GETTING READY FOR A NUCLEAR-READY IRAN

Edited by

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The views expressed in this volume are those of the authors and do not necessarily reflect the official policy or position of the Department of the Army, the Department of Defense, or the U.S. Government. This report is cleared for public release; distribution is unlimited.

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This book has been 2 years in the making and has benefited from the financial backing of both private foundations and the U.S. Department of Defense. It would not have been possible, however, without the expertise and guidance of several individuals. The first and most important among these is Patrick Clawson who, as co-editor, was instrumental in identifying both the topics and authors of the commissioned research that makes up this volume's chapters.

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Comments pertaining to this report are invited and should be forwarded to: Director, Strategic Studies Institute, U.S. Army War College, 122 Forbes Ave, Carlisle, PA 17013-5244.

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INTRODUCTION

Little more than a year ago, the Nonproliferation Policy Education Center (NPEC) completed its initial analysis of Iran's nuclear program, *Checking Iran's Nuclear Ambitions*. Since then, Tehran's nuclear activities and public diplomacy have only affirmed what this analysis first suggested: Iran is not about to give up its effort to make nuclear fuel and, thereby, come within days of acquiring a nuclear bomb. Iran's continued pursuit of uranium enrichment and plutonium recycling puts a premium on asking what a more confident nuclear-ready Iran might confront us with and what we might do now to hedge against these threats.

These questions are the focus of this volume. The book is divided into four parts. The first presents the findings of the NPEC's working group on Iran. It reflects interviews with government officials and outside specialists and the work of some 20 regional security experts whom NPEC convened in Washington to discuss the commissioned research that is contained in this book. Some of this report's findings to keep Iran and others from overtly deploying nuclear weapons or leaving the Nuclear Nonproliferation Treaty (NPT) are beginning to gain official support. The U.S. Government, the International Atomic Energy Agency (IAEA), and an increasing number of allies now support the idea that states that violate the NPT be held accountable for their transgressions, even if they should withdraw from the treaty. There also has been increased internal governmental discussion about the need to clarify what should be permitted under the rubric of "peaceful" nuclear energy as delineated under the NPT. The remaining report recommendations, which were presented in testimony before Congress in March of 2005, remain to be acted upon. Whether they will or will not, of course, depends greatly on how public officials view the Iranian nuclear threat.

This, then, brings us to the book's second part, "Tehran's Nuclear Endeavors: What's the Worry?" Richard Russell starts off this section by detailing how Iran's neighbors are likely to hedge their own security bets as Tehran goes literally more and more nuclear and ballistic. Critical to what these nations might do is just

how nuclear-capable they are themselves. This is detailed by Wyn Bowen and Joanna Kidd in their chapter, "The Nuclear Capabilities and Ambitions of Iran's Neighbors." In it, we learn just how close Egypt, Saudi Arabia, Turkey, Syria, and Iraq are to acquiring nuclear weapons of their own. The special case of Turkey, a full-fledged North Atlantic Treaty Organization (NATO) ally, is addressed in greater detail in Ian Lesser's chapter, "Turkey, Iran and Nuclear Risks." The good news here is that if the European Union and the United States provide proper support on both security and economic fronts, Turkey is unlikely to go its own way. The bigger picture of what might transpire after Iran overtly goes nuclear, though, is sure to be grim. Kenneth Timmerman spells out the increased prospects for war and much more violent terrorism in his chapter, "The Day After Iran Gets the Bomb."

What can be done? The two popular policy options—military strikes against Iran's known nuclear facilities and imposing economic sanctions against Tehran—are analyzed in the book's third part, "Is There A Simple Military or Sanctions Fix?" Shlomo Brom, a retired Israeli general, explains why, although it would be extremely popular in Israel to attempt another Osiraq-like raid against Iran's known facilities, the operational prospects for success are not very high. What of having the United States assume this mission? Thomas Donnelly, a staunch supporter of the invasion of Iraq, explains how launching a limited raid against Iran's nuclear facilities could jeopardize the larger American campaign to liberalize and moderate the Middle East. Imposing economic sanctions against Iran is a possible alternative, but how realistic or effective would these likely be? These questions are addressed in the analysis by George Perkovich and Silvia Manzanero, "Iran Gets the Bomb—Then What?" Their conclusion is that it will be difficult to secure the support necessary to make sanctions against Iran work.

This, then, brings us to the book's final part, "Further Courses of Action." In it, two traditional and two unorthodox policy options are examined. The first of these, which is to reduce the potential vulnerability of Persian Gulf energy shipments to Iranian interference, is examined by Dagobert Brito and Amy Myers Jaffe in their chapter, "Reducing Vulnerability of the Strait of Hormuz." By refurbishing existing pipe lines and building others, the need to send

oil and gas through the strait could be dramatically reduced at a relatively affordable level of spending. This, of course, would require the cooperation and support of the major oil producers in the region. Their help also would be needed to fortify existing levels of defense cooperation with the United States, without which the prospects of deterring and containing a nuclear-ready Iran would surely be low. What exactly can be done in cooperation with the Persian Gulf states is detailed by Michael Eisenstadt in his chapter, "Deter and Contain: Dealing with a Nuclear Iran." What role might diplomacy play in keeping Iran from exploiting its ability to disrupt energy exports from the region? Douglas Streusand examines this question in his analysis, "Managing the Iranian Threat to Sea Commerce Diplomatically." Using the sea control agreements reached with Turkey and the Soviet Union as models, Streusand suggests several negotiating and public diplomacy initiatives that would keep Iran from using its military capabilities to interfere with continued free passage of goods in and out of the Persian Gulf. The success of this effort, as with so many others, of course, would depend on the solidarity of the United States and its key allies, not only in but outside of the Gulf region. How likely such support may be is the focus of the concluding chapter by Thérèse Delpech entitled "What Transatlantic Strategy on Iran?"

CHAPTER 1

GETTING READY FOR A NUCLEAR-READY IRAN: REPORT OF THE NPEC WORKING GROUP

Henry Sokolski

OVERVIEW

When it comes to Iran's nuclear program, most U.S. and allied officials are in one or another state of denial. All insist it is critical to prevent Tehran from acquiring nuclear weapons. Yet, few understand just how late it is to attempt this. Iran is now no more than 12 to 48 months from acquiring a nuclear bomb, lacks for nothing technologically or materially to produce it, and seems dead set on securing an option to do so. As for the most popular policy options—to bomb or bribe Iran—too few analysts and officials are willing to admit publicly how self-defeating these courses of action might be.

This report, based on commissioned research and 2 years' worth of meetings with the nation's leading experts on Iran, the Middle East, and nuclear proliferation, is intended to highlight sounder policy options. It makes seven recommendations designed to reduce the potential harm Iran might otherwise do or encourage, once it gained nuclear weapons or the ability to have them in a matter of days. The report reflects analysis done at a series of competitive strategies workshops that focused on the next 2 decades of likely competition between America and Iran and what comparative strengths the United States and its allies might use to leverage Iranian behavior[1].

These workshops identified three threats that are likely to increase following Iran's acquisition of a nuclear weapons option.

1. Even More Nuclear Proliferation. Iran's continued insistence that it acquired its nuclear capabilities legally under the Nuclear Nonproliferation Treaty (NPT) would, if unchallenged, encourage its neighbors (including Iraq, Saudi Arabia, Egypt, Syria, Turkey, and Algeria) to develop nuclear options of their own by emulating Iran's example, by overtly declaring possession (in Israel's case)

or by importing nuclear weapons (in Saudi Arabia's case). Such announcements and efforts, in turn, would likely undermine nuclear nonproliferation restraints internationally and strain American relations with most of its key friends in the Middle East.

2. Dramatically Higher Oil Prices. A nuclear-ready Iran could be emboldened to manipulate oil prices upward. It might attempt this either by threatening the freedom of the seas (by mining oil transit points as it did in the l980s, or by threatening to close the Straits of Hormuz), or by using terrorist proxies to threaten the destruction of Saudi and other Gulf state oil facilities and pipelines.

3. Increased Terrorism Designed to Diminish U.S. Influence. With a nuclear weapons option acting as a deterrent to the United States and allied action against it, Iran would likely lend greater support to terrorists operating against Israel, Iraq, Libya, Saudi Arabia, Europe, and the United States. The aim of such support would be to reduce American support for U.S. involvement in the Middle East, for Israel, and for actions against Iran generally, and to elevate Iran as an equal to the United States and its allies on all matters relating to the Persian Gulf and related regions. An additional aim of the terrorism that Iran would support would be to keep other nations from supporting U.S. policies and the continued U.S. military presence in the Middle East.

All of these threats are serious. If realized, they would undermine U.S. and allied efforts to foster moderate rule in much of the Middle East and set into play a series of international competitions that could ultimately result in major wars. Most U.S. and allied policymakers understand this and are now preoccupied with trying to prevent Iran from ever acquiring a nuclear weapons option. As Iran gets closer to securing this option, though, two questionable courses of action—bombing or bribing Iran—have become increasingly popular. Neither, however, is likely to succeed and could easily make matters worse.

Certainly, targeting Iran's nuclear facilities risks leaving other covert facilities and Iran's nuclear cadre of technicians untouched. More important, any overt military attack would give Tehran a *casus belli* either to withdraw from the NPT, or to rally Islamic Jihadists

to wage war against the United States and its allies more directly. Whatever might be gained in technically delaying Iran's completion of having a bomb option would have to be weighed against what might be lost in Washington's long-term efforts to encourage more moderate Islamic rule in Iran and the Middle East; to synchronize allied policies against nuclear proliferation; and to deflate Iran's rhetorical demonstrations against U.S. and allied hostility. Meanwhile, merely bluffing an attack against Iran—sometimes urged as a way around these difficulties—would only aggravate matters: The bluff would eventually be exposed, and so only embolden Iran and weaken U.S. and allied credibility further.

As for negotiating directly with Tehran to limit its declared nuclear program—an approach preferred by most of America's European allies—this, too, seems self-defeating. First, any deal the Iranian regime would agree to would only validate that the NPT legally allows its members to acquire all the capabilities Iran mastered. Second, it would foster the view internationally that the only risk in violating required NPT inspections would be to be caught and then bribed to limit only those activities the inspectors managed to discover.

Considering these shortcomings, the working group decided that, rather than trying merely to eliminate Iran's ability to develop a nuclear option (something that may no longer be possible), it also would be useful to devise ways to curb the harmful things Iran might do or encourage, once it secured such an option. This approach produced seven recommendations that the workshop participants believed were not receiving sufficient attention currently. These steps, they argued, would increase the credibility of current efforts to prevent Iran from going nuclear and needed to be pursued, in any case, if prevention failed. These recommendations were:

1. Discrediting the legitimacy of Iran's nuclear program as a model for other proliferators through a series of follow-on meetings to the 2005 NPT Review Conference to clarify what activities qualify as being "peaceful" under the NPT.

2. Increasing the costs for Iran and its neighbors to leave or infringe the NPT by establishing country-neutral rules against violators withdrawing from the treaty and against NPT violators more generally.

3. Securing Russian cooperation in these efforts by offering Moscow a lucrative U.S. nuclear cooperation agreement.

4. Reducing Persian Gulf oil and gas production and distribution system vulnerabilities to possible terrorist disruptions by building additional back-up capabilities in Saudi Arabia.

5. Limiting Iran's freedom to threaten oil and gas shipping by proposing a Montreux-like convention to demilitarize the Straits of Hormuz and an agreement to limit possible incidents at sea.

6. Isolating Iran as a regional producer of fissile materials by encouraging Israel to take the first steps to freeze and dismantle such capabilities.

7. Backing these diplomatic-economic initiatives with increased U.S.-allied anti-terrorist, defense, naval border security, and nuclear nonproliferation cooperation.

Would taking these steps eliminate the Iranian nuclear threat? No. Given Iran's extensive nuclear know-how and capabilities, it is unlikely that the United States or its allies can deny Iran the technical ability to covertly make nuclear weapons. Yet, assuming adoption of the steps described, it would be far riskier diplomatically, economically, and militarily for Iran to acquire nuclear weapons than is currently the case. More important, taking these steps would leverage the comparative strengths of the United States and its friends in a manner that would undermine Iran's efforts to divide the United States from its allies and to deter them from acting against Iranian misbehavior. It would not only discourage Iran's neighbors from following Iran's nuclear example, but force a needed reconsideration of what nuclear activities ought to be protected under the NPT (including those Iran has used to justify completing its own nuclear breakout capabilities). Finally, it would map a non-nuclear future for the Middle East that might be eventually realized (assuming a change of heart by Iran and others) through verifiable deeds rather than dependent on precise intelligence (which is all too elusive).

BACKGROUND

When U.S. and allied officials speak of Iran's nuclear weapons program, imperatives are used freely: Iran, we are told, *must* not

be allowed to acquire nuclear weapons; the United States and its allies *cannot tolerate* Iran going nuclear; a nuclear-armed Tehran is *unthinkable*.

Yet, the truth is that Iran soon can and will get a bomb option. All Iranian engineers need is a bit more time—1 to 4 years at most. No other major gaps remain: Iran has the requisite equipment to make the weapons fuel, the know-how to assemble the bombs, and the missile and naval systems necessary to deliver them beyond its borders. As noted in the working group's earlier report (*Checking Iran's Nuclear Ambitions*), no scheme, including "just in time" delivery of fresh fuel and removal of spent fuel from Bushier, will provide much protection against Iran diverting its peaceful nuclear program to compliment its covert efforts to make bombs.[2]

As for eliminating Iran's nuclear capabilities militarily, the United States and Israel lack sufficient targeting intelligence to do this. In fact, Iran long has had considerable success in concealing its nuclear activities from U.S. intelligence analysts and International Atomic Energy Agency (IAEA) inspectors. (The latter recently warned against assuming the IAEA could find all of Iran's illicit uranium enrichment activities). As it is, Iran already could have hidden all it needs to reconstitute a bomb program, assuming its known declared nuclear plants were hit.

Compounding these difficulties is what Iran might do in response to such an attack. After being struck, Tehran could declare that it must acquire nuclear weapons as a matter of self-defense, withdraw from the NPT, and accelerate its nuclear endeavors. This would increase pressure on Israel (which has long insisted that it will not be "second" in possessing nuclear arms in the Middle East) to confirm its possession of nuclear weapons publicly, and thus set off a chain of possible nuclear policy reactions in Cairo, Damascus, Riyadh, Algiers, and Ankara.

On the other hand, Iran could continue to pretend to comply with the NPT, which could produce equally disastrous results. After being attacked, Iran might appeal to the IAEA, the Arab League, the Non-Aligned Movement, the European Union (EU), and the United Nations (UN) to make Iran's nuclear program whole again, and once again, use this "peaceful" program to energize and serve as a cover for its covert nuclear weapons activities. This would again

put the entire neighborhood on edge, debase the NPT, and set a clear example for all of Iran's neighbors to follow on how to get a weapons option. In addition, as more of Iran's neighbors secured their own nuclear options, Washington's influence over its friends in the region (e.g., Egypt and Saudi Arabia) would likely decline, as well as Washington's ability to protect North Atlantic Treaty Organization (NATO) allies (e.g. Turkey) and non-NATO allies (e.g., Israel) in the region.

In addition, Iran might respond to an overt military attack by striking back covertly against the United States, Saudi Arabia, Iraq, or Israel through the support of non-Iranian terrorist organizations.

The ramifications of any of these responses are difficult to minimize. Finally, Iran could take any and all of these actions *without* actually ever testing, sharing, or deploying, nuclear weapons. Certainly, as long as most nations buy Tehran's argument that the NPT's guarantee to "peaceful" nuclear energy gives it and all other members the right to develop everything needed to come within a screwdriver's turn of a nuclear arsenal, Iran will be best served by getting to this point and going no further. Indeed, by showing such restraint, Iran's mullahs could avoid domestic and international controversies that might otherwise undermine their political standing, along with possible additional economic sanctions, and the added costs of fielding a survivable nuclear force. Meanwhile, as long as Iran could acquire nuclear weapons quickly, Tehran could intimidate others as effectively as if it already had such systems deployed.

None of this, of course, argues for reducing pressures on Iran to curb its nuclear activities. The United States and its allies should continue to do all they can to head Iran off, including efforts to throttle Iran's "civilian" program. Indeed, if all Washington and its allies do is pressure Iran not to acquire nuclear arms openly, without pressuring Iran to give up its "civilian" nuclear efforts, Iran will best them easily by using these civilian facilities to develop a quick nuclear breakout capability, claiming its entire nuclear program is legal under the NPT, and wielding it diplomatically much as it would if it actually had nuclear weapons.

What should we expect when, in the next 12 to 48 months, Iran secures such a breakout option? If the United States and its

allies do no more than they have already done, two things. First, many of Iran's neighbors will do their best to follow its "peaceful" example. Egypt, Algeria, Syria, and Saudi Arabia will all claim that they too need to pursue nuclear research and development to the point of having nuclear weapons options and, as a further slap in Washington's face (and Tel Aviv's), will point to Iran's "peaceful" nuclear program and Israel's undeclared nuclear weapons arsenal to help justify their own "civil" nuclear activities. Second, an ever more nuclear-ready Iran will try to lead the revolutionary Islamic vanguard throughout the Islamic world by becoming the main support for terrorist organizations aimed against Washington's key regional ally, Israel; America's key energy source, Saudi Arabia; and Washington's prospective democratic ally, Iraq.

Early in 2004, senior Saudi officials announced they were studying the possibility of acquiring or "leasing" nuclear weapons from China or Pakistan (this would be legal under the NPT so long as the weapons were kept under Chinese or Pakistani "control"). Egypt earlier announced its plans to develop a large nuclear desalinization plant and is reported recently to have received sensitive nuclear technology from Libya. Syria, meanwhile, is now interested in uranium enrichment. Some intelligence sources believe Damascus already may be experimenting with centrifuges. And Algeria is in the midst of upgrading its second large research reactor facility, which is still ringed with air defense units.

If these states continue to pursue their nuclear dreams (spurred on by Iran's example), could Iraq, which still has a considerable number of nuclear scientists and engineers, be expected to stand idly by? And what of Turkey, whose private sector was recently revealed to have been part of the A. Q. Khan network? Will nuclear agitation to its south and its repeated rejection from the EU cause Turkey to reconsider its non-nuclear status? Most of these nations are now friends of the United States. Efforts on their part to acquire a bomb under the guise of developing "peaceful" nuclear energy (with Latin American, Asian, European, Russian, or Chinese help), will only serve to strain their relations with Washington.

With such regional nuclear enthusiasms will come increased diplomatic pressure on Israel, an undeclared nuclear weapons state and America's closest Middle East ally. In July 2004, the IAEA's

Director General and the major states within the Middle East urged Israel to give up its nuclear arms in proposed regional arms control negotiations. Israel's understandable reluctance to be dragged into such talks or to admit to having nuclear arms now will not end these pressures. If Israel has a secret nuclear arsenal, Arabs argue, why not balance it with Iranian, Saudi, Egyptian, or other covert nuclear weapons programs? How fair is it for the United States and Europe to demand that Middle Eastern Muslim states restrain their own "peaceful" nuclear ambitions if Israel itself already has the bomb and is publicly arguing that it will not be "second" to introduce nuclear weapons into the region? Wouldn't it make more sense to force Israel to admit it has nuclear weapons and then to demand that it give them up in a regional arms control negotiations effort (even though once Israel admits it has weapons, many of its Muslim neighbors, who still do not recognize Israel, are likely to then use Israel's admission to justify getting nuclear weapons themselves)?

This then brings us to the second likely result of Iran becoming ever more nuclear-ready: A more confident Iran more willing to sponsor terrorist organizations, especially those opposed to Israel and the current government in Iraq. With Hamas in decline, Iran already has been seen to be increasing its support to groups like Hezbollah in Iraq, Israel, and Lebanon, groups which want to liberate their lands from American and Israeli "occupation." Increasing its aid to these groups certainly would help Iran take the lead in the Islamic crusade to rid the region of Zionist—American forces and thereby become worthy of tribute and consideration by other Islamic states. Also, bolstering such terrorist activity would help Tehran deter Israel and the United States from striking it militarily.

Beyond this, Iran is likely to increase its assistance to groups willing to risk striking the United States. News reports in August 2004 claimed that Iranian diplomats assigned to UN headquarters in New York were to survey 29 American targets to help terrorist organizations interested in hitting the United States. The aim here appears to be, again, to deter the United States from hitting Iran and to divide U.S. opinion about the merits of backing Israel, or supporting any other anti-Iranian measure or group.

A nuclear-ready Iran is also likely step up its terrorist activities against Iraq, Libya, and Saudi Arabia. Iran already is reported to

have several thousand intelligence agents operating in Shia regions of Iraq and is actively contributing to community associations there. Meanwhile, there are nearly a dozen terrorist organizations operating within Iraq now employing Hezbollah in their groups' names. As in the case of earlier Iranian penetration of Lebanon, these efforts will enable Iran to scout, recruit, and control terrorist operatives. The aim here will be to pressure the United States and its allies to remove their military forces from Iraq, and thereby allow a government more sympathetic to Iran to emerge.

As for Libya, Iran's Mullahs are concerned about how much Qaddafi might tell the United States and the IAEA about what illicit nuclear technology Iran might have gained from Libya, Pakistan, and others. Recent unconfirmed reports indicate Iran has been arming the Libyan Combat Islamic Group at camps in southern Iran; this is an organization Qaddafi expelled from Libya in the late 1990s and the United States expelled from Afghanistan in 2001. If true, these reports suggest how Iran might try to leverage Qaddafi's behavior.

Iran also has a history of supporting terrorist activity in Saudi Arabia. Although only roughly 10 percent of Saudi Arabia's population is Shia, this sect constitutes an overwhelming majority of the population living in Saudi Arabia's key northern oil-producing region. Any terrorist action anywhere in Saudi Arabia, though, tends to raise questions about the general viability of the Saudi regime and the security of the world's largest oil reserves. Historically, after a major terrorist attack in Saudi Arabia, markets worry, the price of oil increases, and Iran's own oil revenues, in turn, surge upward. The reason is simple: Saudi Arabia has the world's largest reserve oil production capacity (roughly 7 million barrels a day). Damage Saudi Arabia's ability to ramp up production or to export what it can produce (or merely raise doubts about the current Saudi government's continued ability to protect these capabilities), and you effectively cripple the world's capacity to meet increased demand for oil internationally. Terrorism in Saudi Arabia, in short, provides Iran with a quick, effective way to manipulate international oil prices. This cannot help but garner Iran greater leverage in getting the Organization of Petroleum Exporting Countries (OPEC) to support its long-ignored calls to increase oil prices. It also will help Iran garner

increased European and Asian regard for its calls for more financial support, investment, and advanced technology. Iranian progress on these fronts is likely to be fortified by Tehran's offers of oil rights to European states, Russia, and China. This, in turn, will help keep the current regime in power longer, will further reduce U.S. influence in the region, and will make action in the UN Security Council (UNSC) against Tehran far less likely.[3]

Yet, another way Iran could drive up oil prices is by threatening free passage of oil through the Straits of Hormuz or by engaging in naval mining in the Gulf and other key locations, using its surface fleet of fast boats or its smaller submarines as it did in the late l980s. Iran already has deployed anti-shipping missiles at Qeshm, Abu Musa Island, and on Sirri Island, all of which are in range of shipping through the Strait. It has also occupied and fortified three islands inside the shipping lanes of the Strait of Hormuz—Abu Musa, The Greater Tunbs and the Lesser Tunbs. Given that one-fifth of the world's entire oil demand flows through the Straits (as well as roughly a quarter of America's supply of oil) and no other nation has fortified its shores near Hormuz, an Iranian threat to disrupt commerce there would have to be taken seriously by commercial concerns (e.g., insurers and commodity markets) and other nations.

