syrian and Israeli Military Strength: 1973-1982-1992

	1973		1982		1992	
	Syria	Israel	Syria	Israel	Syria	Israel
Manpower	150,000	350,000	250,000	450,000	400,000	600,000
Divisions	5	7	6	11	11	12
Independent Brigades	5	12	4	12	4	16
Special Forces Battalions	7	+	25	+	30	+
Tanks	1,650	2,100	3,600	3,600	4,800	3,850
APCs	1,000	4,000	2,700	8,000	4,150	8,100
Artillery	1,250	800	2,300	1,000	2,700	1,400
Combat AC	280	360	450	600	530	550
SAM Batteries	34	10	80	+	250	17
Missile Patrol Boats	9	14	18	23	21	25
Submarines	–	4	–	3	3	3

APPENDIX VII

A NOTE ON SOURCES

This study relies heavily on the speeches and interviews of President Hafez al-Assad, as well as other senior officials, in an effort to portray the views of key decision makers in Syria. In addition, this paper draws on articles that appeared in a number of Syrian military publications, or elsewhere, by a number of prominent Syrian military analysts and commentators.

The Syrian armed forces publish three principal publications: *Military Thought (Al-Fikr al-'Askari)*, a bimonthly professional publication which publishes articles translated from Soviet and other foreign military journals, as well as original articles on strategy, operational art, and tactics; *The Arab Soldier (Al-Jundi al-'Arabi)*, a monthly publication with a popular orientation which emphasizes current political, military, and cultural affairs, and *The People's Army (Jaysh al-Sha'b)*, a weekly military publication with a similar popular orientation.

This study relies in particular on the works of a relatively small number of Syrian military analysts and commentators who often write for these publications, and whose works probably reflect official thinking with regard to national security and military issues. These include:

• General Mustafa Tlas: Defense Minister and a former armor officer, born in Al-Rustan, 1932. Author of scores of books and articles, has published widely on various topics, including the Arab-Israeli conflict, Israeli strategy, Arab military history, and Arabic poetry.[1]

---

[1] Tlas headed an authoritative committee which published an official account of the 1982 war, *The Israeli Invasion of Lebanon*, (Damascus: Tishrin Publishing House, 1983), which was used extensively in this study. The editorial and research committees included Major General Muhammad Sa'id Tayyan (commander of Syrian forces in Lebanon during the war), Major General 'Ali Malahafji (deputy commander of the air force during the war), and a number of civilian commentators, including al-Kaylani, al-Ayyubi, and al-'Assali.

• Brigadier General Haytham Kaylani: Soldier and diplomat, born in Hama, 1926. Served in the air force, 1948-61, retiring as Air Force Chief of Staff. Subsequently held several senior diplomatic postings, including ambassador to Algeria, Morocco, East Germany, and the UN. Specializes in Israeli strategy.

• Lieutenant Colonel Bassam Al-'Assali: Former paratroop and infantry officer, served with UN forces in the Congo, and as military attache in London. Has published numerous books on Arab military history, frequently writes for professional military publications and newspapers on Israeli strategy.

• Lieutenant Colonel Al-Haytham Al-Ayyubi: Former combat engineer and military commentator, born in Ma'rat al-Nu'man, 1932. One of the most important and prolific Arab commentators on the Arab-Israeli conflict and Arab strategy. Former director of the military branch of the Palestine Research Center in Beirut, member of the editorial board of the Arab Military Encyclopedia and *Istratijiyya*, a monthly Arab military magazine published in Lebanon.[1]

These authors also often write for non-Syrian Arab publications such as *Arab Strategic Thought (Al-Fikr al-Istratiji al-'Arabi)*, *Strategy (Istratijiyya)*, and *Palestinian Affairs (Shu'un Filastiniya)*, and works by these authors published in these sources have been cited, when appropriate.

---

[1] According to an Israeli source, Al-Ayyubi is of Palestinian origin, and not only served in the Syrian army, but also served as head of the military branch of Dr. George Habbash's Popular Front for the Liberation of Palestine (PFLP), under the nom de guerre Abu Hamam. Yehoshefat Harkabi, *Arabs and Israel: Articles on the Conflict* (Hebrew), (Jerusalem: Am Oved, 1975), p. 9.

THE WASHINGTON INSTITUTE FOR NEAR EAST POLICY