RECOMMENDATIONS

What are the chances of Iran credibly making these threats? If the United States and its friends do little more than they already have, the odds are high enough to be worrisome.

What more should the United States and its friends do? Ultimately, nothing less than creating moderate self-government in Iraq, Iran, and other states in the region will bring lasting peace and nonproliferation. This, however, will take time. Meanwhile, the United States and its friends must do much more than they are currently to frustrate Iran's efforts to divide the United States, Israel, and Europe from one another and from other friends in the Middle East and Asia; and to defeat Tehran's efforts to use its nuclear capabilities to deter others from taking firm action against Iranian misbehavior.

This is a tall order, one that will require new efforts to:

- Significantly increase the diplomatic costs of Iran ever deploying nuclear weapons or of any of its neighbors following Iran's model of "peaceful" nuclear activity by getting the international community to insist on a tougher view of the NPT.
- Make Russia, Iran's key nuclear partner, a willing backer of U.S. and European efforts to restrain Iran's nuclear ambitions, and a backer of nuclear restraint in the Middle East more generally.
- Reduce the vulnerability of Middle Eastern oil and gas production and distribution systems to Iranian-backed terrorist attacks that could significantly increase energy prices.
- Force Iran into choosing between backing free passage of energy commerce in and out of the Gulf or becoming an outlaw in the eyes not just of the United States, but of Europe and Asia.
- Strengthen U.S. and allied support of Israel by cooperating on a positive Middle Eastern nuclear restraint agenda that Tel Aviv could pace by deeds (rather than negotiation) and highlight the problem of large nuclear facilities located in Iran and the Middle East more generally.

How might these goals be achieved? First, by exploiting or leveraging:

- The desire of all nations to produce some result from the upcoming NPT Review Conference in May 2005 to strengthen the NPT and increase its influence.
- French proposals to the EU and the NPT Review Preparatory Committee to make withdrawal from the NPT difficult and EU sanctions likely for any nation that the IAEA cannot find to be in full compliance with the NPT.
- Russia's long-standing interest in securing a nuclear cooperative agreement with the United States to secure Russia's backing to strengthen nuclear restraints internationally.

- Oil producers' anxieties to increase the security of Saudi oil production and distribution systems from possible terrorist attacks.
- Tehran's desire to secure multinational guarantees to enhance Iran's security and increase its access to critical European high technology imports.
- Israel's clear regional lead in advanced nuclear capabilities.
- Europe's desire to play an active role in promoting nuclear nonproliferation in the Middle East.

Specifically, these levers could be pulled by taking the following steps:

1. Clarify what is peaceful under the NPT. The United States and other like-minded nations should use the occasion of the NPT review conference in May 2005 to convene a series of follow-on meetings dedicated to reevaluating under what circumstances specified forms of nuclear power should be considered to be "peaceful" and thus protected by the NPT. These meetings should take into account the latest information regarding the spread of covert centrifuge and reprocessing technology, bomb design, and the availability of separated plutonium and highly enriched uranium. In addition, they should raise the questions of what nuclear materials and activities can be safeguarded in a manner that will detect potential violations early enough to achieve the IAEA's and the NPT's goal of "preventing diversion of nuclear energy from peaceful uses to nuclear weapons or other nuclear explosive devices." This set of international gatherings, which should meet periodically in anticipation of the next NPT review conference in 2010, should also evaluate how increased use of free market competitions and private financing could help identify uneconomic, suspect nuclear activities. These meetings could be held under IAEA or UNSC auspices. If this proves to be impractical, though, the United States and other like-minded nations should proceed on their own (much as the Proliferation Security Initiative was promoted) to hold these meetings with as many like-minded nuclear power and large nuclear research reactor-capable nations as possible.

2. Establish country-neutral rules for NPT violators. The United States and its allies should build on France's recent proposals that the UNSC adopt a set of a country-neutral rules for dealing with NPT violators, such as Iran and North Korea, which would stipulate that:

a. countries that reject inspections and withdraw from the NPT without first addressing their previous violations must surrender and dismantle their large nuclear capabilities (i.e., large research and power reactors and bulk handling facilities) to come back into compliance. Until the UNSC unanimously agrees to drop this ban, violators would lose the right to acquire nuclear technology under the NPT (a ban against exporting such help to these nations would be imposed), and international financial institutional support for major projects within their borders would be suspended.

b. countries that violate their safeguards obligations under the NPT and that the IAEA cannot find to be in full compliance should no longer receive nuclear assistance or exports from any other country until the IAEA Board of Governors is able to unanimously give them a clean bill of health.

c. countries that build new, large nuclear fuel-related facilities that cannot be justified economically and monitored in a manner that can assure timely warning of diversion of enough nuclear material to make a bomb, should not receive nuclear assistance or exports from another country until the IAEA Board of Governors is able to unanimously agree that the project in question is economically imperative or capable of being safeguarded to provide timely warning of potential diversions.

The idea in passing these resolutions would be to make it clear to both Iran and its neighbors that violating the NPT as Iran or North Korea have done will have consequences for their nuclear programs and for continued international financial institution support. Diplomatically, this will help the United States and its allies identify and treat Iran and North Korea in a country-neutral manner, not as an equal in negotiations, but as legally branded violators of the NPT.

In addition, the United States should encourage the EU, and short of this, the governments of Italy, Germany, and France, to threaten to sanction Iran's nuclear misbehavior by holding up their exports of machinery and materials to Iran, which make up a vast majority of all the imports Iran takes in. The continued flow of these exports is critical to the maintenance of Iran's economy.

3. Offer Russia a U.S. nuclear cooperative agreement. To help secure the support for these resolutions from Russia, the United States should offer Moscow a nuclear cooperative deal that Moscow has long sought. This deal would allow Russia to store U.S. origin spent fuel from Asia and Europe and pocket 10 to 20 billion dollars in revenues from this business. For nearly a decade, U.S. progress on this deal has been stymied in the United States because of Russian unwillingness to drop its nuclear cooperation with Iran. Russia, meanwhile, insists that its cooperation with Iran is peaceful. Moscow has made it clear, however, that it would suspend its nuclear cooperation with Tehran if asked to do so by a resolution of the IAEA or the UNSC. If the country-neutral rules described above were passed, Russia would not have to announce that it was permanently dropping nuclear cooperation on Bushier, only that it was temporarily suspending nuclear cooperation with Iran as required by the resolution. Any resumption of Russian-Iranian nuclear cooperation that violated the resolution, however, would jeopardize continued U.S. consent to send additional U.S. origin spent fuel, which should continue to require case-by-case approval by Washington (as is normally the case) under any nuclear cooperative agreement the United States strikes with Russia.

4. Reduce the vulnerability of the Saudi oil production and distribution system by building additional capacity. In a study conducted for NPEC by energy researchers at Rice University, two key vulnerabilities in the Gulf oil production and distribution system in Saudi Arabia were identified. The first is an Iranian threat to close the Straits. Such a threat, Rice analysts argue, could be significantly reduced by upgrading and complimenting the trans-Saudi Arabian Petroline, which would allow 11 million barrels a day to be shipped to ports on the Red Sea. This could be done with technical upgrades to the trans-Saudi Arabian line and by bringing the Iraqi-Saudi

pipeline (Ipsa-2) back on line. To do the later would require an agreement with Baghdad. The cost of the entire project is estimated to be $600 million. Assuming the worst—a complete closure of the Straits of Hormuz—this bypass system is estimated to be capable of reducing the economic impact to the United States to a loss of only 1 percent of gross domestic product. This figure could be reduced even further if additional pipelines were built from Abu Dhabi to ports in Oman. There are a number of ways in which these projects could be financed. Given the high price of oil and the large revenue streams high prices are now generating, the best time to finance such construction is now.

The second vulnerability Rice researchers identified is the major oil processing facilities located at Abqaiq. If terrorists were to attack these facilities, the loss could be as high as several million barrels a day of production. Work needs to be done to detail how best to reduce this vulnerability but, again, the time to address these concerns (and finance their fixes) is now when oil prices are high. In the longer run, of course, the steady rise in energy prices is likely to produce both increased conservation and new alternative sources of energy that will reduce U.S. and allied reliance on Gulf oil and gas.

5. Call on Iran to agree to a Montreux Convention to demilitarize the Straits of Hormuz and an agreement to limit possible incidents at sea. One of the constant complaints of Iranian diplomats is that the United States and other major powers are unwilling to negotiate directly with Iran to guarantee its security. Certainly, the United States is loath to negotiate directly with Iran's representatives for fear that this would give its current revolutionary government greater support than it otherwise would have. More importantly, after having been disappointed so many times, Washington officials are rightly skeptical that Tehran is serious about reaching substantive agreements. The Council on Foreign Relations recently highlighted this problem in a report on Iran, which eschewed attempting any grand bargaining with Tehran. Several of America's key European allies and other influential interest groups, however, are inclined to negotiate, if at all possible, incrementally. This suggests that the pressure for talks will persist and that, in some fashion, they will continue. Where should such negotiatons be focused? One sensible area, which unlike nuclear and human rights matters (where it is

in Iran's interest to hide its hand or lie and where negotiating with Iran would only lend greater legitimacy to the current regime's bad policies), is demilitarizing and guaranteeing free passage through the Straits of Hormuz and agreeing to naval standards of behavior in and around the Gulf. Securing a Montreux-like agreement for the Straits of the sort in place for the Dardanelles and an incidents at sea agreement like that the United States secured with the Soviets during the Cold War would be in Iran's interest. An agreement regarding Hormuz could assure multipower guarantees to prevent any foreign nation from closing the straits (through which nearly all of Iran's own oil exports flow). It would require submarines—including U.S., Israeli, French, and British special forces vessels—to surface before entering or exiting the Straits. It ultimately (after initial sounding talks with key European nations) would entail negotiations with the United States.

On the other hand, such an agreement would also be in the interest of the United States and its allies. It would require Iran to demilitarize all of the islands and coast it has fortified with artillery and antishipping missiles near or adjacent to the Straits. It would give additional international legal grounds for military action against Iran if it should threaten to close the Straits (by moving Iranian military systems beyond an agreed demilitarized zone, the agreement would help give timely warning of Iranian efforts to cheat and allow superior allied air and reconnaissance capabilities a clear shot at identifiable ground or sea movements). Finally, it would serve as a confined, limited set of talks, the progress of which could be used as a barometer of Iranian seriousness in negotiations generally. Similar benefits could be secured with an incidents at sea like agreement with Iran that might include provisions to restrict any nation's ability to covertly mine key waterways in or near the Gulf.

6. Encourage Israel to initiate a Middle East nuclear restraint effort that would help isolate Iran as a regional producer of fissile materials. Israel should announce that it will unilaterally mothball (but not yet dismantle) Dimona, and place the reactor's mothballing under IAEA monitoring. At the same time, Israel should announce that it is prepared to dismantle Dimona and place the special nuclear

material it has produced in "escrow" in Israel with a third trusted declared nuclear state, e.g., the United States. It should make clear, however, that Israel will only take this additional step when at least two of three Middle Eastern nations (i.e., Algeria, Egypt, or Iran) follow Israel's lead by mothballing their own declared nuclear facilities that are capable of producing at least one bomb's worth of plutonium or highly enriched uranium in 1 to 3 years. Israel should further announce that it will take the additional step of handing over control of its weapons usable fissile material to the IAEA when:

a. All states in the Middle East (i.e., the three mentioned above) dismantle their fissile producing facilities (large research and power reactors, hexafluoride, enrichment plants, and all reprocessing capabilities).

b. All nuclear weapons states (including Pakistan) formally agree not to redeploy nuclear weapons onto any Middle Eastern nation's soil in time of peace.

Such arms restraint by deed rather than negotiation should avoid the awkwardness of current Middle Eastern arms control proposals that would have Israel enter into nuclear arms talks with states that do not recognize it and have it admit that it has nuclear weapons—a declaration that would force Israel's neighbors immediately to justify some security reaction including getting bombs of their own.

7. **Back these diplomatic-economic initiatives with increased U.S.-allied anti-terrorist, defense, naval, and nuclear non-proliferation cooperation.** A key derivative benefit of pursuing the proposals described above is their potential to frustrate Iran's efforts to divide the United States from its friends and to deter them from acting against the worst of what Iran might do. Specifically, it would be useful to:

- *Have the United States canvass the EU, international financial institutions, and other nations about their willingness to back an Israeli nuclear restraint initiative of the sort described above.* Clearly, it will make little sense for Israel to launch a nuclear restraint initiative if other key nations merely dismiss it. To help determine its prospects for success, the United States ought to talk with its key allies in Europe and elsewhere to guage their willingness to back the proposal described. Would

the United Kingdom, France, Germany, and other EU nations see the proposal as a positive step that other Middle Eastern nations should be encouraged to follow? Would they be willing to announce that they would be prepared to provide any Middle Eastern nation that matched Israel's actions help in funding non-nuclear energy systems and smaller research reactors (that cannot make a critical weapon's worth of material in anything less than a decade)? Construction of these facilities might begin once dismantlement commenced. Would international financial institutions, meanwhile, be willing to announce that they would put on hold further loans to states that subsidize or invest in uneconomical large research, desalination, or power reactors and other nuclear bulk handling facilities in the Middle East? If so, Washington should consult with Israel and, assuming Israel's willingness to proceed, announce that America will use existing U.S. cooperative threat reduction efforts to commence securing escrowed Israeli nuclear material and converting this material into appropriate storable form on a schedule that Israel will set.

- *Increase the level and tempo of allied naval exercises in an around the Persian Gulf.* These exercises should emphasize mine-clearing, protection of commercial shipping, nuclear export and import interdictions, and reopening the Straits under a variety of "seizure" scenarios. The exercises should be conducted with as many other interested Gulf and non-Gulf nations as possible.
- *Increase international cooperation to help Iran's neighbors secure their borders against illicit commerce and illegal immigration.* One of the key problems facing Iran's neighbors (especially Iraq and Turkey) is the threat of terrorists and illicit nuclear imports and exports transiting into and out of their territories. Cooperative efforts to secure these borders could be made a part of a larger international effort to help European and other states protect their borders and shores as well against illicit strategic weapons-related imports or leakage. This effort should be made an integral part of President Bush's Proliferation Security Initiative.

- *Consider ways to share the benefits of turn-key missile defense and reconnaissance systems in the Middle East in a manner that would avoid compromising these systems.* The utility of missile defense and reconnaissance cooperation with friendly nations is clear enough. The dangers of sharing more than one are less obvious but no less real.[4]

As noted in the overview, none of these proposals can guarantee Iran will not go nuclear. Assuming the United States continues to stick by its key friends in the Middle East, though, these measures will give Iran and its neighbors much greater cause to pause in further violating the NPT. More importantly, they will go a long way toward frustrating Iran's efforts to divide and deter the United States and its major allies from taking firm actions against the misdeeds Iran would otherwise be tempted to do once it becomes nuclear ready. Finally, and most important, these proposals, if implemented, are much more likely in the near-term to restrain Iran's nuclear enthusiasm and that of its neighbors than any effort to bargain over Tehran's nuclear capabilities, or to try to bomb them. In the end, however, only Iran's eventual transition to more moderate self-rule will afford much chance for lasting, effective nonproliferation. Until then, the suggestions noted above are our best course.

ENDNOTES - CHAPTER 1

1. For background, see *Checking Iran's Nuclear Ambitions*, Carlisle, PA: U.S. Army War College, 2004, at *http://www.npec-web.org/pages/checkiran.htm*.

2. For a discussion of how best to reduce the risks associated with power reactors see NPEC's detailed technical analysis, Victor Gilinsky, *et al*., *A Fresh Examination of the Proliferation Dangers of Light Water Reactors,* at *http://www.npec-web.org/projects/NPECLWRREPORTFINALII10-22-2004.pdf*.

3. The current Iranian regime thrives on corruption and central planning, both of which require ever larger amounts of cash.

4. For a detailed discussion of these issues and how best to manage them, see NPEC's commissioned research, "Missile Nonproliferation and Missile Defense" and "Controlling Unmanned Air Vehicles: New Challenges," at *http://www.npec-web.org/published/hl_761.pdf* and *http://www.npec-web.org/projects/uavs.pdf*, respectively.

PART II

TEHRAN'S NUCLEAR ENDEAVORS: WHAT'S THE WORRY?

CHAPTER 2

ARAB SECURITY RESPONSES TO A NUCLEAR-READY IRAN

Richard L. Russell

The current American and international attention on Iran's suspected nuclear weapons aspirations is high, but Tehran's belated admissions and continued maneuvering with the International Atomic Energy Agency (IAEA) may, in the medium to longer runs, allow Iran to press ahead with a clandestine nuclear weapons program. Tehran probably looks to the North Korean model in which Pyongyang ostensibly conformed to the Nonproliferation Treaty (NPT) to politically diffuse any international or American resolve for preemptive military action to stem North Korea's nuclear weapons program. After establishing a minimal nuclear deterrent, North Korea was able to publicly withdraw from the NPT and announce its nuclear weapons capabilities to up the ante for any consideration of American-instigated military action against the hermit kingdom. Tehran also can look closer to home to Iraq's unsuccessful bid for nuclear weapons in the run up to the 1990-91 Gulf war. Saddam managed to remain in good standing with the NPT, while harboring an enormous nuclear weapons infrastructure that would have produced a nuclear weapons arsenal had Saddam not provoked international military intervention with his invasion of Kuwait. The lessons from North Korea and Iraq underscore for Iran how it is possible to continue working on nuclear weapons even with the presence of IAEA inspectors on the ground, while parlaying "compliance" with the NPT safeguards against international military action against suspected nuclear weapons-related sites and infrastructure.

Iran's confidence that it can pursue a clandestine nuclear weapons program under the watchful eye of the IAEA may be bolstered by American preoccupation with Iraq. The American military is stretched thin with operations against insurgents in Iraq and would be poorly suited to undertake yet another ambitious military campaign against

neighboring Iran. American political legitimacy also is strained over the course of events in Iraq. Moreover, domestic and international confidence in the quality of American intelligence is in doubt after an apparently less than stellar performance against Saddam's Iraq. For all of these reasons, Iran might calculate that the Americans are ill-prepared to move militarily against its nuclear weapons program.

Public and policy debate on Iran has focused on Tehran's bid for nuclear weapons, but significantly less attention is paid to the regional consequences if Iran is eventually successful in evading IAEA safeguards and acquiring nuclear weapons. To the extent that regional reaction to Iran's drive for nuclear weapons or its eventual possession of nuclear weapons is addressed, it is devoted largely to the dilemmas for American and Israeli policy. While Iran straddles the Middle East and South Asia, the major powers in South Asia—Pakistan and India—already have nuclear weapons, and their security perception is likely to be less startled by Iran's acquisition of nuclear weapons than those in the Arab world. Parenthetically, Islamabad appears to have cast aside any long-term strategic concerns about Iranian nuclear weapons in favor of short-term financial windfalls from aiding Iran's nuclear weapons program.

But Arab states too will face new security challenges and burdens if faced with Iranian nuclear weapons capabilities. Authoritative Arab debate and discussion of the impact of Iranian nuclear weapons has not yet surfaced and probably should not be expected. Arab states, for all intents and purposes, still consider the public debate and discourse of national security policies to be taboo. Notwithstanding the arrival of satellite television and cable news programs, Arab public discussion of national security is muted, and what little does get aired publicly is intellectually superficial and resembles platitudes rather than hardheaded strategic analysis.

In light of the paucity of public sources, a great deal of analytic speculation, as well as analysis based on off-the-record conversations with officers and diplomats from the region, are required to answer the question, "How will Arab states react and respond to a nuclear-ready Iran?" This chapter sets the analytic scene by examining Arab threat perceptions of Iran writ large. The chapter assumes that most regional states believe that over the next 5 to 10 years Iran could

readily and rapidly have nuclear weapons, even if Tehran does not make a formal policy declaration or detonate a nuclear device to demonstrate its nuclear power status. The chapter examines Arab perception of American and Israeli security, which is intertwined intimately with Arab contemplation of Iranian nuclear weapons capabilities. The chapter then discusses likely courses of action by Arab states nearest Iran in the Persian Gulf, as well as Arab states geographically located farther afield in the Levant and northern Africa. The chapter concludes with a discussion of the options and limitations for U.S. policy in stemming political-military pressures on Arab states to redouble their weapons of mass destruction (WMD) and delivery system programs in the aftermath of a suspected or demonstrated Iranian nuclear weapons stockpile.

ARAB THREAT PERCEPTION OF IRAN

Arab states traditionally have worked to balance Iranian power in the Persian Gulf and Middle East. Most of the Arab states, with the notable exceptions of Syria and Yemen, politically, economically, and militarily backed Iraq in its war with Iran out of concern that Iranian forces threatened at various stages in the 1980-88 war to overwhelm Iraqi forces, thus gaining a strategic foothold in southern Iraq from which Tehran could exercise a stranglehold on Kuwait and Saudi Arabia. Such a course of events would have positioned Tehran to better export its then revolutionary zeal to undermine moderate Arab states throughout the region and to dominate the regional distribution of power.

The Iran-Iraq war depleted Iranian political, military, and economic power and reduced the acuteness of Arab threat perception of Iran during the 1990s. The substantial American military presence in the region as a legacy of the 1990-91 war to monitor and deter any renewed Iraqi military ambitions in the Gulf, reassured Arab Gulf states that neither Iraq nor Iran would be able to mount an ambitious military campaign to upset the regional balance of power. Iran's election in 1997 of President Khatami, who was widely perceived as a moderating political influence in Tehran, dampened Iran's zeal for exporting the Islamic revolution and led to a further easing of the Arab threat perception of Iran.

The American ouster of Saddam Hussein's regime in Iraq may have diminished further Arab concern about Iran's ability to leverage its geopolitical mass to dominate the Gulf. Arab states are in awe, if only privately, of American military capabilities that they witnessed slash through the massive Iraqi forces widely regarded as the most formidable Arab military forces in 1990. Arab military forces too must be impressed with the relative ease with which American and British forces smashed through Iraq to occupy Baghdad. Arab states must calculate that as long as American forces occupy Iraq, Tehran would not dare to undertake any conventional military operations to challenge the Gulf distribution of power. Indeed, many Arab officers and diplomats today are more concerned about American political and military intentions in the Gulf than they are about Iran in its weakened political, military, and economic condition.

The public disclosures in 2002 and 2003 about the scope and sophistication of Iran's nuclear weapons program is just beginning to seep into the strategic calculations of Arab diplomats, officials, and military officers. The Arab states have been slow to perceive the strategic threat posed by Iranian nuclear weapons. As Judith Yaphe observes, the Gulf Cooperation Council states, "have shrugged off dire predictions of the dangers of a nuclear armed Iran."[1]

The author's discussions with a wide array of senior military officers and diplomats from the Middle East reveal a fairly commonly held view that Iranian nuclear weapons would have a stabilizing effect on the region. These officials and officers observe that Israel and the United States both have robust nuclear weapons capabilities while Arab states do not, and only one Muslim state, Pakistan, does. They reason that Iranian nuclear weapons would have salutary effects on regional security because Tehran's nuclear arsenal would "balance" Israeli and American nuclear weapons. The implicit assumption of this line of reasoning is that Israel and the United States have political, military, and economic ambitions in the region that could only be checked by Muslim nuclear weapons, even if in the hands of the Farsi-speaking Islamic regime in Tehran.

The superficial reasoning behind this Arab strategic thought may reflect the equivalent of an intellectual "knee jerk" reaction. As time passes and the reality of an Iran armed with nuclear weapons comes

into sharper focus, Arab diplomats and officers are more likely to come to grips with the dilemmas posed by a nuclear-armed Iran. They will have to worry that American security backing of Arab states may lessen in the face of Iranian nuclear weapons. Arab security policy officials would have to concede that the United States might be less willing to come to Arab states' aid in the event of a future regional crisis in which Iran wields nuclear weapons. Had Iraq had nuclear weapons in 1990, for example, the risks and potential costs of an American military campaign to liberate Kuwait would have been greater and might have led the United States to accept Iraq's occupation of Kuwait as a *fiat accompli*. In a future regional contingency, the Iranians could make limited land grabs in the Persian Gulf—whether against Iraq, Kuwait, or the United Arab Emirates—and hope to hold American conventional forces at bay with the threat of Iranian nuclear weapons. Iranian nuclear weapons too would afford Tehran the titular leadership role in the Gulf and give it substantial political sway with the Arab Gulf States.

Arab states also will have to worry that Iran's possession of nuclear weapons will embolden Tehran to revert to a more aggressive foreign policy. The clerical regime might calculate, for example, that it could give more material assistance and lessen restrictions on Hezbollah to engage in operations against Israeli and American interests. The Iranians have supported Hezbollah operations against American forces as an appendage of Iranian foreign policy to push the Americans out of the Gulf, most notably in assisting Saudi Hezbollah attacks against the Khobar Towers. Tehran might calculate that it could support an even more ambitious unconventional terrorist campaign against American forces in the Gulf and the smaller Arab Gulf states that host American forces if it has a nuclear weapons arsenal. Tehran might assess that, even if its hand is exposed, the risks of American military retaliation would be minimal, given Iranian nuclear weapons. If push came to shove, Tehran could use nuclear weapons against American military assets or hosting countries in the region with Iranian ballistic missiles, or clandestinely insert them into the United States to directly target American cities and citizens.

ARABS WEIGHING AMERICAN AND ISRAELI REACTIONS

Scratching the analytic surface of the dilemmas posed by Iranian nuclear weapons will lead Arab defense planners to contemplate American and Israeli security policies. For Arab states, the United States and Israel are the "bulls in the china shop" whose actions will have to be gauged in mapping out Arab reactions to Iranian nuclear weapons. How the United States and Israel behave toward an Iran armed with nuclear weapons will affect their security policies and strategies.

Arab officials already are alarmed at what they see as an American precedent for waging preemptive or preventive war. While American security studies scholars are careful to distinguish preemptive war as moving militarily first in a crisis against an adversary, and preventive war as moving to stop an adversary from growing too powerful, particularly with nuclear weapons, Arab officials appear to use these terms in conversations in English interchangeably. Arabs worry that the United States will move militarily against Iran either before or after Iran acquires nuclear weapons by using its military position in the Gulf to bring forces to bear against Iran.

The Arab states worry that they will be caught in a crossfire in an American military campaign against Iran. The Saudis, for example, may hope that the ending of the American military footprint in Saudi Arabia will lessen the potential for Saudi Arabia to become embroiled in a future conflict with Iran. The Saudis, after all, resisted the investigation of the 1996 Khobar Towers bombing which killed numerous American servicemen out of fear that it would uncover Iranian ties to the operation and put the Kingdom in the middle of an American-Iranian conflict. The Gulf states, particularly Saudi Arabia, also worry that American military operations against Iran would give the Americans potentially too great an influence over the global oil market.

The Arab states will be concerned about Israeli preemptive or preventive military action. The Arab regimes especially will worry that Israeli military operations against Iran—whether by air or sea—would spark street demonstrations that could spark public resentment against Arab regimes. Despite their worst fears in the run up to

the 2003 war against Iraq, "the Arab street" was muted. But Arab regimes will worry that Israeli military action against Iran would prove to be more volatile politically than American military action against Iraq had been. Arab military officers and diplomats have a hard time, though, understanding Israel's perception of geographic vulnerability and the severe security demands that Iran's acquisition of nuclear weapons would have on Israeli defense policy.

The Arab world has a begrudging respect for Israeli air power, in particular due to its prowess demonstrated in the Arab-Israeli wars, air battles with Syrian aircraft in struggles over Lebanon, the air strikes against Palestine Liberation Organization (PLO) headquarters in Tunis, and the preventive air strikes against Iraq's nuclear reactor. The mystique of Israeli air power, however, probably is larger than reality in the case of Iran, which is located a far reach from Israeli airspace.[2] Depending on the flight route, Israeli aircraft would have to violate Jordanian, Syrian, Iraqi, or Saudi airspaces to strike Iranian targets. While some speculate that Israel could gain basing support to launch aircraft from Turkish bases, Ankara's unease with working with the Americans vis-à-vis Iraq shows how squeamish the Turks are over relations with their southern neighbors. The Israeli air force's ability to generate sorties for a sustained air bombardment of Iranian nuclear weapons-related facilities, moreover, pales in comparison of that of the United States which enjoys wide access in the Persian Gulf, both in host countries and based on aircraft carriers.

Tel Aviv, for its part, will try to work closely with Washington on the shared threat from Iran's nuclear weapons. In November 2003, the head of the Israeli intelligence service, the Mossad, told the Israeli Knesset that Iran's nuclear weapons program represented "the biggest threat to Israel's existence since its creation" in 1948.[3] The Israelis would be relieved to have the Americans carry the lion's share of the burden for working diplomatically and, if necessary, militarily to stop Iran's nuclear weapons drive.

THE GULF NEIGHBORHOOD

The policy plate of U.S. security officials is already overflowing with its current load of security responsibilities, and the contemplation or implementation of yet another formidable security task represented

by moving militarily—even in a limited air campaign—against Iran's nuclear weapons infrastructure may simply be one bridge too far for American policymakers. Should the United States be unable or unwilling to use military actions against Iran's nuclear weapons program, Tehran will likely acquire nuclear weapons sooner rather than later. How, then, are Arab states likely to react in the next 5 to 10 years to a suspected or demonstrated Iranian nuclear weapons stockpile and robust ballistic missile inventories as delivery means?

Arab Gulf states will feel the Iranian threat most acutely. Iraq, for example, will continue to see Iran as the largest and most formidable national security threat in the region regardless what shape, form, or nature the post-Saddam government in Baghdad eventually takes. A relatively transparent, moderately disposed government in Baghdad probably would want American military reassurance to shore up its security vis-à-vis Iran. The Iraqis might be amenable to residual American and international ground and air forces hosted in Iraq. The Iraqis might want a profile small enough to minimize charges by political opposition that the Iraqis are subservient to the Americans, but large enough to serve as a "trip wire" to deter Iranian military ambitions against Iraq, particularly as Iraq's new armed forces are just taking root. The American presence in Iraq also would reassure Iraqis that the Iranians could not parlay their nuclear weapons for political coercion against Iraq.

The Iraqis, too, probably will want force projection capabilities to deter Iranian military activities as well as to strike Iran in the event that deterrence fails. The residual American and international presence in Iraq might work to dampen Iraqi interests and ability to restart ballistic missile programs to match Iran's ballistic missile capabilities. The Iraqis, though, probably would press the United Stats and the West for advanced air force capabilities to project power and to compensate for not resuming ballistic missile endeavors. Parenthetically, while much public discussion has centered on the size and nature of Iraq's post-Saddam army, little debate has touched upon the legitimate air power needs of the future Iraq.

Over the longer run, the withdrawal of American and international forces from Iraq probably would heighten Iraqi fears vis-à-vis Iran's nuclear weapons arsenal. Even if Iraqi conventional forces evolve

into relatively modern, professional, and capable forces—albeit in fewer numbers than the forces during Saddam's rule—the Iraqis will be under strong pressure to contemplate resurrecting Iraq's nuclear program to counterbalance Iran's nuclear weapons inventory. From Baghdad's perspective, Iran could parlay its nuclear weapons advantage to politically coerce Iraq. The Iranians, for example, could embark on an aggressive campaign to support Iraqi Shia opposition in the south or challenge the Shat al Arab, calculating that Baghdad would be deterred by Iranian nuclear forces from undertaking conventional military reprisals across the border. The Iraqis would have to worry that, should they seek to strike conventionally against Iran, Tehran could resort to tactical nuclear weapons to destroy Iraqi forces on the battlefield.

A Turkish decision to acquire nuclear weapons in response to Iran's nuclear arsenal would further increase Iraq's incentive to resurrect its nuclear weapons programs. A deterioration in Turkish-American relations, coupled with failed efforts to gain entry into the EU, over time could lead Ankara to be substantially less confident in NATO's resolve to come to Turkey's defense in the event of a military contingency with Iran. The Turks might then calculate that they need to have their own, independent nuclear deterrent as a hedge against Iran's nuclear forces, as well as future nuclear weapons aspirants to Turkey's southern borders.

Saudi Arabia has worked to restore diplomatic ties with Tehran that were ruptured by the Iranian revolution and the Iran-Iraq war, but Tehran's possession of nuclear weapons is likely to cause discomfort in the kingdom. While the restoration of normal diplomatic relations appears on the surface to ease tensions, neither the Saudis nor the Iranians have abandoned their traditional aspirations to be the most influential nation-state in the Gulf. The Saudis are likely to view Iran's acquisition of nuclear weapons as a substantial Iranian effort toward politically and militarily dominating the Gulf. The Saudis probably would suffer a sense of political humiliation that the Iranians have the political prestige or reputation for power that accompanies nuclear weapons.

Iranian nuclear weapons would add already substantial political-military incentive for Saudi Arabia to pursue its own nuclear weapons capabilities. The Saudis have limited conventional

military capabilities to defend their large geographic space from outside threats, the most serious of which, Iran and Iraq, could be armed with nuclear weapons. The Saudis worried in the Iran-Iraq war that Iranian forces would defeat Iraqi forces in southern Iraq to threaten Kuwait and the eastern province of Saudi Arabia. The Saudis would have to worry that a nuclear-armed Iran could again militarily threaten the Gulf. The Saudis, too, would have to worry about the foreign policy orientation of the future government in Iraq and hedge against the specter of Iraq in the long run, tapping its technical expertise to resurrect a nuclear weapons program. The Saudis also harbor deep mistrust of Israel and resent Israeli military prowess and nuclear weapons capabilities.

The Saudis, too, have a wary eye on the military power of the United States. The Saudis have been shaken by post-September 11, 2001, events. They were shocked both by signs of formidable domestic political opposition against the Saudi regime and internationally by the anger in the United States over the stark, if belated, recognition that Saudi Arabia was a hotbed for al-Qaeda. The political backlash in the United States must have heightened Saudi concern that the United States could one day pose a threat to the Kingdom. Although this concern is never uttered, Saudi officials remember that the Kingdom was vulnerably dependent on the United States for its survival in the 1990 war. It would not take too much Saudi imagination to appreciate that the United States, with its 500,000 troops then stationed in Saudi Arabia, could have forcibly taken over the Kingdom in a couple of days. The Saudis today probably worry that that United States could, in the future, "overreact" to an al-Qaeda attack against American interests with retaliatory strikes or military occupation in Saudi Arabia, much as the Americans have done in Afghanistan and Iraq.

A Saudi nuclear weapons capability would work strategically to shore-up Saudi insecurities vis-à-vis Iran's nuclear weapons capabilities, but also against potential hostile actions in the longer run from Israel, Iraq, and the United States. The Saudis have already taken several steps in this direction. In the 1980s, unknown to the United States, they secretly negotiated for and purchased intermediate range CSS-2 ballistic missiles from China. According to Anthony

Cordesman, the Saudis purchased 50-60 CSS-2 missiles, 10-15 mobile launchers, and technical support from China.[4] The missiles would be ideal for delivering nuclear weapons, but poorly suited for the delivery of conventional munitions because they are very inaccurate and too limited in numbers in the Saudi arsenal to be used in the massive missile barrages with the conventional weapons necessary to compensate for inaccuracies. The missiles, moreover, were sold from Chinese operational nuclear force inventories. Although Beijing and Riyadh claim that the missiles in Saudi Arabia are armed with conventional weapons, no American or international observers have been allowed by the Saudis to inspect and independently verify Chinese and Saudi claims.[5]

The international revelations in 2003 about the scope and depth of Iran's nuclear weapons-related activities have brought to the public domain reports of Saudi contemplation of nuclear weapons with the assistance of Pakistan. The British newspaper, the *Guardian*, reported that Saudi officials have admitted that, in light of Iran's nuclear weapons program and the post-September 11 security environment, the Kingdom is considering a variety of national security policy options, one of which is the pursuit of nuclear weapons.[6] Other press reports allege that then Saudi Crown Prince Abdullah bin Abdulaziz traveled to Pakistan in October 2003 and secured a secret agreement with President Pervez Musharraf, under which Pakistan will provide the Saudis with nuclear-weapons technology in exchange for cheap oil.[7] Naturally, Pakistani and Saudi officials deny these reports, but both Pakistan and Saudi Arabia have national interests consistent with such a course of actions. Pakistan needs money to support its military competition with India, while Saudi Arabia needs a deterrent to compete with Iran and Israel, and as a hedge against a distancing of security ties with the United States.

While a body of circumstantial evidence suggests that Saudi Arabia has the interests, means, and intentions to lean toward a nuclear weapons option, there is little to suggest that the smaller Gulf Arab states are as far along in their strategic thinking as Saudi Arabia. To greater and lesser degrees, Kuwait, Bahrain, Qatar, the United Arab Emirates (UAE) and Oman gauge a threat from Iran in general. Yemen, on the other hand, takes great reassurance from its geographic separation from Iran and sees little to no direct military

threat coming from Tehran. Yemen's security preoccupation, despite Iranian nuclear weapons in the Gulf region, will continue to be its neighbor to the north, Saudi Arabia.

The richer small Arab Gulf states have the financial wherewithal to purchase nuclear weapons and delivery systems, but they would face obstacles in moving along such a strategic path. China and Pakistan, for example, probably are more willing to press the envelope of risk with international and American backlash for public discovery of clandestine WMD-related dealings in exchange for the strategic prize of security ties with Saudi Arabia, the richest and one of the three major states in the Gulf balance of power, but they might be less willing to take these risks for the sake of security ties with the smaller Gulf states. The Chinese and Pakistanis might be more concerned with the operational security of any clandestine WMD cooperation with the smaller Arab Gulf states, recognizing that they need strong ties with the Americans that would increase the risk of public exposure. The Saudis, in contrast, have proven themselves adept at keeping secrets from the Americans. While Saudi Arabia may calculate that it could survive the international and American opprobrium that would accompany revelations of a Saudi nuclear weapons program, the smaller Arab Gulf states would have to worry that exposure of nuclear weapons aspirations would alienate their security backers—namely the United States and Saudi Arabia—which are the cornerstones for ensuring their autonomies from the larger states of Iraq and Iran.

Small Gulf Arab state efforts to develop their own nuclear fuel cycles and nuclear power plants under the guise of civilian electric power generation would be a long and expensive undertaking. Such a course of action, moreover, might set off international alarm bells in light of Iran's successful exploitation of this route for acquiring nuclear weapons. The small Arab Gulf states might be less able than Iran to ride out international criticisms of ostensible civilian nuclear power infrastructure; they are far more dependent on critical trade and security from the West than Iran and therefore more vulnerable to the effects of international economic sanctions and ruptures in bilateral security arrangements, particularly with the United States, Britain, and, to a lesser extent, France. The small Gulf Arab states, too,

would have to worry that their nascent nuclear power infrastructure would be vulnerable to preventive and preemptive attacks from larger regional powers.

The notable exception to this line of reasoning might be the UAE, which perceives the Iranians as a threat more acutely than their Gulf Arab counterparts. The UAE still harbors resentment toward the Iranians for their occupation of the contested territories of Greater and Lesser Tunbs and Abu Musa Islands.[8] The UAE might calculate that Iran's nuclear weapons will reduce, if not eliminate, what little incentive Tehran has to negotiate a settlement to the island disputes, as well as embolden Tehran to take even more assertive actions against the UAE.

The UAE has demonstrated a willingness to spend top dollar for defense as evident in procurement of combat aircraft from France and the United States, as well as *Scud* missiles from North Korea. The UAE blindsided the United States when Dubai purchased *Scud-B* missiles from North Korea in 1989, according to Simon Henderson.[9] Dubai is suspected of having six *Scud-B* launchers.[10] The UAE might see its *Mirage* 2000 and its F-16 aircraft as ideal nuclear weapons delivery systems and could turn to Pakistan for technical assistance. These aircraft and well-trained UAE pilots could readily navigate the Persian Gulf to hold at risk Iran's nuclear weapons infrastructure at Bushier and major naval facilities at Bandar Abbas. The UAE, moreover, has demonstrated willingness to purchase controversial weapons systems such as *Scud* missiles and suffer economic sanctions as a consequence. The Chinese and the Pakistanis might be willing to undertake the risk of exposure for substantial economic reward to assist the UAE in developing nuclear, chemical, or biological payloads for its combat aircraft or ballistic missiles.

THE LEVANT NEIGHBORHOOD

Iran's acquisition of nuclear weapons will have security repercussions for Arab states beyond the immediate Persian Gulf area. Syria and Egypt are geopolitically central to Middle Eastern security and will see their interests most directly affected by Iran's nuclear weapons power. Concerns about the prospects of Syrian or Egyptian nuclear weapons programs, however, have been muted in part due

to the economic weaknesses of both states. Common wisdom holds that nuclear weapons programs often are prohibitively expensive undertakings that put the nuclear weapons option beyond the grasp of many nation-states with poor, if not dysfunctional, economies, such as Syria and Egypt.

A cursory look at reality shatters that common assumption. Two of the world's poorest and most ineffective economies in Pakistan and North Korea illuminate the stubborn fact that countries with an expert technical elite and the determination to siphon off scarce financial resources from their economies can defy reasonable assumptions and establish nuclear weapons programs. Pakistan and North Korea are estimated to have 2002 per capita gross domestic product (GDP) of $462 and $903, respectively.[11] Egypt and Syria have estimated 2002 per capita GDPs of $1,190 and $1,100, respectively,[12] which puts Cairo and Damascus on a richer footing than both Islamabad and Pyongyang. And like Pakistan and North Korea, Syria and Egypt have black market means for making funding streams for clandestine nuclear weapons programs. With the Pakistani and North Korean nuclear weapons histories in mind, one should not be too confident in dismissing futures in which the poorly performing economic states of Syria and Egypt embark on nuclear weapons programs.

Syria, at least initially, might take some solace from Iran's nuclear weapons stocks. Damascus is increasingly isolated and in a weakened regional security position. It is encircled by states that enjoy strong security relationships with the United States; Israel to the southwest, Jordan to the south, Iraq to the east, and Turkey to the north. Syria, while the reigning influence in Lebanon, has only Iran to cooperate with in regional politics against the other regional powers influenced by the United States. In the short term, Damascus might welcome Iran's nuclear weapons as a means to bolster, by association, its marginal regional power.

Over the longer run, Syria probably would come to see the negative strategic consequences of Iranian nuclear weapons. If, in response to Iranian nuclear weapons, Turkey and Iraq pursue nuclear weapons options, Syria will see its power position in the region deteriorate even further.[13] Turkish or Iraqi nuclear weapons will add to the already strong Syrian strategic incentive to pursue nuclear weapons because Damascus views Israel as its most formidable security threat.

The Syrian regime is isolated politically and might calculate that it has no other means to ensure its survival other than a nuclear deterrent. Damascus might calculate that it has no alternative to running the risk of Israeli military action in the near and medium terms in order to achieve a margin of security in the longer run under a nuclear umbrella. The Syrians have a rudimentary nuclear infrastructure upon which to build.[14] But aside from the formidable technical obstacles for acquiring the fuel cycle infrastructure to support a nuclear weapons program, Damascus would have a major challenge keeping its nuclear program secret to avoid provoking Israeli preemptive or preventive military action either against Syria's clandestine nuclear weapons infrastructure or against the regime itself. Tel Aviv probably could not tolerate Syrian possession of nuclear weapons, and, unlike the case of Iran, Israel has more than sufficient military capabilities needed to wage a sustained air campaign to damage Syrian political, military, and economic nodes significantly.

Syria could respond more readily to accelerated regional nuclear weapons proliferation by strengthening its "poor man's nuclear weapon option." The Syrian conventional military is dying on the vine since it lost its principal military backer with the collapse of the Soviet Union. Today, Syria's conventional military is less capable on the battlefield than the Iraqi military of the 1991 war. The Syrian military is a thoroughly political institution unable to compete with Israel's military on the battlefield. Damascus compensates for conventional military inferiority by relying on chemical, and perhaps biological, weapons and ballistic missiles to deter Israeli military action. Undersecretary of State for Arms Control John Bolton testified to a House hearing in September 2003 that Syria has "a stockpile of the nerve agent sarin that can be delivered by aircraft or ballistic missiles, and has engaged in the research and development of more toxic and persistent nerve agents such as VX." Bolton also stated that Syria "is continuing to develop an offensive biological weapons capability" and expressed concern about Syria's nuclear activities, noting that Russia and Syria "have approved a draft program on cooperation on civil nuclear power."[15] Damascus probably will redouble efforts in the chemical and biological weapons arenas to

shore up its weak deterrent capabilities against Israeli, Turkish, Iraqi, and Iranian conventional and nuclear forces in the distant future.

The Syrians would have to depend on their substantial ballistic missile forces to deliver chemical or biological weapons against regional threats because of the uncertainty over their air force capabilities. Only Syria's ballistic missiles would stand a chance of penetrating Israeli airspace, probably even with the deployment of the Israeli *Arrow* ballistic missile defense system which cannot be entirely foolproof. Syria's air force would be an unreliable means to deliver WMD payloads, given the exceptionally poor performance of Syrian aircraft and pilots against Israeli forces in the air battles of the 1980s in which Israel downed some 80 Syrian aircraft without a loss of one Israeli. The Syrians have 18 *Scud-B* launchers with 200 missiles, 8 *Scud-C* launchers with 80 missiles, and an unknown number of *Scud-D* missiles.[16]

The Syrians appear to be working on modernizing their ballistic missile forces in fits and starts. "Syria tested a 700-kilometer range *Scud-D* on September 23, 2000, following a successful test of Israel's *Arrow* missile defense system."[17] Syria also could look to acquire more modern, mobile, reliable, and accurate ballistic missiles such as the M-9—whether from China directly, or indirectly from Pakistan. Syrian President Bashir has yet to demonstrate much prudence in regional politics and might be persuaded by Syria's old guard military that new missiles will bring Syria greater security and influence vis-à-vis Israel. Tel Aviv might, in turn, shatter that Syrian assessment and judge that such a change of the status quo is unacceptable and militarily move against Damascus, particularly since Damascus is in a profoundly weaker position in the Middle East than it had been during the Cold War.

Egypt is geographically farther from Iran and does not feel the direct Iranian military threat as acutely as those states located closer. Nevertheless, Cairo is likely to view Iran's nuclear weapons as another blow to the Egyptian worldview as the leader in the Arab and Islamic worlds. As journalist Nicholas Kralev observes, "Egyptian politicians, intellectuals, and journalists are worried that their country is losing its status as a major regional player in the Middle East."[18] The blow to Egyptian prestige because of Iran's

nuclear weapons status may not be sufficient in and of itself to alter Egypt's restraint from a nuclear weapons program, but it adds to an already large pile of incentives to pursue nuclear weapons.

Egypt had incentive to contemplate nuclear weapons well before Iran's nuclear weapons come to the foreground in regional politics. The Egyptians, notwithstanding the peace treaty with Israel, have long resented Israel's nuclear weapons program that they see as a substantial source of Israeli political leverage over Egypt and the other Arab states. Cairo has long pressed diplomatically for a nuclear free zone in the Middle East as a means to negotiate away Israel's unilateral nuclear weapons advantage in the region. Cairo has long warned that it could reconsider its nuclear weapons restraint if the Israelis indefinitely refuse to negotiate for a nuclear free zone.

Egypt does have a nuclear power infrastructure upon which to begin a program with military applications. In the 1970s, Egypt may have debated pursuing nuclear weapons, but the peace treaty with Israel, aid from the United States, and limited financial means derailed a policy in this direction.[19] Nevertheless, the Egyptians have a nuclear research center with a Soviet-supplied two megawatt research reactor that started in 1961, and an Argentine-supplied 22 megawatt light water reactor that started in 1997.[20] The Wisconsin Project estimates that the Argentine reactor gives Cairo access to bomb quantities of fissile material, possibly enough plutonium to make one nuclear weapon per year.[21] If the Egyptians were to embark on a nuclear weapons program based on its nuclear power infrastructure, they would have to move gingerly much as the Syrians to reduce the risk of Israeli military action. Cairo, however, might judge that it would face less of a risk from Israeli military action than Syria because of Egypt's security relationship with the United States. Cairo could also calculate that Tel Aviv would be loath to undertake military action that would threaten the Egyptian-Israeli Peace Treaty and risk the return of hot wars between Arab states and Israel.

The Egyptians, much like the Syrians, also could redouble their "poor man's nuclear weapon" option. The Egyptian military in the 1980s modernized its chemical warfare agent production facilities to manufacture the nerve agents and even cooperated with Iraq on chemical weapons; in 1981 Iraq gave Egypt $12 million to expand

Egypt's chemical agent production facilities and, in return, Cairo assisted Baghdad in the production and storage of chemical weapons agents.[22] And the Egyptians could undertake similar modernization efforts of their suspected biological warfare capabilities. "In 1996, U.S. officials reported that by 1972 Egypt had developed biological warfare agents and that there was no evidence to indicate that Egypt has eliminated this capability and it remains likely that the Egyptian capability to conduct biological warfare continues to exist."[23]

Egyptian and Syrian pursuit of the "poor man's nuclear option" might prove in the end to be only stopgap measures. The Egyptians and Syrians, drawing lessons from the 1991 and 2003 wars against Iraq, might conclude that nuclear weapons are inherently greater sources of deterrence than chemical and biological weapons. The Iraqis had robust chemical and biological weapons inventories in 1991, and the United States believed that Baghdad had retained some of these capabilities in the run-up to the 2003 war. The American campaign against Saddam probably has shaken Egyptian and Syrian confidence in the deterrence value of chemical and biological weapons because the U.S. perception of Iraqi chemical and biological weapons stores was insufficient to deter the United States from waging a war against Baghdad. Israeli, American, and Iranian possession of nuclear weapons might pressure Syria and Egypt to pursue nuclear weapons as the ultimate guarantor of their securities.

The Egyptians appear to be continuing efforts to modernize their ballistic missile forces, which could be used as a foundation for a nuclear weapons deterrent posture. The Egyptians probably already have on hand at least 24 *Scud B/C* launchers with about 100 missiles.[24] The Wisconsin Project assesses that the long-standing relationship with North Korea has given Egypt the capability to indigenously produced *Scud-B* missiles, and Cairo is developing *Scud-C* missile production capabilities.[25] In August 2002, Slovak authorities revealed that two North Korean agents based in Slovakia were procuring millions of dollars of ballistic missile components for Egypt. Although the North Korean agents fled the country before Slovak authorities could arrest them, remaining documents showed that between 1999 and mid-2001, they ordered more than $10 million worth of equipment and supplies for Egypt, to include items that

suggest that Cairo is trying to acquire a ballistic missile with a range of about 1,500km.[26] The Egyptian ballistic missile program, which has escaped much international scrutiny, has benefited from substantial North Korea assistance, which Cairo might eventually tap to support a nuclear weapons program such as warhead designs to carry on top of Egypt's ballistic missiles.

Egypt's interest in ballistic missiles with longer ranges than the *Scud* is long-standing. In the 1980s, Egypt cooperated with Iraq and Argentina on the Condor missile program. The United States in 1988 revealed that the Egyptians turned to Argentina for production help and Iraq for funding in a $3.2 billion *Condor-2* project intended to provide Egypt and Iraq each with 200 solid-fuel ballistic missiles comparable to the American *Pershing II* nuclear delivery system.[27] Intense U.S. diplomatic pressure, as well as the 1990 Gulf war, forced the collapse of the program. Cairo might be rekindling its efforts to procure longer range missiles, calculating that U.S. attention is diverted elsewhere.

A series of scenarios could be envisioned in which Egypt could embark on a nuclear weapons program in earnest. If American grant assistance were cut significantly, the lifeblood for Egypt's conventional military modernization would evaporate and put more pressure on Cairo to compensate with comparatively cheaper investments in unconventional weapons. A continuing political deterioration over the Israel-Palestinian conflict, Arab street backlash over American military occupation of Iraq, popular Egyptian uprisings against the Mubarak regime, or Mubarak's death all could work to reduce Cairo's responsiveness to U.S. diplomatic pressure below what was the case when Egypt abandoned the *Condor* missile program. Cairo could look to nuclear weapons acquisition as a means for the political prestige needed to shore-up Egypt's domestic security situation and sagging political stature in the Arab world. Egypt might look to Pakistan as a model in this regard; a poor state, but one in which popular support for the nuclear program worked to Musharraf's political advantage at home and abroad. Arguably, Pakistan benefits from more international attention and American assistance than would have been the case had Pakistan not had nuclear weapons. Cairo also could calculate that only nuclear weapons could bring sufficient

political pressure on Israel to engage in serious arms control talks, much as they had between the Americans and Soviets during the Cold War.

AMERICAN POLICY AVENUES

The United States will have leverage and influence over Iraqi responses to Iranian nuclear weapons inventory as long as American and international forces play critical roles inside Iraq, but, over the longer run, that influence will subside and the incentives for Iraq to resume ballistic missile and nuclear weapons programs will grow stronger to balance growing Iranian ballistic missile and nuclear forces. The smaller Gulf Arab states, moreover, might be supportive of Iraqi efforts in this direction because they would see Iraq as a geopolitical counterbalance to Iranian and Saudi power much as they had during the 1980-88 Gulf war.

To stem this course of events, the United States will have to bolster Iraq's force projection capabilities by providing assistance in building a modern, capable air force to compensate for Iraqi restraint in resurrecting Iraqi ballistic missile programs. The Iraqis will have legitimate security demands for force projection capabilities against Iran's growing ballistic missile forces. The Iraqis also will need American and international security reassurance in continued linkages to western militaries to ensure that Iraqi conventional forces, while smaller than Iranian forces, are more capable in conventional military operations to deter Iranian ambitions. The Iraqis, too, will need international security reassurance to dampen the powerful incentive to pursue nuclear weapons to counterbalance Iran's nuclear weapons inventory.

The United States should be forward-leaning in diplomatic efforts to stem Egyptian and Saudi incentives to pursue nuclear weapons options. The United States is bound to have more leverage over Egypt, which benefits from substantial American military and economic assistance. As Jon Alterman observes, "the $1.3 billion in military aid that the United States provides annually is useful as the present regime distributes patronage in the armed forces. U.S. economic aid, just under $800 million annually and slowly declining, also helps the regime consolidate its patronage networks."[28]

Egypt demonstrated sensitivity to U.S. diplomatic and political pressure that ended its *Condor* ballistic missile program in the late 1980s. The Egyptians, however, probably calculate that the United States has a short attention span and is easily distracted by other global events, especially today in Iraq and Afghanistan. In light of Iran's nuclear weapons program, the United States needs to squeeze Egypt's ballistic missile program and potential nuclear weapons aspirations back on to the policy agenda. The United States needs to speak firmly and directly with the Egyptians and challenge the country on the activities of its ballistic missile forces, which could be the platform for nuclear weapons delivery in the future.

American leverage against Saudi Arabia will be less than is the case with Egypt. The Saudis by no means depend on American economic support or largesse for the modernization of the Saudi military. Still though, the Saudis continue to see the United States as a strategic backdrop that could potentially again bolster the Kingdom in a future contingency. The United States needs to leverage the security reassurance it gives to the Saudis to gain access and Saudi updates on the status of CSS-2s. The United States should argue that the Saudi military benefits from access to American military facilities, and that the Saudis should reciprocate by allowing U.S. officials to inspect on a bilateral basis Saudi military facilities, missiles, and warheads, and to speak with Saudi personnel. Such efforts would give the United States a better understanding of the Saudi infrastructure, as well as underscore the potential negative consequences of the Saudis undertaking a bid for nuclear weapons on ballistic missiles.

The possession of nuclear weapons in Egypt and Saudi Arabia would be particularly troubling given the potential for political instability in these countries over the longer run. Both countries have a burgeoning demographic bulge of young and unemployed men who will be vulnerable for recruitment by domestic—especially militant Islamic—political opposition. Egypt in the past has had its armed forces penetrated by Islamic militants, witness the assassination of President Sadat during a military parade, and might again suffer from Islamic militants in military ranks who might have knowledge and access to nuclear weapons inventories. The same case could be made of Saudi Arabia. While these scenarios would not appear likely in the near term, they might not appear so hypothetical in 15 or 20 years.

These scenarios underscore the imperative of American statecraft to try to head off the Egyptian or Saudi acquisition of nuclear weapons in the near term to avoid being saddled in the future with unstable regimes politically struggling against militant Islam opposition both inside and outside the gates of power, much as the United States faces today with respect to Pakistan.

Syria will require more use of coercive diplomacy that entails the threat of force than the cases of Egypt and Saudi Arabia, if the United States is to discourage Syria from undertaking the nuclear weapons route. The Syrians have demonstrated a stubborn resistance to conciliatory measures from outside as well as a propensity to put their near-term interests over longer-term strategic interests. The Syrians, for example, appear to have rendered logistics assistance for Iraqi regime exodus from Iraq after the 2003 war, as well as facilitated the travel of Jihadists from the region into Iraq to fight American occupation forces. The United States needs to reaffirm directly to Syria that it is an isolated regime squeezed between powers—Israel, Jordan, Turkey, and Iraq—which are more favorably disposed to American than Syrian strategic interests. Damascus needs to know directly and clearly that the initiation of a nuclear weapons program would not be tolerated and the American or Israeli military forces could wreak havoc on Syria's limited infrastructure and obsolete conventional forces, the destruction of which would leave the ruling regime wobbly.

Rather than procure their own nuclear weapons capabilities, the smaller Gulf Arab States might seek to use a set of overlapping security arrangements to acquire a rough, if minimal measure, of deterrence against the Iranian nuclear weapons threat. Iranian nuclear weapons could act as a further catalyst for Arab Gulf States to nurture their security relationships with the United States. Kuwait, Bahrain, Oman, and Qatar might increase the already substantial security links that have bloomed with the United States since the 1991 Gulf war. These states see security ties with the United States as critical to ensure their autonomies from the major regional states of Iraq, Iran, and Saudi Arabia. If they were to become wedged between nuclear powers in Iran—and subsequently in Iraq and Saudi Arabia—the small Arab Gulf states might try to get themselves more closely tied with American conventional deterrence as well as under

a potential American nuclear umbrella. The small Arab Gulf states, moreover, would need to hedge their bets and simultaneously work to nurture ties with Saudi Arabia and Iraq to counterbalance Iranian aspirations for dominance in the Gulf.

The small Arab Gulf states will be looking to secure a protective coverage of American nuclear deterrence. They will seek to leverage their hosting and support of American conventional forces in the region for American security guarantees that an American nuclear forces deterrent will be leveraged against Iranian nuclear capabilities. Gulf States might ask the United States for a contemporary rendition of the "Carter Doctrine," in which the United States made a veiled threat to respond with nuclear weapons in the event that the Soviet Union made a military bid for warm water Gulf ports. President Carter announced in January 1980, in response to the Soviet Union's invasion of Afghanistan and closer proximity to the Persian Gulf, that "Any attempt by any outside force to gain control of the Persian Gulf will be regarded as an assault on the vital interests of the United States of America; any such an assault will be repelled by any means necessary, including military force."[29] Although the United States might opt to couch a policy that applies to the whole region—as the Carter Doctrine had—the Arab Gulf states are unlikely to be able to coordinate among themselves a coordinated pitch to the United States. The United States, though, would be well-advised to steer clear of a renewed Carter Doctrine that imprudently relies on nuclear weapons. The Carter Doctrine made strong strategic sense, but because the United States at the time lacked the conventional force projection capabilities to make good the threat against Soviet forces, the doctrine amounted to a veiled American threat to resort to nuclear weapons.

The United States would be better off offering ballistic missile defense coverage than a new grand doctrine with veiled threats of American nuclear retaliation for military disruptions to the Gulf balance of power. The Gulf States with the experience of the 1991 and 2003 Gulf Wars have grown accustomed to benefiting from the provision of American ballistic missile defense coverage. And Iran's acquisition of nuclear weapons undoubtedly will increase the Gulf Cooperation Council (GCC) states' sense of vulnerability because one nuclear tipped Iranian missile could decimate the government,

ruling families, and societies of the smaller GCC states that, in some respects, have more in common with ancient city-states than modern nation-states. The United States might look to the GCC states for financial assistance to offset the research, development, procurement, and deployment of ballistic missile defense systems in the region, whether land- or sea-based. While sea- and land-based American ballistic missile defense systems are unable to provide strategic defense protection of the United States with its large landmass, they are capable of providing strategic protection to small states such as Qatar and Bahrain.

The Arab Gulf states and the United States would have advantages in drawing the North Atlantic Treaty Organization (NATO) into the Gulf to shore-up deterrence against a nuclear-ready Iran. From the Gulf state perspective, encouraging greater European security involvement in the Gulf via NATO is a potential means to hold in check what they perceive as assertive "unilateral" American diplomacy and statecraft vis-à-vis Iran. From the American perspective, NATO involvement potentially would give U.S. endeavors aimed at countering Iran at least a cloak of multilateral legitimacy. NATO's European members, moreover, have recently shown more interest in Alliance involvement in the greater Middle East—particularly in Afghanistan—in no small measure to help repair the damage done to the trans-Atlantic relationship due to bitter French and German opposition to the war in Iraq. Washington should parlay European interest in repairing security ties to the United States to move NATO's traditional focus on continental Europe to the greater Middle East, with a concentrated focus on dealing with a nuclear-ready Iran.

NATO involvement should complement rather than replace the U.S. role as the premier security broker in the Persian Gulf. Despite a recent upswing in European interest in the Gulf, the worldviews of European capitals remain focused on security issues in and around Europe. The Europeans are all too willing to let political and military problems in the Middle East fester, to step aside and let the Americans carry the lion's share of the region's political-military burdens, and to eagerly criticize American policy for failing to deliver a "perpetual peace" to the troubled region. While NATO's European members devote considerable attention to political pomp and circumstance, their military capabilities are seriously eroding, leaving them with

little to no means to project military power into the Gulf.[30] The Gulf States understand that NATO can help politically contain American power, but, if push comes to shove in a future military contingency in the Gulf, only the Americans have the military power needed to act.

The United States today—unlike its European allies—does not lack the conventional means to project power in the Gulf as demonstrated in the wars of 1991 and 2003 against Iraq. And the United States would be wise strategically to tap that reputation for power to reassure partners in the region—in order to dampen incentives for exploring the nuclear weapons option—with ballistic missile defenses and conventional military means. The United States, with its preponderance of conventional forces, could threaten to remove the regime in Iran should nuclear weapons be used against American forces and regional partners. The reliance on conventional deterrence will underscore internationally the lack of usability of nuclear weapons, a mindset that, in turn, would dampen regional interest and prestige linked to nuclear weapons acquisition. Conversely, the American threat of nuclear weapons response in kind would heighten the importance and prestige of nuclear weapons and contribute to incentive for nuclear weapons proliferation. In the event that nuclear deterrence fails, the United States would have to make good on its nuclear threat and retaliate with nuclear weapons to cause most likely the end of the regime in Tehran, but at the unacceptable moral cost of thousands to millions of innocent Iranian civilian lives. Massive and tightly targeted conventional force retaliation offers a profoundly more moral and strategically effective deterrent because the threat is more credible than nuclear weapons response in light of the American restraint in inflicting civilian casualties in numerous conflicts since the end of the Cold War.

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CHAPTER 3

THE NUCLEAR CAPABILITIES AND AMBITIONS OF IRAN'S NEIGHBORS

Wyn Q. Bowen and Joanna Kidd

INTRODUCTION

The Islamic Republic of Iran has been suspected of pursuing nuclear weapons since the mid-1980s. Over the past 2 years, these suspicions have intensified due to revelations about Tehran's past failures to inform the International Atomic Energy Agency (IAEA) of significant nuclear activities and facilities. The most serious failures have involved neglecting to declare extensive work on uranium enrichment and plutonium separation—the two routes to producing weapons-grade material for nuclear weapons.

Iran's failure to live up to the both the letter and spirit of its Safeguards Agreement with the IAEA has prompted a serious deterioration in assessments of when Tehran could acquire nuclear weapons. It has been suggested that the time frame for Iran "going nuclear" could now be as early as 2005-07.[1] Such assessments have not gone unnoticed in Iran's immediate neighborhood, and concern is growing about the potential response of some of its neighbors, in particular whether Tehran's behavior could prompt other regional actors to consider acquiring nuclear weapons. Four countries, Saudi Arabia, Egypt, Turkey, and Syria, stand out in this respect due to their relative proximity to Iran and because there are suspicions that they have all, at one time or another, been interested in acquiring nuclear weapons. Although beyond the scope of this chapter, it is recognized that if one or more of these countries acquired, or came close to acquiring, a nuclear weapons capability, then this would influence nuclear deliberations in other countries, both within and beyond the Middle East and North Africa. If Egypt went nuclear, for example, this probably would influence nuclear decisionmaking in Algeria. Moreover, although the chapter does not examine the current case of

Iraq in relation to Iran, it is recognized that, in the long-term, a post-Saddam government could feel sufficiently vulnerable to consider acquiring nuclear weapons to counteract a future nuclear-armed Tehran.

Drawing purely on open sources, this chapter seeks to cast some light on the nuclear capabilities and ambitions of Saudi Arabia, Egypt, Turkey, and Syria. In addition to generally available sources, the authors utilize original Arabic and Turkish language sources and information derived from various scientific and technical journals/proceedings. For each country, an assessment is made of current nuclear capabilities, including various elements of the fuel cycle that could potentially be used to support the development of nuclear weapons. Attention is also given to the drivers of potential nuclear and other weapons of mass destruction (WMD) programs in the countries concerned, and potential nuclear delivery systems.

An analysis of available open sources revealed relatively little about national intentions regarding the acquisition of nuclear weapons—both in general terms and, more specifically, in response to the current Iranian nuclear crisis. The lack of pertinent information in this respect appears to stem primarily from the political sensitivity of the issue and the relatively closed and nontransparent nature of the societies involved, with the exception of Turkey. In contrast, it did prove possible to develop a fairly detailed picture of the various elements of the fuel cycle currently in existence or being developed in the four countries, as well as their potential nuclear delivery options. Although it is assessed that each country currently lacks the technical capacity to build a nuclear weapon, it is essential to note that open sources rarely will provide the complete picture. This is particularly the case with regard to the most sensitive aspects of nuclear weapons development—uranium enrichment, plutonium separation, and weaponization—which are subject to the greatest secrecy. Moreover, revelations throughout 2004 about the role of Pakistani scientist A. Q. Khan in illicitly supplying nuclear technology to Libya and Iran, raise the concern that other countries also may have benefited from this clandestine proliferation network. For example, Libya's acquisition of technology and assistance via the network prior to December 2003 had enabled Pakistan to begin to initiate a step change in its nuclear

weapon program. Moreover, Khan is known to have made business trips to numerous other countries including Egypt, Saudi Arabia, and Syria, although it is not known what the Pakistani scientist actually did on these visits.[2]

SAUDI ARABIA

Saudi Arabia does not possess a nuclear weapons capability and, based on an assessment of available open sources, the Kingdom does not appear to possess the necessary technical infrastructure to develop one indigenously, bar significant infusions of external assistance. However, there are some suspicions that Saudi Arabia has considered the nuclear option and even sought to purchase nuclear weapons from abroad, notably from Pakistan. This despite the country's non-nuclear weapon status and commitments under the Nonproliferation Treaty (NPT) which Riyadh signed in 1988.[3] However, the Kingdom has yet to conclude a comprehensive safeguards agreement with the IAEA.[4]

Beyond the nuclear realm, there is "no confirmed evidence" that Saudi Arabia has a chemical or biological weapons program.[5] Indeed, the Kingdom long has denied any intention to acquire WMD of any type and, similar to Egypt, has called for an agreement to make the Middle East a WMD-free zone.[6] In Autumn 2002 Prince Naef bin Ahmed Al-Saud, a colonel in the Saudi Armed Forces with responsibilities for strategic planning, noted that "Proliferation must be seen in terms of regional realities: the Israeli monopoly in nuclear weaponry, defiance by Pakistan and India of nonproliferation regimes, and reported efforts by both Iraq and Iran to develop nuclear capabilities."[7] At least one Saudi newspaper has expressed concern about Iran's nuclear intentions by noting that, "the danger will include countries such as Saudi Arabia, Oman, Iraq, Afghanistan, Turkmenistan, and Azerbaijan."[8]

Speculation about the Kingdom's potential interest in acquiring nuclear weapons goes back to the 1980s. Saudi Arabia originally signed the NPT in 1988 to address concerns that it wanted to arm its newly acquired DF-3 (CSS-2) intermediate range ballistic missiles (IRBM) with nuclear warheads. The missiles had been acquired from China at some point between 1986 and 1988. The transfer

was significant because it provided the Kingdom with the longest-range ballistic missiles (2,700-2,800km) outside the Permanent Five members of the United Nations (UN) Security Council. Indeed, the DF-3 gave Saudi Arabia the capability to strike targets throughout and beyond the Middle East. Moreover, the missiles had been withdrawn from Chinese service as nuclear delivery systems, although they reportedly were modified prior to shipment as non-nuclear capable systems.[9] Despite suspicions that Saudi Arabia planned to arm the missiles with unconventional warheads, Riyadh claimed it had no intention to do so.

In early September 2002, Israeli Prime Minister Ariel Sharon said that "there might be Saudi money involved" in Libya's nuclear weapons program, but this had not been confirmed.[10] There has been much greater speculation about a potential nuclear link with Pakistan. Since the 1980s, there have been suspicions that Saudi Arabia has paid, or wanted to pay, Pakistan to conduct research and development of nuclear weapons. These suspicions have been based in part on the history of defence cooperation between the two countries including, for example, the training of Saudi pilots and naval collaboration. In recent years, suspicions have been fed by several visits to Pakistan by Saudi officials. In 1999, a team of defence officials visited Pakistan's enrichment and missile assembly facilities at Kahuta where they were briefed by A. Q. Khan, the father of the Pakistani nuclear weapons program.[11] In 2002, the son of Crown Prince Abdullah was reportedly an invited guest at the test firing of Pakistan's 950-mile range *Ghauri* nuclear-capable missile.[12] More recently in October 2003, it was alleged that Abdullah visited Pakistan and concluded a secret agreement on "nuclear cooperation" to cover nuclear technology in return for cheap oil. However, Saudi Arabia has denied this allegation.[13] Recent revelations about the role of Khan in proliferating nuclear technology to several states of concern has further fueled suspicion about the Saudi-Pakistan nuclear connection.[14] Indeed, Khan has travelled to Saudi Arabia in the past, although it is not known what he actually did during his time in the Kingdom.[15]

Prince Naef argued in 2002 that, "Saudi Arabia does not accept the notion that a Pakistani bomb is an Islamic bomb. Instead, national interest is regarded as the most likely factor affecting how nuclear

capabilities will be used. Nevertheless, regional competition increases concern among Saudis over the spread of WMD and ballistic missiles. Moreover, despite the lack of evidence that Riyadh may be pursuing a nuclear option, some speculate on the possibility."[16] Indeed, it was reported in September 2003 that Saudi Arabia was conducting a strategic review including deliberations related to the potential acquisition of nuclear weapons. The review appears to be the result of a growing perception of strategic vulnerability prompted by several interrelated factors, including: the crisis over Iran's nuclear program and intentions, the lack of international pressure to address Israel's nuclear arsenal, general regional instability in the Middle East, and the deterioration of relations with the United States since September 11, 2001 (9/11), including concerns about the reliability of U.S. security guarantees and the American nuclear umbrella. Although it is not known whether a decision has yet been made, the strategic review reportedly is considering three potential options on the nuclear front: (1) acquiring nuclear weapons for deterrent purposes; (2) maintaining an alliance or entering into a new alliance with an existing nuclear weapon power; and (3) seeking an agreement for a Middle East free of nuclear weapons.[17]

Nuclear Capabilities.

The national nuclear authority in Saudi Arabia is the King Abdul Aziz City for Science and Technology (KACST) in Riyadh.[18] KACST describes itself as "an independent scientific organization of the Saudi Arabia Government"[19] which provides "scientific and technological advice" and conducts "applied research programs and joint research activities with other international scientific institutions." KACST assists the private sector in applied research for promoting agricultural and industrial development and funds research projects in universities such as studies of alternative energy resources and sewage water treatment.[20]

The Atomic Energy Research Institute (AERI) was established within KACST in 1988 with the aim of adapting the nuclear sciences and technologies and utilizing them "in support of the economic, industrial and agricultural plans of the Kingdom." The objectives of

AERI include drafting a national atomic energy plan and supervising its implementation; conducting research in the field of nuclear technologies; identifying manpower requirements in the area of atomic energy research; and training and developing manpower in the area of atomic energy research."[21] To do this, the institute has several departments: a Radiation Protection Department; an Industrial Applications Department; a Nuclear Reactors and Safety Department; and a Materials Department.[22] The institute has programs that focus on industrial applications of radiation and radioactive isotopes, nuclear power and reactors, nuclear materials, and radiation protection.

A review of available open sources generated the following observations related to Saudi Arabia's nuclear capabilities.

Uranium Resources. The U.S. Geological Survey makes no reference to uranium resources in its 2001 report on Saudi Arabia's mineral sector.[23] However, it is evident that the Kingdom has conducted research into uranium prospecting, mining, and milling. In 1986, the IAEA approved a technical cooperation agreement with KACST and the Nuclear Engineering Department of King Abdul Aziz University to provide "training for the application of neutron capture techniques in in-situ mineral exploration." The agreement covered prospecting, mining and analyzing raw nuclear materials.[24]

Saudi Arabia does not appear to be involved in the recovery of uranium from phosphate rock. However, relevant research has been conducted in this area in the past. In 1987, for example, an academic currently at King Abdul Aziz University wrote a Ph.D. thesis on "The Separation and Determination of Rare Earths in Phosphate Deposits from the North of the Kingdom of Saudi Arabia."[25] Saudi Arabia's phosphate mines are operated by the Ma'aden mining company,[26] which was founded in 1997 to become the focal point of the country's minerals sector. Ma'aden operates mines at Al Hajar, Al Sukhaybarat, and Bulgah which produce gold and silver. A mine at Mahad Ad Dabab produces copper, gold, and silver; and a mine at Al Amar produces copper, zinc, and gold. The company is carrying out exploration programs in the Al-Jalamid and Umm Wu-al areas.[27]

Nuclear Power. Saudi Arabia does not possess a nuclear power reactor. However, the Kingdom has certainly demonstrated an

interest in nuclear power since at least the late 1970s. The IAEA approved a technical cooperation project in 1978 on nuclear energy planning with the Atomic Energy Department, Ministry of Petroleum and Mineral Resources, in Saudi Arabia. The aim was to establish "training and research institutions with regard to the introduction of nuclear power in the country."[28] It is evident that the Kingdom's interest in nuclear power has focused, at least partially, on its potential application in the desalination of seawater.[29] Indeed, researchers from AERI and the Nuclear Engineering Department of King Abdul Aziz University recently conducted research into the role of nuclear desalination in Saudi Arabia.[30] In 2001, the IAEA approved a technical cooperation agreement with AERI on transferring and enhancing national capabilities and skills "in modern forecasting techniques for the development and regular updating of future energy demands and optimal expansion plans for the power sector."[31]

Reprocessing, Spent Fuel and Waste Storage. Although Saudi Arabia does not appear to possess a reprocessing capability, the AERI has four laboratories of potential relevance in this field. These include laboratories for physical separation, chemical separation, radio chemistry, and radioactive isotopes and chemical separation.[32]

Saudi Arabia does not have a spent fuel and waste storage capability. However, AERI is responsible for controlling radioactive waste disposal "in all installations that use radioactive material" and is reported to be preparing national regulations for radioactive waste disposal.[33] In 1995, the IAEA approved a technical cooperation agreement with AERI to establish a "comprehensive radioactive waste management program covering regulations, storage, and treatment." The agreement covered safety issues and technologies related to radioactive waste management.[34]

Research Reactor. Saudi Arabia does not have a research reactor. However, it should be noted that the IAEA has provided extensive assistance to develop nuclear research and applications in the Kingdom.[35] According to one source, Saudi Arabia opened a nuclear research centre in a desert military complex at Al-Suleiyel, near Al-Kharj in 1975.[36]

Delivery Capabilities. Saudi Arabia's potential nuclear delivery capabilities include both ballistic missiles and aircraft. Saudi Arabia

possesses 40-60 DF-3 (CSS-2) IRBMs, which can carry payloads of up to 2,500kg. The DF-3 is a single stage missile with a circular error probable of 1km. The missiles are reportedly deployed at two sites located 500km (al-Sulaiyil) and 100km (al-Joffer) south of Riyadh.[37] The missiles had been withdrawn from Chinese service as nuclear delivery systems, although they reportedly were modified prior to shipment as non-nuclear capable systems.[38] Their current status is unknown. According to one recent report, Saudi Arabia and Pakistan "have arranged a deal by which Pakistan will provide Saudi Arabia with nuclear technology in return for cheap oil," and the Kingdom will also acquire a new generation of Chinese-supplied long-range missiles with a range of 4,000-5,000km.[39] In terms of fighter and ground attack aircraft, Saudi Arabia is reported to possess 50 F-15s (with 75 on order), 91 F-15C/D *Eagles*, 24 *Tornado* ADVs (F Mk3), 92 *Tornado* IDs, approximately 64 F-5E/Fs and 10 RF-5Es.[40]

EGYPT

Egypt acceded to the NPT in 1981 and its comprehensive Safeguards Agreement entered into force in 1982 (INFCIRC 302).[41] However, the country has been critical of the nuclear nonproliferation regime primarily because of Israel's possession of nuclear weapons. In a debate at the UN General Assembly in late September 2003, Egyptian Foreign Minister Ahmed Maher said, "It is unacceptable that Israel's possession of such weapons should remain a reality that some prefer to ignore or prevent the international community . . . from facing it squarely and frankly."[42] According to the Wisconsin Project, Egypt strongly opposed efforts to extend the NPT indefinitely in 1995.[43] Despite this lack of faith in the nonproliferation regime, Egyptian President Hosni Mubarak frequently has proposed the creation of a WMD-free zone in the Middle East as a way to address the nuclear threat posed by Israel and the wider challenge of proliferation.[44]

Throughout 2003-04, it appears that Egypt has, in its public statements, continued to be much more concerned about Israel's nuclear arsenal than Iran's recent nuclear activities. As the Egyptian Foreign Minister said after John Bolton visited Egypt in June 2003, "Talks with the American official dwelt on Israel's nuclear

arms."[45] Moreover, Egyptian-Iranian relations appeared to improve significantly in late 2003 when negotiations were initiated over the resumption of diplomatic relations between the two countries.[46]

In 2004 and early 2005, several media reports claimed that Egypt has been working on a clandestine nuclear program. These have included a few reports about potential "Egyptian links" to Libya's nuclear program in the past. One report even referred to "evidence uncovered by a British-U.S. team of nuclear inspectors" working in Libya which confirmed "an exchange of nuclear and missile technology between Libya and Egypt in late 2003."[47] Officials reportedly stated that the evidence confirmed suspicions of a 3-year-long secret trade between Cairo and Tripoli in strategic weapons obtained from North Korea.[48] Egyptian links with Libya in the nuclear field are believed to go back to the early 1970s. According to Shyam Bhatia writing in 1988, a link developed between Libya and high calibre Egyptian nuclear scientists in the early 1970s. This link reportedly resulted in the transfer of manpower and ideas to Libya. Bhatia wrote that Egypt explored the possibility of using Libyan money to keep up the momentum of research and development at Egypt's nuclear center at Inshas and other locations, and both Qadhafi and Nasser reportedly gave this project their personal backing. However, Libyan-Egyptian cooperation was short-lived because relations between the two countries deteriorated in the mid-1970s when it emerged that Libya had backed a plot against Egyptian President Sadat.[49] Relations between the two countries later had recovered sufficiently to enable joint research in nuclear-related fields including personnel exchanges.[50]

In addition to the alleged link with Libya, it was reported in November 2004 that the IAEA was looking into why plutonium particles had been discovered near a nuclear facility in Egypt.[51] This was followed in January 2005 by a report that, according to diplomats, the IAEA "has found evidence of secret nuclear experiments in Egypt that could be used in weapons programs."[52] A report by the IAEA Director General to the Agency's Board of Governors dated February 16, 2005, and leaked into the public domain shortly thereafter, subsequently confirmed that Egypt, indeed, had possessed undeclared materials and conducted undeclared activities

at its Inshas Nuclear Centre near Cairo. The materials and activities related to uranium extraction and conversion, the irradiation of uranium targets, and reprocessing. The key findings of these IAEA investigations related to Egypt are included in the sections below.

Nuclear Capabilities.

The Egyptian Atomic Energy Authority (AEA) is at the center of the country's civilian nuclear program and the main AEA nuclear research center is located at Inshas near Cairo. Egypt has conducted a considerable amount of nuclear relevant research. A review of available open sources generated the following observations related to Egypt's nuclear capabilities.

Uranium Resources. The AEA Nuclear Materials Authority has undertaken various technical co-operation projects with the IAEA on uranium exploration since 1989.[53] However, Egypt appears to have placed an emphasis on extracting uranium from phosphates as opposed to mining uranium itself. For example, IAEA investigations in 2004 revealed that Egypt's Nuclear Materials Authority (NMA) had conducted a project to separate uranium at a Phosphoric Acid Purification Plant at Inshas, although "it was never able to work as designed for the separation of uranium." It was also discovered that the NMA currently has "a program for heap leaching of uranium ore in the Sinai and Eastern deserts." The Egyptian authorities have claimed that "none of the uranium ore concentrate produced as a result of its leaching activities has been of a purity and composition that required it to be reported" to the IAEA.[54] In 1990, the AEA began a technical cooperation program with the IAEA titled, "Potential for yellowcake production." The objective was to provide expert services to undertake a prefeasibility study to assess the potential of two sites for a pilot plant.[55]

Conversion, Enrichment, and Fuel Fabrication. The IAEA noted in February 2005 that investigations in 2004-05 had revealed that, prior to Egypt's Safeguards Agreement taking force in 1982, it imported nuclear material and conducted uranium conversion activities, using some of this material at Laboratories in the Nuclear Chemistry Building at Inshas.[56] According to the Egyptian

authorities, the experiments were designed within the "framework of staff development for the front end of the fuel cycle." Initial IAEA investigations have discovered that Egypt failed to include in its first report to the Agency in 1982 "approximately 67 kg of imported UF4, 3 kg of uranium metal (some of which had been imported, and some of which had been produced from imported UF4), approximately 9.5 kg of imported thorium compounds, and small amounts of domestically produced UO2, UO3 and UF4."[57]

In January 2005 it had been reported that, according to diplomats, the IAEA "has found evidence of secret nuclear experiments in Egypt" involving the production of "various components of uranium." The Egyptians reportedly have produced "several kilograms of uranium metal and of uranium tetrafluoride—a precursor to uranium hexafluoride gas." According to the diplomats, the work appears "to have been sporadic, involved small amounts of material, and to have lacked a particular focus," indicating that it was "laboratory scale" and "not directly geared toward creating a full-scale program to make nuclear weapons."[58] The experiments reportedly were conducted mainly during the 1980s and 1990s, but there may also be evidence suggesting that some experiments "were as recent as a year ago."

Egypt does not appear to have an established enrichment program but research has been performed on relevant processes. For example, scientists at Cairo University have researched the chemical exchange process as a method of uranium isotope enrichment.[59] Moreover, research has been conducted at the University of Alexandria on multicomponent isotope separation in asymmetric cascades, which could potentially be used in uranium enrichment using aerodynamic methods.[60]

The AEA has a Fuel Manufacturing Plant to produce the nuclear fuel necessary for the operation of the Agency's multipurpose reactor. According to the AEA: "The starting material is uranium hexafluoride (UF_6) gas, 19.75 percent enrichment. This is converted into U_3O_8 through treatment with ammonia and water in special chemical reactors. This is followed by filtration and thermal treatment to get the appropriate particle size of U_3O_8. The oxide powder is mixed with aluminium powder and cold-pressed under 4.5 tons/cm^2 into compacts, which are then cladded with sheets of aluminium 6061

alloy, and sealed by welding all around."[61] The plant can produce two fuel elements per month, which is sufficient for the continuous operation of the reactor. According to the Wisconsin project, Egypt had plans to build a larger fuel fabrication plant in the mid 1990s with help from Germany.[62] However, these plans do not yet appear to have come to fruition.

Nuclear Power. Egypt does not have any nuclear power reactors. The Egyptian government has shown interest in starting a civilian nuclear power program since the 1960s. The Federation of American Scientists states that in the mid-1970s, the United States pledged to provide Egypt with eight nuclear power plants, and the necessary cooperation agreements were signed. This project was cancelled in the late 1970s after the United States unilaterally revised the bilateral agreements and introduced new conditions that were unacceptable to the Egyptian government.[63]

Interest in nuclear power reactors has continued, and Egypt has carried out several relevant research programs. In 2001, the AEA began a technical cooperation project with the IAEA entitled, "Human Resource Development for Nuclear Power Project Preparation and Project Management." The project's objective was to "transfer knowledge, information, and experience related to the development of human resources for planning and implementing a nuclear power project for electricity generation and/or desalination."[64] It was reported in September 2002 that an Egyptian government minister had announced the country's intent to build a nuclear power plant on the north coast of Egypt, although no details of the plan were available.[65] Indeed, initial negotiations reportedly were underway in 2001 with Russia, after Egypt requested information about Russia's atomic energy industry. According to General Director of Russia's *Atomenergostroi* Viktor Kozlov, contracts may be signed as early as 2006.[66] Although new plans have not yet been announced, the media reported that Egypt has held negotiations with both China and Russia over the construction of nuclear power plants.[67] However, it was reported later in 2004 that the likely site for a nuclear power plant, Dabba, was about to be turned into a tourist resort.[68]

Reprocessing, Spent Fuel, and Waste Storage. It has emerged as a result of recent IAEA investigations that in the late 1970s, Egypt concluded a number of contracts with a foreign company to construct

a laboratory (the Hydrometallurgy Pilot Plant) for conducting "'bench scale radiochemistry experiments' involving the separation of plutonium and uranium from irradiated fuel elements of the 2 MW research reactor." According to Egyptian authorities, the experiments were motivated by plans to construct eight nuclear power plants and to develop expertise in the nuclear fuel cycle.[69]

In 1987, Egypt subsequently performed "acceptance tests using unirradiated uranyl nitrate in chemical reagents" at the Hydrometallurgy Pilot Plant. The uranyl nitrate had been blended with a solution acquired from the dissolution of domestically produced scrap UO2 pellets (estimated total weight of 1.9 kg of uranium compounds). However, Egypt failed to report to the IAEA both the materials and their use in test.[70]

The reason offered by Egypt for not including the Hydrometallurgy Pilot Plant in its initial declaration to the IAEA in 1982 is that it "had not considered it to be a facility since it was being constructed only to carry out bench scale radiochemistry experiments." The IAEA believes the plant constituted a nuclear facility, given its intended purpose and design capabilities, and Egypt should have informed the Agency "as early as possible prior to the introduction of nuclear material into the facility." [71]

Further undeclared activities took place between 1990 and 2003. Egypt informed the IAEA in December 2004 that, between 1990 and 2003, 16 experiments had been performed, "involving the irradiation of small amounts of natural uranium in its reactors to test the production of fission product isotopes for medical purposes." Twelve experiments involving a total of 1.15g of natural uranium compounds took place at the 2MW research reactor between 1990 and 2003. Four experiments involving 0.24g of natural uranium compounds took place at the 22MW reactor between 1999 and 2000. Nine thorium samples also were irradiated in the 2MW reactor. Moreover, the irradiated targets "had been dissolved in three laboratories located in the Nuclear Chemistry Building" although Egypt claims that "no plutonium or U-233 was separated during these experiments." According to the Egyptian authorities, similar experiments were performed before its Safeguards Agreement took force, and between 1982 and 1988, but that it has been unable thus far to locate relevant source documentation with respect to such experiments." [72]

Egypt also informed the IAEA in December 2004 that it had not included in its initial Safeguards report imported "unirradiated fuel rods containing uranium enriched to 10% U-235 and some of which had been used in experiments" at the Nuclear Chemistry Building prior to its Safeguards Agreement taking force. The experiments were reported to have involved "laboratory scale testing of fuel dissolution in anticipation of the development of a reprocessing laboratory."[73]

Egypt currently is constructing a new Radioisotope Production Facility at Inshas for the separation of radioisotopes from uranium enriched to 19.7 percent in U-235 to be irradiated at the 22MW reactor. However, the Egyptian authorities have informed the IAEA that no nuclear relevant equipment yet has been acquired for the facility. According to the IAEA, the decision to construct the facility should have been conveyed to Vienna "no later than 1997 when it undertook to provide early design information for new facilities."[74]

Research Reactors. Egypt commissioned its first research reactor, the 2MW Soviet-supplied ET-RR-1 in 1961.[75] A second, the 22MW open pool Multi-Purpose Reactor (MPR), was commissioned in 1997. The MPR, supplied by the Argentine company, INVAP, is designed to produce radioisotopes for industrial and medical applications, as well as research on neutron physics and training personnel.[76] Both reactors are located at Inshas and are under IAEA safeguards.

It is reasonable to assume that, based on standard operating levels, the MPR will produce about 22g of plutonium per day of operation. Assuming that the MPR runs for 300 days a year (if in heavy service), it would produce 6.6kg of plutonium per year. The Fatman nuclear bomb used by the United States in 1945 used 6.5kg of plutonium.[77]

Delivery Capabilities.

Egypt's potential nuclear delivery capabilities include both ballistic missiles and aircraft. Egypt has a range of ballistic missiles both in its inventory and under development. Egypt is reported to have nine *SCUD*-B launchers[78] and slightly over 100 *SCUD*-B missiles. The inventory also reportedly includes approximately 90 Project T missiles, with a range of 450km and a payload of 985kg.[79] Other

ballistic missiles apparently are being developed. There are reports that Egypt has developed an enhanced *SCUD*-C missile, with a range of 550km and a 500kg payload. Furthermore, Egypt reportedly signed an agreement with North Korea in 2001 to purchase the 1000km-range *Nodong* system. [80] These reports have not been confirmed. It is also reported that Egypt is developing the Vector missile with a range of 800-1,200km and a 450-1,000kg payload.[81] In March 2004, it was reported that evidence was uncovered by a British-U.S. team of nuclear inspectors working in Libya that, "an exchange of nuclear and missile technology between Libya and Egypt" took place "in late 2003."[82] Egypt possesses seven squadrons of fighter-ground attack aircraft (including *Mirage* 5E2) and 22 squadrons of fighter aircraft (including F-16A and D, *Mirage* 2000C and 5D/E, and *MiG*-21).[83] It would appear that the range of combat aircraft available to Egypt would provide Cairo with a theoretical capability to deliver nuclear weapons.

TURKEY

Turkey's ratification of numerous nonproliferation agreements commits the country to the application of nuclear technology for purely peaceful purposes. These commitments include the NPT, IAEA Safeguards (including the Additional Protocol) and the Comprehensive Test Ban Treaty (CTBT).[84] Although the country does not possess a nuclear power reactor, the Turkish Atomic Energy Authority (TAEK) conducts a considerable amount of research in the nuclear field and operates one research reactor.[85]

In the recent past, Turkey has shown considerable interest in establishing a civil nuclear power sector to alleviate energy shortfalls. The country is a net energy importer because it is not rich in energy resources. For example, Turkey imported 62 percent of its energy requirements in 2001. Turkish government officials believe this figure will increase by about 8-10 percent annually up to 2010, which will necessitate an installed power production capacity of approximately 46GW.[86] In 2002 and 2003 there were calls from national newspapers,[87] and even the head of the TAEK,[88] for Turkey to initiate a nuclear power program in order to reduce energy

imports. The Turkish government demonstrated a renewed interest in nuclear power in 2004. In November 2004, Turkish Minister of Energy and Natural Resources Hilmi Guler said Turkey should be producing 4,500MW of nuclear power beginning in 2012[89] with three nuclear power plants.[90]

There is no evidence in available open sources that suggests Turkey has a nuclear weapons program. Indeed, given the openness of Turkey's nuclear research program, small uranium reserves, and lack of enrichment and reprocessing capabilities, it is difficult to believe that Ankara could develop a weapons program in the near future. Although some allegations have been made about the potential proliferation threat posed by Turkey, it is important to note that most have been voiced by Greek officials and focused on alleged nuclear cooperation between Turkey and Pakistan. For example, following a military coup in Turkey in September 1980, military leaders of Turkey and Pakistan reportedly exchanged a series of official visits, which prompted Greek Prime Minister Papandreou to accuse Pakistan of expecting Turkey "to act as a trans-shipper of material for a nuclear bomb" and likely to "reciprocate by proudly sharing the nuclear bomb technology with Turkey."[91] Moreover, following the Indian and Pakistani nuclear tests an article in the Turkish daily "Radical" reported that then Pakistan Prime Minister Nawaz Sharif offered Turkey cooperation on nuclear weapons by stating, "Let's work together on nuclear weapons."[92]

Ankara certainly has reacted with concern to Iran's recent activities in the nuclear field. Defense Minister Vecdi Gonul noted in November 2003 that Iran's efforts to export its own revolution, its contradictory attitude towards terrorism, and its policies towards Armenia and Azerbaijan are not in line with Turkey's interests, and make it difficult for Ankara to develop bilateral relations with Tehran. Moreover, he noted that Iran might be working on the production of nuclear, biological, and chemical weapons, which would threaten the whole region.[93] As Larabee and lesser note, a nuclear-armed Iran "could dramatically change the security equation for Turkey and could have broader consequences for military balances elsewhere on Turkey's borders."[94] However, it was reported on November 19, 2004, that Turkish Foreign Minister Abdullah Gul had told

journalists in Ankara that Turkey wanted the Middle East to be a region free of nuclear weapons. With regard to American concerns over Iran's nuclear activities, Gul said he expected caution on both sides, adding that Iran had a "long-standing place in the region. It would probably be very cautious. So we expect the problem to be resolved eventually."[95] It would appear, then, that there may be a substantial difference of opinion between the Foreign and Defence ministries in Turkey in terms of threat perceptions related to Iran.

Although Turkish and Israeli military and civilian officials appear to have discussed "joint threats" as part of their strategic cooperation,[96] it is not known to what extent Iran and its nuclear ambitions have featured in their discussions.

Nuclear Capabilities.

It appears that almost all aspects of the nuclear fuel cycle have been examined in Turkey except uranium enrichment. The Çekmece Nuclear Research and Training Centre is in charge of these activities, which are conducted by a network of nuclear-related research centers and laboratories based at government facilities and universities.

Uranium Resources. It was reported in November 2004 that Hilmi Guler had said that Turkey has 230,000 tons of thorium reserves and 9,200 tons of uranium reserves. Moreover, Guler noted that, while current technology in Turkey was more suited to uranium, thorium would be considered in the future.[97] Indeed, preliminary work has been conducted to survey, analyze, and determine the feasibility of using the country's natural thorium resources to fuel a future nuclear power industry in Turkey. Moreover, TAEK initiated a feasibility study on uranium extraction from phosphoric acid in the early 1980s, with assistance from the IAEA. According to the IAEA database on technical cooperation, this work is still active and may not yet be complete.[98] TAEK is working with ETI Holding and the Directorate General of Mineral Research and Exploration (MTA) on rare soil elements and the development of thorium extraction/purification technology.[99]

Conversion, Enrichment, and Fuel Fabrication. Turkey appears to have one facility capable of engaging in conversion activities, a fuel pilot plant at the Çekmece Nuclear Research and Training Centre.

The extent of the facility's work remains unclear.[100] Moreover, while Turkey does not appear to have any enrichment capabilities, some potentially relevant research has been conducted at Turkish universities.[101]

Turkey has experimented with nuclear fuel fabrication on a laboratory scale. Relevant experiments have been conducted at several universities in Turkey, with research undertaken to understand the properties of nuclear fuel and the process of fuel fabrication. Dr. Gungor Gunduz, Department of Chemical Engineering, Middle East Technical University (METU), has participated in numerous projects with the TAEK and supervised student projects in this field.[102] Fuel fabrication experiments and uranium analysis studies have also been conducted in the Department of Chemistry, Cumhuriyet University.

Nuclear Power. Although Turkey does not have a nuclear power plant, the country has shown an interest in nuclear power ever since U.S. President Dwight Eisenhower's Atoms for Peace speech in December 1953. However, it was not until the mid-1990s that Turkey made its most definite attempt to initiate a civil nuclear power program. In 1996, following additional feasibility and exploration work conducted by the Korean Atomic Energy Institute (KAERI), Turkey invited bids to construct a nuclear power plant at Akkuyu. By the end of 1997, three competing vendors were negotiating with Turkey for the deal: AECL (Canada), Nuclear Power International (NPI)—which included Germany's Siemens and France's Framatome—and the U.S. Westinghouse Electric Co. However, Turkish Prime Minister Bulent Ecevit announced in July 2000 that the Akkuyu project had been cancelled, blaming it on the International Monetary Fund's demands on Turkey with regard to its domestic economic policies. The country's nuclear power program was shelved indefinitely, and TAEK recommended Turkey's concentration on the development of natural gas and hydroelectric options until at least 2015.[103]

The Turkish government began to demonstrate a renewed interest in nuclear power in 2004. In May 2004, Guler reportedly said that technical studies continued on nuclear power plants, Turkey would "soon get in touch with the countries producing such power plants," and that things are at the specifications of contract stage. According

to Guler, the government wants to involve the private sector in all kinds of investment in the energy sector, but the government could invest itself where necessary.[104] During a visit to Brazil in October 2004, Turkish Finance Minister Kemal Unakitan was due to hold talks with officials in Sao Paolo and Rio de Janeiro on economic relations. The meetings were expected to focus in part on cooperation in many fields including nuclear energy.[105]

Guler said in November 2004 that Turkey should be producing 4,500MW of nuclear power from 2012.[106] The Turkish Ministry of Energy and Natural Resources also issued a statement in November 2004 noting that nuclear power was one of the most important alternative energy sources for Turkey. According to the ministry, Turkey is one of the few developing countries that possesses the infrastructure to transfer and to develop nuclear technology.[107] According to a report dated November 19, 2004, Guler said Turkey was planning to construct three nuclear power plants, and they would be on-line after 2011. Guler said that domestic resources were insufficient to meet the country's energy requirements, and an energy shortage could occur if no measures are taken. According to Guler, Turkey plans three nuclear plants to prevent such a shortage. The goal is to generate 8-10 percent of the country's energy needs using nuclear power plants. Guler said that the plan is to fuel the plants with uranium, and that current technology in Turkey was more suited to uranium, altough thorium would be considered as a fuel in the future.[108]

Reprocessing, Spent Fuel, and Waste Storage. Since the late 1980s, academics and government scientists in Turkey have worked both at home and abroad on studies to determine the most effective method for reprocessing spent fuels.[109] For example, a research project involving the Nuclear Engineering Department of Hacettepe University and the TAEK Nuclear Safety Department established feasible flow sheet calculations for using the solvent extraction process to reprocess thorium based spent fuel.[110] The project was carried out in anticipation that Turkey may eventually build a thorium-based HTR reactor.

The majority of Turkey's radioactive waste classified as low-level is produced by the country's single research reactor, several research centers, and radiological sources in universities, hospitals,

and industries. The waste is collected, treated, and stored at the Radioactive Waste Processing and Storage Facility of the Çekmece Nuclear Research and Training Centre.[111]

During negotiations to build a power reactor at Akkuyu, Turkey started to plan for an interim storage facility to accommodate spent fuel. Negotiations were initiated with Bulgaria and Hungary in 1997 to establish a regional interim storage facility or repository in south Eastern Europe—potentially in a remote location in Turkey. The site would have served as an interim storage facility or potential repository for spent fuel from the planned Akkuyu power reactor and reactors in Bulgaria and Hungary.[112] Given the cancellation of the Akkuyu project, negotiations with these countries are not likely to continue.

Research Reactors. Turkey has one operational research reactor. The ITU-TRR is a 250 kw *TRIGA* Mk II reactor, which was supplied by General Atomics and went critical in 1979.[113] The reactor is located at the Istanbul Technical University, operated by the Institute for Nuclear Energy, and licensed by TAEK. Turkey's first research reactor, the 1MW TR-1 located at Çekmece Nuclear Research and Training Centre, was shut down in 1977.[114] The country's second research reactor, the TR-2, a 5MWth upgrade of the TR-1, was shutdown in 1995.[115]

Delivery Capabilities.

Turkey's potential nuclear delivery capabilities include both ballistic missiles and aircraft. Turkey is reported to be developing a satellite launch vehicle (SLV) similar to the French *Ariane* SLV, which could potentially form the basis of a theoretical nuclear missile. The project is scheduled for completion by 2010 at the earliest, if the rocket and the satellite are completed simultaneously. The Rocketan Corporation has begun production activities related to the rocket under the supervision of the Turkish Aviation Institution. Other organizations involved include the Turkish Armed Forces, the Middle East Technical University, Istanbul Technical University, and the Turkish Scientific and Technical Research Institution. No decision yet has been reached on the location of the launch site, which is expected to be situated on the Turkish coast.[116] Turkey is believed to have 120

MGM-140 Army Tactical Missile Systems (ATACMS), with a range of 160km and a payload capability of 450kg.[117] The Turkish Air Force has a range of combat aircraft including 223 F-16 fighter aircraft (193 F-16C and 30 F-16D); 87 F/NF-5A/B fighter ground attack aircraft; and 170 F-4E aircraft (88 fighter ground attack, 47 fighters, and 35 recce).[118] In addition, the air force now has some 100 Israeli *Popeye*-1 air-launched standoff missiles, with a range of 100km and a payload of 360kg. One hundred more may be delivered by Israel, and there are plans to co-produce, with the Israeli firm, Rafael, *Popeye*-2 air-launched standoff missiles, with a 350km range and a payload of 360kg.[119]

SYRIA

Syrian President Bashar Assad effectively admitted in an interview published in January 2004 that his country has developed chemical and biological weapons as a last resort defence against Israel.[120] Indeed, it has long been known that Damascus possesses a substantial chemical warfare capability and a more limited biological weapons capability.[121] From a review of available open sources, however, it does not appear that Syria is pursuing seriously the development of nuclear weapons. Moreover, it appears that Syria does not currently possess the infrastructure and personnel necessary to establish a nuclear weapons program, bar significant infusions of external assistance.[122] This assessment reflects Syria's non-nuclear weapons status under the NPT,[123] which has been subject to IAEA verification since the country's Safeguards Agreement (INFCIRC 407) took force in 1992.[124] Syria has not concluded an Additional Protocol with the IAEA or signed the CTBT.[125]

The U.S. National Intelligence Council noted in December 2001 that the American intelligence community "remains concerned about Syria's intentions regarding nuclear weapons."[126] The country's limited infrastructure includes a nuclear research center at Dayr Al Hajar[127] and a small Chinese-supplied research reactor under IAEA safeguards. In May 1999, Damascus signed a "broad nuclear cooperation agreement" with Russia covering the construction of a small light-water research reactor, which will be subject to IAEA safeguards.[128] Syria and Russia have also approved "a draft

cooperative program on cooperation in the civil nuclear power field." It has been assessed by U.S. intelligence that, "In principle, broader access to Russian expertise provides opportunities for Syria to expand its indigenous capabilities, should it decide to pursue nuclear weapons."[129] In 2004, there were reports alleging that Syria may have acquired centrifuge enrichment technology from the A. Q. Khan network.

In March 2004 an agreement reportedly was signed between Syria and Iran on defense and military cooperation.[130] Both Syria and Iran confront a similar strategic situation and appear to recognize that they have a vested interest in cooperating with each other to retain their political independence. Both countries are united against Israel in support of the Palestinians, Hezbollah, and Lebanon. Moreover, they were both rivals of the Iraqi Ba'athist regime of Saddam Hussein, and both currently fear American hegemony and intentions in the region due to their own WMD ambitions and support for terrorism.[131]

Nuclear Capabilities.

The Atomic Energy Commission (AEC) is at the center of Syria's civilian nuclear program. A review of available open sources generated the following observations related to Syria's nuclear capabilities.

Uranium Resources. Syria has conducted significant work to examine the feasibility of exploiting phosphatic rock to recover uranium. The country is rich in phosphatic rock deposits and produces around one-fifth of the phosphate rock mined in the entire Middle East.[132] In 2001, Syria mined over 2.04 million tons of phosphate.[133]

Syria operates a uranium recovery micro-pilot plant at Homs.[134] The plant was designed to be the precursor for a pilot plant and an industrial scale plant, with potential operations such as refining, conversion, enrichment, and fuel fabrication.[135] However, a study, conducted to determine whether the technology used for extracting uranium from phosphoric acid produced at Homs could be industrialized, found that it was not feasible financially.[136] Damascus signed a tripartite contract with the IAEA and an unnamed entity in 1996 to improve its technical capabilities to recover uranium from triple superphosphate.[137]

Several Syrian experts reportedly have spent time at Ranstad Mineral in Sweden, a facility that extracted uranium for enrichment purposes between 1997 and 2002. Although the IAEA reportedly sponsored some of the visits, according to the facility's owner, Bengt Lillja, the Syrians made additional trips "on their own."[138]

Conversion, Enrichment, and Fuel Fabrication. Syria does not appear to have conversion, enrichment, or fuel fabrication capabilities. However, there were various reports in 2004 related to Syria's potential acquisition of enrichment related technology from the A. Q. Khan network. According to one report in August 2004, American officials believe that Syria received "an unspecified number" of P1 centrifuge components "in what could be the most significant step" in the country's "nascent nuclear weapons program." According to the officials, Firas Tlas, son of Syrian Defence Minister Mustafa Tlas, became a customer of A. Q. Khan in 2001. The components and other nuclear equipment reportedly were ordered by the Saddam regime in Iraq via Syria, and deliveries may have continued after Saddam's fall in April 2003.[139] In May 2004, however, it was reported that the U.S. intelligence community was divided on the issue of whether Syria had received technology from the clandestine network.[140] Moreover, a January 2004 report in *The Washington Post* noted that, although network middlemen from South Africa, Germany, the Netherlands, Sri Lanka, and elsewhere allegedly offered their services to Syria, the deals never apparently transpired.[141]

Moving beyond the centrifuge allegations, Syria does operate a *Cyclon*-30 cyclotron which was provided by Belgium's Ion Beam Applications (IBA).[142] IBA also supplied a cyclotron of the same model to Iran, which analysts suspect may have been used to research uranium enrichment.[143] The AEC had asked for IAEA assistance in 1996 to build a cyclotron facility at its Nuclear Medicine Centre. The project was approved by the IAEA, and construction of the facility began in 1997. The stated aim is to produce radioisotopes for medical purposes.[144] It should be noted that personnel at the AEC are also conducting research on CO_2 lasers, which could potentially be applied to laser isotope separation and therefore enrichment.[145]

Nuclear Power. Although Syria does not have a nuclear power reactor, it has long viewed nuclear energy as a viable source to meet Syria's future energy needs. Damascus performed a feasibility study

in the early 1980s with help from the IAEA to identify the requirements for a potential power program,[146] and since the late 1980s has actively sought to acquire a nuclear power capability. Syria initiated a plan in 1988 to build six nuclear power reactors by the late 1990s capable of producing 6,000MW at a cost of $3.6 billion. Although Belgium, the Soviet Union, and Switzerland were approached for assistance, the plan came to nothing as a result of financial and technical issues.[147] In 1990, for example, Syria asked the Soviet Union if it could buy up to four VVER-1000 power reactors and the associated fuel.[148]

Russia and Syria signed a Comprehensive Cooperation Agreement in 1997 under which Russia reportedly will build two nuclear reactors in Syria, although it is unclear whether they will be for research or power production.[149] Syria's continuing interest in nuclear power was demonstrated in 2001 when the IAEA agreed to provide assistance for another project to assess the potential role of nuclear power in the country.[150]

One potential application of nuclear power in Syria is desalination. The AEC is involved with Damascus University in a program to develop desalination technologies in conjunction with the Scientific National Commission for Water Desalination, based at the Higher Institute of Applied Science and Technology, Damascus.[151]

It was subsequently reported in 2003 that Russia and Syria had entered negotiations for the construction of a $2 billion nuclear facility in Syria. Russia's Ministry of Atomic Energy confirmed that discussions were underway to supply a nuclear power plant and a nuclear desalination plant, but no agreement had been reached.[152] However, the Russian Foreign Ministry denied that such discussions had taken place.[153]

Spent Fuel and Waste Storage. There do not appear to be any spent fuel storage facilities in Syria, although the AEC is currently planning to construct a waste processing facility. To this end, the AEC recently established a Radioactive Waste Management Division to collect, treat, and store naturally occurring radioactive waste from Syria's mining, oil, and natural gas sectors.[154]

Research Reactor. Syria's single 30kw research reactor—the SRR-1 (Syrian Research Reactor, Syrian Miniature Neutron Source Reactor)—was provided by China along with 90 percent enriched uranium fuel. The reactor is located at the Der Al-Hadjar Nuclear

Research Centre near Damascus, and went critical in 1996. It is used for basic and applied research and training reactor operators.[155] Syria and Russia have reportedly signed an agreement for the provision of a 25MW light-water pool-type research reactor to be housed in a new research centre.[156]

Delivery Capabilities.

Syria's potential nuclear delivery capabilities include missiles and aircraft. Syria has several hundred *SCUD*-B, *SCUD*-C and SS-21 missiles, according to *The Military Balance*[157] and the U.S. Department of Defense (DoD).[158] DoD states that Syria continues to acquire *SCUD*-related equipment and materials from Iran and North Korea, including considerable assistance from Pyongyang in producing *SCUD*-C missiles. According to *Jane's Defence Weekly*, Syria may have some *SCUD*-D missiles with a range of 650km.[159] Syria allegedly has tested a *SCUD*-B with a warhead designed to disperse VX nerve agent."[160] Damascus is also said to be attempting to develop a capability to arm ballistic missiles with biological warheads, although this has not been verified.[161] Since 1999, it is thought that Syria has worked on establishing a solid-propellant rocket motor development and production capability with external assistance from abroad, including Iran. In addition, DoD claims that foreign equipment and assistance for Syria's liquid-propellant missile program has come from North Korean entities, as well as Chinese and Russian firms. According to DoD, these developments are part of Syria's efforts to acquire a modern, solid-fueled, short-range missile.[162] Syria possesses 10 squadrons of fighter-ground attack aircraft (including Su-24, Su-22 and *MiG*-23 BN) and 16 squadrons of fighter aircraft (including *MiG*-21, *MiG*-23, *MiG*-25 and *MiG*-29A, and Su-27), according to *The Military Balance 2003-2004*.[163] The combat aircraft available to Syria would provide Damascus with a theoretical capability to deliver nuclear weapons.

CONCLUSION

The Iranian nuclear crisis has resulted in concerns about the potential response of some of Iran's neighbours, in particular

whether Tehran's behavior could prompt other regional actors to consider acquiring nuclear weapons. Within this context, the chapter sought to shed some light on the nuclear capabilities and ambitions of four key countries in Iran's immediate neighbourhood: Saudi Arabia, Egypt, Turkey, and Syria. These countries were singled out due to their relative proximity to Iran and because there have been suspicions that they have all been interested, at one time or another, in acquiring nuclear weapons. For each country, an assessment was made of current capabilities, including the various elements of the fuel cycle that could potentially be used to support nuclear weapons development and potential nuclear delivery systems. Attention also was given to the drivers of potential nuclear and other WMD programs in the countries concerned.

An analysis of available open sources revealed relatively little about national intentions in Saudi Arabia, Egypt, Turkey, and Syria regarding the acquisition of nuclear weapons—both in general terms and more specifically with regard to the current Iranian nuclear crisis. The lack of pertinent information in this respect appears to stem primarily from the political sensitivity of the issue and the relatively closed and nontransparent nature of the societies involved, with the exception of Turkey. In contrast, it was possible to develop a fairly detailed picture of the various elements of the fuel cycle currently in existence or being developed in the four countries, as well as their potential nuclear delivery options. It is assessed that each country currently lacks the technical capacity to build a nuclear weapon, barring significant infusions of external assistance. However, the recent exposure of Egypt's undeclared materials and activities is a significant cause for concern—not just in its own right, but in terms of whether it is indicative of a broader trend in the region already demonstrated by the Iran and Libya cases. Indeed, given that A. Q. Khan has previously visited Egypt, Saudi Arabia, and Syria, it is quite possible that, in addition to Iran and Libya, these countries also may have secretly acquired sensitive nuclear technology and expertise from this clandestine proliferation network in the past.

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CHAPTER 4

TURKEY, IRAN, AND NUCLEAR RISKS

Ian O. Lesser

INTRODUCTION

Turkey is among the countries most exposed to proliferation developments in the Middle East. New disclosures regarding Iran's nuclear ambitions, and Tehran's apparent commitment to proceed with more extensive IAEA inspections and safeguards, comes at a time of general flux in Turkey's strategic environment and in the country's foreign and security policy outlook. For some 50 years, Turkey has lived with nuclear weapons on its borders and deployed on its territory. Although not a nuclear state, and unlikely to become one, nuclear forces and doctrines have been part of the security calculus of the modern Turkish republic for the majority of its existence. But only since the Gulf War of 1990-91, and with increasing attention over the past few years, have Turkish planners and policymakers begun to view the combination of weapons of mass destruction (WMD) and the means for their delivery at longer ranges as a proximate threat to the security of the country.

In the context of a foreign and security policy that is, at base, conservative and multilateral, the Middle East is one region where Ankara has been prepared to think and act more assertively. The prospect of one or more nuclear or near-nuclear states on Turkey's Middle Eastern borders is now a significant factor in Turkish strategic thought. But in the nuclear realm, Turkey retains a strong preference for multilateral approaches, imbedded in the North Atlantic Treaty Organization (NATO)—and to an increasing extent, European—policies. The NATO (really the United States) nuclear guarantee has been the cornerstone of an approach that still owes much to Cold War patterns. Only very recently have Turkish strategists begun to contemplate a capacity for deterrence and response that goes beyond Alliance arrangements.

Turks worry about the reliability of both NATO and U.S. commitments to Turkish defense in Middle Eastern contingencies, and Turkey will be strongly affected by changes in Alliance strategy, missions, and cohesion, all of which are in flux. If the European Union (EU) does open formal accession talks with Ankara, as most Turks hope, the European part of this equation is set to grow in importance. While the defense dimension of Turkey's relations with Europe has been less prominent (and sometimes strained), this too is set to grow in prominence as the EU focuses more heavily on extra-European challenges, including proliferation.

Could Turkey act more radically, outside multilateral arrangements, to meet risks posed by a nuclear-ready Iran? The short answer is yes, but it is not very likely. Could Turkey "go nuclear"? Again, the answer is yes, but it is most unlikely. The key in both cases would be a sharp deterioration in the quality of Turkish defense cooperation with the West, and a sense that Turkey was being left to go it alone in a dangerous geo-strategic setting. Overall, the existence of a nuclear-ready Iran poses some direct risks to Turkish security—and many indirect but highly consequential ones. Implications for U.S. and Western policy abound.

This chapter explores the contours of Turkey's perceptions and potential responses to a nuclear-ready Iran. Section One discusses the Turkish strategic context, both regional and functional. Section Two assesses relations with Iran in the context of proliferation challenges, including the effect on wider regional dynamics. Section Three treats the range of possible Turkish responses to a nuclear or near-nuclear Iran, and external influences on Turkish choices. Section Four offers conclusions and policy implications.

SECTION ONE: THE TURKISH STRATEGIC CONTEXT

Turkey is a security-conscious society in which territorial defense and internal security remain priorities for the political class, the military, and the public. Broadly, the Turkish strategic culture displays several key characteristics that shape Ankara's approach to the challenge of a nuclear Iran, and relations with allies on proliferation matters. These characteristics include a pronounced sensitivity to

questions of national sovereignty (far higher the modern norm in Europe), a low threshold of tolerance for national insecurity and threats to the "homeland," a high threshold for intervention outside the country, and a willingness to act massively and decisively when this threshold is crossed (e.g., Cyprus in 1974 and more recent cross border actions in northern Iraq). Foreign policy debates in Ankara are also characterized by an historic tension between the Ataturkist tradition of nonintervention, even isolation, and demands for more active regional engagement. Turkey shares many of these characteristics with the United States.[1]

A Conservative Approach.

Turkish perceptions regarding Iran and proliferation issues are affected by a deep tradition of conservatism in foreign and security policy.[2] As a former imperial power, Turkey takes its regional role seriously, and Turkish strategists like to take the long view. Often, this puts them somewhat out of step with their Western counterparts. As an example, despite the transformation of western relations with Russia since the end of the Cold War, Turks have retained a very wary approach to Russian power and geopolitical aims. They have remained highly sensitive to the nuclear aspects of Russian doctrine, and Russia's role in places like the Balkans and Cyprus—at a time when it has become fashionable to down-grade or dismiss the Russian factor in Europe and even Eurasia. In historical terms, Turkey has seen Russia as its primary geo-strategic competitor. Turkey's relations with Arab neighbors in the Middle East have been colored by the experience of empire, including its collapse, leaving a legacy of mutual diffidence and mistrust. Iran, by contrast, has been a relatively stable and predictable neighbor, with no history of conflict with Ottoman Turkey or the Turkish republic.

Turks—like many others—have been relatively slow to adapt their security thinking to new risks, although this dimension of Turkey's conservatism in external policy is changing under pressure of new regional realities, and a new constellation of actors in the policymaking process. Turkey's very significant conventional military strength, with the second largest military establishment

in NATO, an increasingly modern force structure, and a growing capacity for power projection beyond its borders, is an important element in the country's perception of regional risks.[3] One the one hand, Turkey's overwhelming conventional superiority vis-á-vis its Middle Eastern neighbors, and its NATO membership, are obvious and very potent deterrents to aggression in relations with Iran, Iraq, and Syria. On the other hand, like their counterparts in Israel and the United States, Turkish strategists worry that their conventional superiority compels regional adversaries to adopt unconventional, asymmetric strategies. This can take the form of support for terrorism and insurgency, as with Syria's past support for the Kurdistan Workers Party (PKK), or the threat to use chemical, biological, or even nuclear weapons against Turkish population centers or bases.[4]

Like other NATO allies, much Turkish thinking about nuclear forces and doctrine derives from Cold War experience. For 50 years, Turkey was a key forward location for intelligence and early warning on Soviet strategic forces and a base for potential nuclear operations against the Soviet Union. Nuclear-armed *Jupiter* missiles based in Turkey were traded away during the Cuban missile crisis, but Turkey continued to host tactical nuclear forces deployed in a NATO context. Turkish strategists remain attuned to shifts in Russian nuclear forces and doctrine. Even as Turkish-Russian political and economic relations have expanded dramatically over the past decade, security relations have remained tenuous, and Turks have been among the most sensitive of NATO members on the question of the re-nuclearization of Russian military doctrine.

Changing Perceptions of WMD Exposure.

Given the extraordinary extent of Turkey's exposure to WMD and missile risks emanating from the Middle East—easily the most pronounced in NATO—some analysts express surprise that Turkey did not signal its concern about proliferation issues earlier and more forcefully.[5] As general concern about WMD in the Middle East grew among Western and Israeli strategists, even prior to the Gulf War, Ankara remained relatively unconcerned, adopting a "surprisingly nonchalant attitude" toward the threat.[6] Several explanations can

be offered for this stance. First, a perception of substantial strategic depth, with the main Turkish population and economic centers at some distance from Middle Eastern borders.[7] Obviously, as the range of missiles deployed in the region has increased, this perception has waned. Second, in line with Cold War thinking and prior to the troubling experience of the Gulf War in 1990, Turkey assumed that the NATO security guarantee was relevant and more than sufficient to deter regional, unconventional threats. Third, the Turkish security elite, like the Turkish elite in general, has preferred to focus on European and transatlantic issues, holding Middle Eastern problems at arms length wherever possible.

Turkish military planners noted with concern the exchange of missile strikes during the so-called "war of the cities" during the Iran-Iraq war. But the Gulf War of 1990 was the real watershed in Turkish strategic perceptions regarding WMD and missile risks.[8] The war also had a negative effect on Turkey's assumptions about the predictability of the NATO security guarantee in "out-of-area" contingencies. Despite threats from Baghdad, Turkey was not targeted by Iraq in its Scud missile campaign. Nonetheless, the Ozal government's active role in the Gulf War coalition and the extensive air operations conducted from Incirlik Air Base, could well have made Turkey a target for retaliatory attack. During the run-up to the war, Turks were dismayed by the slow and contentious allied response to Ankara's request for NATO air defense reinforcements (an experience repeated in the months before the 2003 Iraq war). The *Scud* attacks on Israel and in the Gulf made a strong impression on the Turkish military, who took away the lesson that Turkey's large but rather out-dated military establishment required substantial modernization, including the ability to address WMD and missile risks from Iraq, Iran, and, above all, Syria.

From the early 1990s, Turkey's small cadre of strategic analysts outside the government, including academic observers and journalists, began to pay increased attention to WMD and missile risks. At the official level, the response remained largely rhetorical. Turkey was never a particularly enthusiastic supporter of the United Nations Special Commission's (UNSCOM) work in Iraq, although Ankara clearly benefited from the military containment of Baghdad.

With proximate reasons for conflict, Syrian chemical and improved-*Scud* programs remained the leading concern. Iran's nuclear and missile ambitions were seen as a more distant risk—linked more closely to American interests and behavior than to Turkish-Iranian dynamics.

Growing attention to the WMD problem was reflected in changes to Turkey's air defense strategy, which for the first time (1993) included the concept of countering medium-range missiles and potential nuclear arsenals deployed in countries to the south and east, with "countering" a matter of forward planning for enhanced early warning and missile defense procurement. The Turkish mix of active and passive defense against WMD envisioned reliance on NATO assets for deterrence, hardening of military targets and command and control, and bolstering the ability to locate and attack mobile targets (a tough problem, even for far more capable allies). The informed public debate noted the importance of the issue, largely as reflected through American and Israeli analyses, but was generally dismissive of Turkey's own missile defense strategy.[9]

As noted above, the general perception of threat from Iran and Iraq has been low. Turks in general have not shared the American concern regarding nuclear and missile risks emanating from either country, largely because Turkish observers find it difficult to imagine circumstances under which Iran or Iraq would employ such weapons against Turkey—except in retaliation for American intervention launched from Turkish bases. Turkey does have pronounced stakes in the future of Iran and Iraq, but these turn on questions of instability, consequences for Kurdish separatism affecting Turkey, the role of the region's Islamists in Turkish politics, and access to energy. The question of direct, state-to-state conflict has not loomed large in Turkish perceptions, in stark contrast to a far more unstable relationship with Syria.

The Israeli Factor.

Arguably, a leading factor in elevating Turkish attention to WMD risks, and Iranian WMD risks in particular, has been the development of a broad-based strategic relationship with Israel. Israel is an active

participant in Turkey's defense modernization program, and there is an impressive degree of collaboration on training and intelligence sharing, including surveillance and possible responses to nuclear and missile threats. More broadly, there has been a substantial convergence in strategic perception and regional risk assessment, driven by increased dialogue and objective factors. This strategic relationship has been encouraged by Washington, but has its origins in Turkish and Israeli interests. In some cases, Turkey sees Israel as an alternative and perhaps more reliable supplier of defense goods and services than the United States or the EU. Iran's nuclear and missile capabilities are central to Israel's strategic outlook, and this has certainly reinforced the issue in Turkish thinking (the potential for Turkish-Israeli cooperation in strikes against Iran's nuclear facilities are discussed in Section Four). Neither the Islamist Erbakan government of the mid 1990s, nor the current government led by Prime Minister Erdogan, with its "recessed" Islamic roots, has interfered significantly with Turkish-Israeli relations—a portfolio in which the Turkish military continues to play a leading role.

The Iraq War—and A More Diverse Security Debate.

The recent experience of the War in Iraq has focused Turkish attention firmly on the problem of northern Iraq, where Turks across the political spectrum perceive substantial stakes. The key variable here is the potential emergence of an independent Kurdish state out of the chaos in Iraq, and the effect this might have on Turkey's own Kurdish separatists. A secondary factor is Turkish affinity for Iraq's Turcomen, although this, too, is seen through the lens of the ethnic power balance in northern Iraq. Turks have been, and remain, less interested in the issue of WMD in Iraq, and tend to share European skepticism regarding the accuracy of pre-war intelligence (despite the fact that Turkish sources contributed to this intelligence, and Turkish analysts were no less convinced of Iraq's WMD capabilities than their opposite numbers in Europe and the United States).

That said, the risk of chemical or missile attacks on Turkish territory certainly figured in the public debate about cooperation with the United States prior to the war. The net effect was to reinforce

the sense that Turkey had a stronger stake in regional stability than in regime change with an unpredictable neighbor. The failure of bilateral negotiations over access to Turkish facilities in the spring of 2003—a close run thing—had multiple sources.[10] Turkish concerns about WMD exposure, and lackluster backing from NATO, played a small but measurable role in this calculus of cooperation.[11]

Today, Turkey's perception of nuclear and missile risks is shaped by an increasingly diverse national debate on security questions. The outlook of the Turkish General Staff still counts heavily, of course. But independent analysts and a vigorous private media now play a key role—and public opinion counts. The new elites, from cosmopolitan business circles to more traditional elements associated with the current AKP government, tend to be less security conscious and more heavily focused on domestic reform. Their views on external issues, including proliferation, are influenced heavily by international debates and, to an ever-increasing extent, by attitudes in Europe. Absent a direct threat to Turkish security, Turks across the political spectrum are now as likely—perhaps more likely—to frame policy toward Iran and its WMD capabilities in European rather than American terms. Barring a sharp deterioration in relations with the EU, the desire to stay in the European mainstream will be a key factor in Turkey's approach to a nuclear-ready Iran in the years to come. The result may be pronounced tension between an Israeli and American-inspired hard line on proliferation matters, and a softer, "diplomacy first" approach flowing from Brussels. These disparate approaches could be brought into line if the EU begins to take proliferation risks more seriously.

SECTION TWO: VIEWS OF IRAN, ITS NUCLEAR AMBITIONS, AND REGIONAL DYNAMICS

In a region which Turks are inclined to treat as a source of risk rather than opportunity, relations with Iran have been essentially stable, with little of the propensity for assertiveness evident in relations with Syria.[12] Both states have traditionally seen each other as status quo powers, and pre-revolutionary Iran had much in common with the secular, modernizing, western-oriented society Ataturk had promoted in Turkey. Turks often refer to their "dangerous

neighborhood" in the Middle East, but are also quick to note that Turkey and Iran lack a recent history of armed conflict. As a broad generalization, Turks *take Iran seriously* as a society and as a regional power, something that cannot be said for Turkey's approach to Syria, Iraq, or the Arab Gulf states. Iran and Israel are treated as peers in the Middle East; Syria, Iraq, and the Arab states of the Gulf are not.[13]

Sources of Turkish Concern.

This relatively favorable view of Iran has been slow to change since the Iranian revolution. Only within the last few years have elements of the Turkish security establishment come to see Iran as a serious challenge, and even today there are strong countervailing interests in improved relations. The sources of Turkish concern are straightforward. First, Turkey's secular elites, including the military, increasingly have been concerned about the export of Islamic radicalism from Iran. This concern is driven by Iranian financial and other support for activists abroad, and the ebb and flow of Iran's support for international terrorism. An Iranian hand is sometimes seen in the construction of Turkish religious schools (where Saudi backing has certainly played a larger role) and the financing of Islamist movements. In reality, these are marginal factors on the Turkish political scene. But those inclined to worry about secularism in Turkey, including harder-line elements in the military and Kemalists of the old school, tend to see Iran as an internal security threat.

Second, Iran is a key player with regard to the Kurdish issue in its regional setting, and relations on Kurdish matters continue to be a leading barometer of Turkish-Iranian relations as a whole. The history here is largely one of cooperation against a common fear of Kurdish separatism, but the vagaries of PKK/Kurdistan Workers/ Labour Party (KADEK) deployments have led to periodic frictions. When the expulsion of the PKK from Syria forced Kurdish insurgents to operate from bases in Iran, Ankara responded forcefully, and the Turkish air force reportedly struck PKK camps inside Iran in July 1999.

Third, as noted earlier, Turkey increasingly has been concerned about the influence of WMD and missile proliferation on the security

environment, its own regional freedom of action, and that of its alliance partners. Iraq and Syria have also been part of this equation, and the WMD capabilities of these countries generally have been seen as posing a more proximate risk to Turkey. In the case of Syria, the regime's support for the PKK, against a background of frictions over territory and resources, actually brought the two countries to the brink of a military clash in 1998. Recurring Western military intervention in Iraq, and the use of Incirlik Air Base for Operation NORTHERN WATCH, made the possibility of Iraqi retaliation on Turkish soil an ongoing concern. In terms of its WMD capabilities and missile reach, Iran may have posed a more serious threat on paper, but few Turks worried about a clash with Iran in which WMD might become a factor—there was little rationale for conflict on either side. Indeed, Turkish economic interests in Iran, including access to natural gas, have been a strong countervailing factor.

Sources of Iranian Concern—and Improved Ties.

On the Iranian side, there are also some concerns regarding Turkey, although none have risen to a level posing a risk of direct conflict. Under conditions of instability in Iran, Turkey could chose to foment separatism among ethnic Turks in Azerbaijan, although Ankara, with its own concerns about national integrity, has been wary of supporting separatist movements elsewhere, whether in Chechnya or Kosovo—despite some internal pressures to do so. Iran has also been troubled by the presence of Iranian opposition groups in Turkey, including elements of the *Mujahiddin-i Khalq*. Turkish secularism and membership in the Western strategic "club" surely trouble Iranian conservatives. More specifically, Turkey could facilitate American or Israeli intervention in Iran, including the provision of intelligence, bases, and over-flight rights for strikes against Iranian nuclear or missile facilities. But on the whole, Iranian decisions regarding strategy and force structure, including nuclear and missile programs, are almost certainly driven by other factors.

Over the past year, Turkish-Iranian relations have improved considerably (as have Turkish relations with Syria), with four high-level Turkish visits to Iran, and six from Iran to Turkey. The

bilateral dialogue has spanned economic and educational matters, as well as the critical question of policy toward Kurdish groups in northern Iraq. Iranian nuclear and missile programs do not seem to be part of this agenda, although Turkey has been supportive of EU-led efforts to forestall new UN-sponsored sanctions over WMD matters.[14] Observers attribute this improvement in Turkish relations with Tehran (and Damascus) to several factors, from the desire for a concerted approach to northern Iraq, to the more open attitude of the Justice and Development Party (AKP) government to engagement with Iran. Not least, Ankara has followed the lead of Europe in its own more active engagement of both states over the past year.[15]

Effect of a Nuclear-Ready Iran on Turkish Interests and Regional Dynamics.

A nuclear-capable or near-nuclear Iran would pose both direct and indirect challenges to Turkish interests. In direct terms, a functioning Iranian nuclear arsenal, coupled with Iranian short and medium-range missiles, would pose a much more dramatic and politically salient threat to Turkish security, going well beyond the current rather amorphous sense of WMD threat. An open Iranian nuclear capability would place immediate pressure on Turkey's slow-moving missile defense plans, and would probably compel Ankara to press for a much more direct NATO (and EU) stance regarding Article V and other commitments in Middle Eastern contingencies. Exposure to a nuclear arsenal on Turkey's borders would not be a new phenomenon for Turkey—Turks have lived with the reality of Soviet and Russian nuclear power for decades—but it would immensely increase the sense of insecurity in an already security-conscious society. In the absence of a predictable Western security guarantee, Ankara might also consider acquiring deterrent capabilities of its own, although the prospect for this is complicated and politically risky for Turkey.

Given the paucity of proximate flashpoints in Turkish-Iranian relations, the consequences of a nuclear Iran are likely to be felt more heavily across a range of wider geopolitical interests (i.e., interests beyond the defense of Turkish territory per se). First, a nuclear Iran

would acquire new strategic weight in its relations with Ankara, among others. This could greatly complicate Turkish diplomacy over Kurds, energy, and other issues that have been at the center of the bilateral agenda. In a less easily measured way, it might also affect Turkey's relative regional standing, with implications for relations across the Middle East, the Caucasus, Central Asia, and even the Balkans.

Second, a nuclear Iran would severely complicate Turkey's security relationships with Washington, Israel, and Europe. A new nuclear threat to Turkish territory, however theoretical, might encourage a convergence of strategic perception among those most affected by this development. In practical terms, however, Ankara will confront a series of new security dilemmas. Turkey's sense of regional exposure, and the need to "live" with neighbors, however unpalatable, is already a strong influence on the calculus of defense cooperation, as seen on numerous occasions since 1990, and as shown quite clearly in 2003. The potential for nuclear retaliation on Turkish territory would revive questions of alliance vulnerability, coupling, decoupling, and "singularization" familiar from the late Cold War.

Given the near-term potential for Western and Israeli intervention in Iran, these would not be theoretical considerations for Ankara. Indeed, the very existence of a nuclear arsenal in Iran would immediately raise the likelihood of and stakes surrounding intervention—at least until Iran acquired a sufficiently credible nuclear capability to deter a conventional first strike. At which point a very different calculus would emerge, with Turkey playing a role analogous to Germany during the Cold War. Under these conditions, Turkish strategists would need to consider whether a nuclear confrontation between Iran and the West would likely to be fought over their heads—possible if Iran developed ballistic missiles of intercontinental range—or on Turkish territory. The prospect would surely reopen doctrinal debates about nuclear strategy within NATO, at a time when the Alliance is contemplating a formal role in security across the "greater Middle East."

Turkey would not be alone in confronting these new dilemmas. For some time, southern European members of NATO have faced the reality of increasing exposure to retaliation from regimes across the

Mediterranean. Southern Europe and the Mediterranean, the least nuclear of theaters during the Cold War, have emerged as leading centers of nuclear and other WMD risks in the current strategic environment. With Libya's decision to dismantle its WMD and missile inventory, the center of gravity for this "southern exposure" has shifted to the eastern Mediterranean, where Iranian, Syrian, and Egyptian arsenals continue to shape NATO and EU perceptions of WMD risk.

Third, the advent of a nuclear Iran, and the possibility of a regional arms race embracing Turkey, could affect military balances and perceptions beyond the Middle East. Russia might feel compelled to respond, technically or doctrinally, to a nuclear Iran, with negative implications for the security of Turkey (unless the Russian response came as part of a concerted approach with the United States and Europe). Similarly, new nuclear and missile capabilities in Iran could have a cascading effect on security balances in the Balkans and the Aegean, where Greece is highly sensitive to changes in Turkish force structure and strategy. This effect has already been seen in the context of Turkish defense modernization (e.g., new air refueling tankers, airborne warning and control systems [AWACS], and army tactical missile systems [ATACMS]) aimed at Middle Eastern contingencies; it might also influence the Greek and Turkish interest in moving ahead with mutual and balanced force reductions, now being discussed.

Finally, Turkey could become an even more prominent focus of Western concern as a transit route for the "leakage" of nuclear materials and technology. Turkey is already at the center of police and intelligence cooperation regarding the interdiction of nuclear contraband. A nuclear capable Iran would raise the specter of another marketplace for nuclear technology, along the lines of Pakistan. The existence of such a market on Turkey's borders would make Turkey an even more essential security partner for the United States and Europe, but might also reinforce existing European wariness regarding the security "baggage" Turkey brings to the table. Which raises a larger question of deep interest to Turkey: Will the EU want to acquire a formal border with Iraq, Syria, and a nuclear armed Iran? This is a question Turks would prefer not to have as part of the

equation in relations with Europe at a time of critical decisions on Turkey's EU candidacy.

Under conditions of increased risk from a nuclear Iran, Turkey would have a very strong stake in the development of more active NATO and EU approaches to nonproliferation, counterproliferation, and missile defense. Ankara has been a leading proponent of multilateral initiatives in this area, especially those oriented toward the Mediterranean and the Middle East. Over the past few years, and with increasing urgency since 2003, NATO and the EU have placed proliferation issues higher on their agendas. The new European Security Strategy (the "Solana" document) identifies proliferation as a leading concern, and the EU now has in place an "action plan" on WMD.[16] The new, tougher EU approach to proliferators can be seen in recent policy toward Iran and especially Syria, in which trade and cooperation negotiations clearly have been linked to progress on the WMD front (another likely rationale for Libya's recent disarmament moves).[17] As Turkey enters a critical phase in its relations with the EU, looking toward the formal opening of accession negotiations in 2005, it is likely to see a growing and very welcome tendency to take nuclear proliferation more seriously in Brussels.[18]

NATO has had a series of initiatives in this area since the first Iraq war, and has devoted significant resources to improving intelligence sharing and command and control in WMD-related contingencies. But for both organizations, the improvements are largely in the realm of strategic concepts and doctrine, rather than capabilities. Confronted with a specific new nuclear threat from Iran, Turkey, like the United States and Israel, will focus on practical, operational responses rather than enhanced debate about the problem. Turkish policymakers will have the opportunity to encourage Alliance attention to nuclear risks and possible responses at the NATO summit in Istanbul in June 2004.

SECTION THREE: POSSIBLE TURKISH RESPONSES AND POLICY INFLUENCES

Revelations regarding the status of Iran's nuclear program, and the apparent Iranian commitment to enhanced International Atomic Energy Agency (IAEA) inspections, have not yet produced a

measurable response from Ankara, although Turkish policymakers are clearly supportive of pressure on Tehran over nuclear matters, at least in a multilateral context. But how might Turkey respond to the advent of an openly nuclear Iran, or an Iran that declares itself bent on acquiring nuclear weapons regardless of international sanctions? The range of possible Turkish responses is wide, from "denial"—ignoring the threat—to the acquisition of a nuclear deterrent of its own.

The critical context for Turkish decisionmaking in this sphere will be the extent and character of Turkish security ties—with the United States, within NATO, and with European partners. Internal political developments may also have a bearing on Turkish choices. But the perceived relevance and predictability of the country's alliance relations will be the overwhelmingly important influence on Turkey's response.

Denial and Decoupling.

Turkey could respond to a nuclear-ready Iran simply by denying the significance of the risk. There is some precedent for this approach in terms of Turkey's relatively unconcerned response to proliferation trends in Iraq and across the Middle East prior to the Gulf War of 1990. A credible nuclear capability in Iran would be more difficult for Turkey to ignore, even if the prospect of a military clash with Iran remains very low. A nuclear-ready Iran threatens American and Israeli strategic interests in ways that Ankara cannot ignore if it is to maintain an effective security relationship with these critical partners. Under conditions of ambiguity or dispute regarding Iranian capabilities, Turkey might well opt for an assessment and response in the European mainstream, which might well lean toward "denial."

Turks who wish to minimize the nuclear threat from Iran will do so by arguing that Turkey's exposure comes about largely as a result of American and Israeli policies, and the direct risks to Turkey come via the prospect of American or Israeli intervention in Iran. In this case, many Turks might seek to decouple the country's security policies from allies who bring more exposure than reassurance. But, with the range of hard security challenges Turkey faces, in multiple regions, it is unlikely that the current Turkish security establishment,

even in light of public opinion, would be willing to jeopardize Turkey's overall deterrent posture to pursue a strategy of decoupling in relation to Iranian risks.

Reinforced Conventional Deterrence.

The prospect of a nuclear-ready Iran would underscore existing Turkish concerns about defense modernization and could accelerate plans for improving the country's early warning and missile defense capabilities. Turkey might also seek to bolster its capacity for locating and striking mobile targets, as well as its rudimentary missile capability, currently limited to ATACMs and an exploratory short-range missile program. Turkey might decide to develop and press forward with an indigenous medium-range ballistic missile program, bringing it into line with several of its Middle Eastern neighbors. These efforts could be strengthened if Turkey proceeds with reported plans to develop its own space launch vehicle for military reconnaissance and commercial purposes by 2010.[19] Turkey's alliance partners, especially Greece, might regard this with concern. Russia, a reconstituted Iraq, and above all, Syria, would regard this with alarm.

Rapid expansion of Turkey's missile defenses would be a less controversial and probably more useful approach. Turkey has already gone some distance in this direction with plans to acquire *Patriot* (PAC-3) missiles, and to participate in the Israeli *Arrow* and perhaps the U.S.-led medium-range extended air defense (MEADS) program with other European allies. Turkey is also a likely site for sensors and boost-phase interceptors deployed as part of an American strategic missile defense architecture.[20]

The scale of Turkey's conventional forces and their increasing capacity for regional power projection, coupled with new missile and missile defense capabilities, surely would cause even a nuclear-armed regional adversary to think twice about confronting Turkey. That said, Turkish analysts are probably correct in their judgment that the real source of nuclear risk to Turkey flows from the strategic decisions of others—the United States and Israel—regarding Iran. Under these conditions, Turkey's own capacity for conventional preemption or response may not weigh heavily.

The Nuclear Option.

Could Turkey go nuclear? This question has been raised from time to time over the past 2 decades by Turks and others. The short answer is probably "yes." Given sufficient time, Turkey probably would have the technical wherewithal to develop a limited nuclear arsenal and the means for delivering nuclear weapons in regional contingencies. That said, the costs—material, and, above all, political—of pursuing the nuclear option are almost certainly prohibitive for Turkey. The calculus surrounding the nuclear option could become more favorable only under drastically changed conditions, both internal and external.

Turkey has been a party to the NPT since 1980, and an additional safeguards agreement with the IAEA is also in force. The country's nuclear research facilities consist of the Cekmece Nuclear Research and Training Center and a 250kw TRR research reactor at Istanbul Technical University supplied by General Atomics in the late 1970s.[21] Since the mid-1960s, Turkey has explored the idea of building one or more nuclear power plants—even soliciting tenders for a 1,200MW plant at Akkuyu Bay near Mersin. But for a variety of financial and environmental reasons, little progress has been made.[22] Over the last 2 decades, Turkey's growing energy demands have driven a variety of new arrangements for importing oil and natural gas from Iran, Central Asia, and Russia. These demands could well have justified a nuclear power program, but the financial instability of recent years slowed the growth in energy demand and put an expensive nuclear program out of reach. Apart from cost, the leading internal impediment to nuclear power development in Turkey is now environmental politics, as elsewhere in Europe (critics charge that the proposed plant at Akkuyu is prone to seismic risks).

Concern about Turkish nuclear intentions has surfaced on a number of occasions, notably in 1981, when Turkey was alleged to have facilitated transfers of nuclear-related technology to Pakistan, and again in 1992, when Senators Glenn and Symington led an effort to halt aid to Turkey in light of allegations about Turkish-Pakistani nuclear cooperation.[23] Recent revelations regarding Pakistani nuclear technology transfers to Iran, North Korea, and Libya raise the question

of whether Pakistani scientists might have tried to sell nuclear designs and equipment to Ankara. Greek analysts have produced several studies exploring Turkish interests and capabilities in the nuclear realm.[24] Most of these pre-date the current détente between Athens and Ankara, and most allege a Turkish interest in acquiring nuclear material and technology from the Turkic republics of the former Soviet Union. Ankara has been quick to deny these allegations. For the most part, however, Greece and other neighbors with a stake in Turkish nuclear developments have been at least as focused on the environmental risks associated with civil nuclear power projects in Turkey. Few regional analysts have taken seriously the prospects for Turkey becoming a nuclear weapons state.

Pursuit of an independent nuclear capability would be a costly long-term project for Turkey, given the lack of a substantial civil nuclear infrastructure on which to build.[25] Western partners would not transfer the required technology outside the context of a civil program (they have been reluctant to do so even in the context of power projects), and all such transfers are now under intense scrutiny. As an open, democratic society, it would be extraordinarily difficult for Turkey to pursue a clandestine weapons program. To do so openly, to "break out" from NPT and technology transfer agreements would mean estrangement from key Western allies—or worse. A nuclear-armed Turkey would raise many of the same concerns associated with a nuclear Germany or a nuclear Japan. It would probably mean the end of Turkey's EU ambitions, and could render the country a pariah in NATO circles. In short, it is an inconceivable path under current conditions.

Under what conditions might Turkey consider running these very considerable risks to acquire a nuclear deterrent? Internal politics could influence the attractiveness of a nuclear option, but it would probably require a complete reversal of Turkey's secular, Western-oriented path—in short, an anti-western revolution. This is extraordinary unlikely. Externally, some combination of highly disruptive developments could make a nuclear option attractive, if no more practical. A short list of such developments would include the collapse of NATO and its nuclear-backed security guarantee; a dead-end in Turkey's EU candidacy; a formal collapse of the international

nonproliferation regime and the rise of multiple new nuclear weapons states; and the emergence of real, proximate flashpoints in Turkish-Iranian relations outside the nuclear realm—taken together, regional and international anarchy as seen from Ankara.

Bilateral and Multilateral Responses.

Without question, Turkey's preferred response to a nuclear Iran will be multilateral. If there is a transatlantic consensus to act, either to constrain or sanction Iranian nuclear plans, or to prevent the production and deployment of nuclear weapons in a nuclear-ready Iran, Ankara will most likely be supportive, diplomatically and militarily. In the absence of a transatlantic consensus, the Turkish calculus will be more complex and uncertain. With decisions regarding EU accession talks looming on the horizon (and with other obstacles such as Cyprus on the way to resolution), Ankara will be wary of getting out of step with mainstream European policies, even under pressure from the United States or Israel. The ideal approach from the Turkish perspective would be a multilateral, UN-backed action aimed at the nuclear disarmament of Iran, leaving in place or even expanding the economic engagement of Tehran—essentially the Libyan model.

If diplomatic pressure and new sanctions are ineffective in slowing Iran's nuclear ambitions and Iran reaches a more advanced "nuclear ready" posture or actually prepares for the deployment of nuclear weapons, Turkey might back an American or Israeli strike against Iranian nuclear and missile facilities. Incirlik airbase could be put at the disposal of U.S. air expeditionary forces. Intelligence gathered from facilities in Turkey, as well as access to Turkish airspace for transit and refueling, would facilitate greatly Israel's ability to strike Iran's WMD infrastructure.[26] Turkey's increasingly capable air force could also contribute to counternuclear operations or strikes against Iranian missile sites of special concern (e.g., *Shahab-3* launchers).

Participation in an Israeli or American strike would imply some risks for Turkey, including the possibility of a preemptive or retaliatory Iranian missile strike, possibly WMD-armed, on Turkish bases or cities. Even Turkish support for stronger nuclear-related sanctions on Iran could jeopardize cooperation with Tehran on issues of concern

to Ankara. It could further complicate Turkey's Kurdish policies, and might spur Iranian meddling in Turkey's religious politics, or support for terrorism inside Turkey. On balance, however, Ankara will most likely run some risks to assure that it will not confront a nuclear Iran, with all that this would imply for longer-term Iranian leverage over Ankara across the board. The political dilemmas may be more difficult for Turkey, especially in the absence of European backing for military action against Iran. With European relations in the balance, Ankara might well opt to observe the destruction of Iranian nuclear facilities from the sidelines (perhaps with some very quiet intelligence and logistical support) rather than risk the political—and possibly real—fallout from active participation.

SECTION FOUR: CONCLUSIONS AND POLICY IMPLICATIONS

After years of relative neglect of WMD risks emanating from the Middle East, Turkey has begun to focus more seriously on these risks, above all the prospect of new nuclear powers appearing on the country's borders. A nuclear or near-nuclear Iran would negatively affect Turkish interests. Quite apart from the country's physical vulnerability to nuclear attack with missiles of increasing range and accuracy, a nuclear-ready Iran would complicate Turkey's regional policies, many closely tied to internal security concerns. Ankara already takes Iran seriously as a regional actor. A nuclear Iran would acquire far greater strategic weight in its relations with Turkey, and others. It is a development Turkey's security elite and increasingly active and well-informed public would prefer not to confront. This analysis points to a number of conclusions about Turkey's exposure and potential responses, with some important policy implications for the United States, Europe, and NATO.

First, Turkey's relations with Iran lack obvious flashpoints for direct military confrontation. There are certainly sources of friction, and these could worsen. But there is little risk of an overt clash of the kind imaginable with Syria until quite recently. Few Turks perceive a direct military threat from Iran. A nuclear Iran would reduce Ankara's regional freedom of action, but might not threaten

Turkish security directly in the near-term. The real effect on Turkish interests—and it could be substantial—would be of a longer-term, geopolitical nature.

Second, to the extent that Turkey does perceive a threat from Iranian WMD and missile capabilities, it tends to be seen as a product of American and Israeli confrontation with Iran, and possible spillovers affecting Turkey. Turkish bases and population centers would be exposed to the retaliatory consequences of intervention by Turkey's western partners. Turks have had to confront this reality as part of their calculus of cooperation with Washington in Iraq; it operates with equal force in relation to Iran. Turkish exposure, and an inherent ambivalence regarding sovereignty compromises in defense ties, means that Turkish cooperation in preventive action against Iran cannot be taken for granted despite Ankara's clear interest in forestalling the emergence of new nuclear powers in the Middle East.

Third, Turkey will be heavily affected by the strategies of others—the United States, Europe, Israel, Russia—vis-à-vis a nuclear-ready Iran. The country is not well-placed to undertake unilateral responses, and will exhibit a strong preference for multilateral approaches that do not expose Turkey to risks in its overwhelmingly important transatlantic and European relationships. Conventional and unconventional responses to Iranian nuclear proliferation could also have a cascading effect on strategic balances beyond the Middle East, affecting Turkish relations with Russia, Greece and others.

Fourth, the critical external influences on Turkish decisionmaking toward a nuclear-ready Iran are the perceived predictability of the NATO security guarantee, including a credible nuclear component, and Turkey's continued integration in Europe. To the extent that the NATO tie remains credible, Turkey's leadership is likely to adopt a measured response to Iranian risks. To the extent that the prospect of EU membership remains alive, Ankara will be wary of policy options that might jeopardize relations with Brussels and key European partners. Turkey could well find itself caught between more forward leaning American and Israeli counterproliferation policies on the one hand, and a more relaxed European approach on the other. This would be a tremendously challenging situation for Turkey, whose security

establishment, absent political considerations, might well prefer a more aggressive stance. The solution would be the development of a more assertive European approach to proliferation risks in Iran and elsewhere—and there is evidence to suggest that this is emerging.

Fifth, the United States and Europe have a clear stake in encouraging Turkey to take Iranian proliferation risks seriously, but without pursuing dangerous and destabilizing unilateral options in response. Turkey is inclined to pursue a measured path. In doing so, Ankara will rightly seek reassurance regarding NATO's commitment to Turkish defense in Middle Eastern contingencies. Turkish policymakers will look for evidence that NATO allies are addressing the doctrinal and operational challenges implied by the need to confront new nuclear and non-European risks. Turkey will seek, and should get, arrangements for the more rapid deployment of air and missile defense assets, and accelerated movement in the area of theater missile defense, including joint projects with Israeli participation. The June 2004 Istanbul Summit offers an excellent opportunity to place nuclear and missile risks higher on the NATO agenda and higher on bilateral agendas with Ankara.

ENDNOTES - CHAPTER 4

1. For a more extensive discussion, see F. Stephen Larrabee and Ian O. Lesser, *Turkish Foreign Policy in An Age of Uncertainty*, Santa Monica, CA: RAND, 2003.

2. On Turkey's strategic culture, see Philip Robins, *Suits and Uniforms: Turkish Foreign Policy Since the Cold War*, London: Hurst and Company, 2003, pp. 161-181.

3. In the mid-1990s, Turkey initiated a sweeping and very costly plan for defense modernization, possibly totaling 150 billion dollars or more in new acquisitions and up-grades over 25 years. The financial crisis of 2000 and onward has cast considerable doubt on the extent and pace of this program, but key aspects continue to move ahead as planned. Annual procurement spending is now in the region of $3 billion per year, with an overall defense budget (narrowly defined) of roughly $7.5 billion in 2001.

4. The ability of Turkey's adversaries to play an internal security card was central to the much-debated argument set out by Ambassador Sukru Elekdag in 1994, regarding the need for a "two and a half war" strategy, with Greece, Syria, and the PKK insurgency as key contingencies for planning.

5. Until quite recently, the author would have described Turkish policymakers as being "in denial" regarding the nature of proliferation risks on the country's borders and the implications for security cooperation with allies. See Ian O. Lesser

and Ashley J. Tellis, *Strategic Exposure: Proliferation Around the Mediterranean*, Santa Monica, CA: RAND, 1996.

6. Efraim Inbar, "The Turkish-Israeli Entente," unpublished paper.

7. Robins, p. 202.

8. See Anthony H. Cordesman, *Weapons of Mass Destruction in the Middle East*, London: Brassey's, 1991, pp. 40-42; and Duygu Sezer, *Turkey's New Security Environment, Nuclear Weapons and Proliferation,* Los Alamos, NM: Center for National Security Studies, 1994.

9. See, for example, *Turkish Daily News*, August 11, 1992, cited in Robins, p. 203.

10. See Lesser, "Playing Turkey," *Aspenalia*, Vol. 21, No. 22, 2003, pp. 166-174.

11. For a official Turkish assessment of NATO defense support to Turkey in the run-up to the Iraq War, see *Turkey's Security Perspectives and Its Relations with NATO*, Turkish Foreign Ministry, December 2003, p. 4, *www.mfa.gov.tr/grupa/af/secure.htm*.

12. I am grateful to Alan Makovsky for this description of Turkish attitudes toward the Middle East.

13. For an excellent discussion of Turkish strategy in the Middle East generally, see Kemal Kirisci, "Post Cold War Turkish Security and the Middle East," *Middle East Review of International Affairs* (hereafter *MERIA*), Vol. 1, No. 2, July 1997.

14. See Amberin Zaman, "Syrian Leader's Visit Highlights Shift in Relations with Turkey," *Los Angeles Times*, January 7, 2004.

15. Soner Cagaptay, "A Turkish Rapprochement with Middle East Rogue States?" *Policywatch*, No. 825, Washington, DC: Washington Institute for Near East Policy, January 9, 2004.

16. See *A Secure Europe in A Better World: European Security Strategy*, Paris: European Union Institute for Security Studies, December 2003; and the "Action Plan for the Implementation of the Basic Principles for an EU Strategy against Proliferation of Weapons of Mass Destruction," *The European Union and WMD Non-proliferation*, 2003, accessed at *http://www.sipri.org/contents/expcon/eu_wmd.html*.

17. This linkage is also noted in Javier Solana, "The EU Security Strategy: Implications for Europe's Role in a Changing World," remarks delivered in Berlin, November 12, 2003, accessed at *http://europa-eu-un.org/articles/en/article_3006_en.htm*.

18. See Dalia Dassa Kaye, "Europe, Syria and Weapons of Mass Destruction," *Policywatch*, No. 824, January 8, 2004, Washington, DC: Washington Institute for Near East Policy.

19. "Report on Turkey's Plans to Launch its Own Missile into Space by 2010 at Earliest," Istanbul *Milliyet*, February 1, 2004 (FBIS text).

20. See Guray Al, "Turkey's Response to Threats of Weapons of Mass Destruction," unpublished thesis, Monterey, CA: Naval Postgraduate School, December 2001, p. 119.

21. Ephraim Kam and Yiftah Shapir, eds., *The Middle East Strategic Balance 2002-2003*, Tel Aviv: Jaffee Center for Strategic Studies, 2003, p. 259.

22. See Robins, p. 205. For an extensive discussion of Turkey's civil nuclear program, see Mustafa Kibaroglu, "Turkey's Quest for Peaceful Nuclear Power," *The Nonproliferation Review*, Spring/Summer 1997.

23. Kibaroglu, pp. 38-39.

24. See, for example, Thanos Dokos, "Greece," in Harald Muller, ed., *Nuclear Export Controls in Europe*, Brussels: European Interuniversity Press, 1995; and Spyros Traiforos, "Nuclear Policy in Turkey: Is Turkey on Its way to Become a Nuclear Weapons State?" *Defensor Pacis*, January 1, 1999.

25. Robins, p. 205.

26. See Michael Eisenstadt, "Turkish-Israeli Military Cooperation: An Assessment," *Policywatch* No. 262, Washington, DC: Washington Institute for Near East Policy, July 24, 1997.

CHAPTER 5

THE DAY AFTER IRAN GETS THE BOMB

Kenneth R. Timmerman

Many analysts believe that a nuclear-ready Iran will act rationally and respond positively to Western-style cost-benefits analysis. Iran's clerical leaders are not suicidal, this argument goes, and do not seek a military confrontation with either the United States or Israel, because of the tremendous damage their country is likely to suffer.

Others argue that Iran has responded to classic deterrence in the past, and can be deterred successfully in the future. They point to the brief but brutal confrontation in November 1987 between the U.S. Navy and Iranian Revolutionary Guards forces who were using three offshore oil platforms as bases for harassment attacks against shipping in the Gulf. The United States destroyed the oil platforms and sank a number of Iranian ships, and Iran ceased its aggressive tactics. A nuclear Iran may talk aggressively, but in practice it can be contained and deterred.

But as I will argue in this chapter, this interpretation of Iranian behavior overlooks key facts, among them:

- Iran's motivation for seeking nuclear weapons;
- Iran's long record of support for international terrorism, including terror attacks against U.S. military targets in Beirut (Marine Barracks, 1983) and Dahran (Khobar Towers, 1996); and,
- The internal dynamics and core values of the regime.

DIPLOMATIC AND ECONOMIC MOVES

Conclusion 1: Iran will not Give Up Its Nuclear Capabilities through Negotiation.

After 16 months of intensified International Atomic energy Agency (IAEA) inspections during which Iran agreed to suspend

uranium enrichment and to stop building enrichment centrifuges, the Iranian leadership decided to reverse course and resume enrichment activities. On June 12, 2004, Foreign Minister Kamal Kharrazi announced that Iran "won't accept any new [safeguard] obligations. Iran has a high technical capability and has to be recognized by the international community as a member of the nuclear club. This is an irreversible path."

Kharrazi essentially pointed to the red line, indicating that Iran had no intention of abandoning its work to master the entire nuclear fuel cycle, from uranium mining, milling, conversion, and enrichment, to spent fuel reprocessing. "That somebody demands that we give up the nuclear fuel cycle . . . is an additional demand," he said. "We can't accept such an additional demand, which is contrary to our legal and legitimate rights," he said. "No one in Iran can make a decision to deny the nation of something that is a source of pride."[1] That "pride" clearly does not stem from mastering civilian nuclear technology, since Iran has been working in this area since its first U.S.-built research reactor went critical in November 1967.[2]

Similar statements about Iran's nuclear intentions have been made by Hasan Rohani, head of the Iran's Supreme National Security Council, and the regime's chief nuclear negotiator; Supreme Leader Ayatollah Ali Khamenei; and recently-elected leaders of Iran's Parliament, or *Majlis*. Even so-called "moderate" President Mohammad Khatami said his country had no obligation to respect the IAEA injunctions. "Nothing stands in the way" of renewed centrifuge activity, he declared on July 15, 2004, shortly after Iran broke the seals the IAEA had placed on key production equipment. "We are not committed any longer to the promise to expand the suspension to include building centrifuges because they [Britain, Germany, and France] failed to keep their promise of closing Iran's dossier," he said.[3] On July 28, the IAEA reported that Iran had resumed production of uranium hexafluoride gas. That same day, an IAEA Governing Board member state circulated a two-page intelligence report alleging that "Iranian middlemen . . . are in the advanced stages of negotiations in Russia to buy deuterium gas" as a booster for thermonuclear warheads.[4]

Iran has insisted on mastering the fuel cycle even though its insistence has caused delays and increased the cost of building the

Bushier nuclear plant. To meet proliferation concerns, Russia initially offered to deliver reactor fuel worth $30 million for Bushier over a 10-year period starting in 2001, taking the spent fuel rods back to Russia for reprocessing.[5] But Iran subsequently rejected the Russian demand. In June 2003, the Russian government—eager to get paid and to conclude additional nuclear deals with Iran—offered to guarantee deliveries of nuclear fuel regardless of whether Iran acceded to the "Additional Protocol," a key IAEA demand. Finally, in October 2003, Russian defense minister Sergey Ivanov declared, during a visit to Canada, that Russia would only supply the fuel if Iran made good on its pledge to sign a contract for returning spent nuclear fuel to Russia.[6] By that point, Iran was unveiling to the IAEA its own nuclear fuel fabrication and reprocessing capabilities, making the whole question of Russian fuel deliveries and reprocessing moot.

Iran can be expected to continue this type of commercial nuclear hardball with its suppliers. As it gains expertise and capabilities, Iran could conceivably sever its commercial relationship with Russia and operate the reactor on its own under IAEA safeguards, until it decides to reprocess the spent fuel for a nuclear weapons arsenal.

Ignoring this recent history, a July 2004 Council on Foreign Relations (CFR) Task Force on Iran report suggested a grand nuclear bargain to the ruling clerics in Tehran. Under the CFR proposal,

> Iran would be asked to commit to permanently ceasing all its enrichment and reprocessing activities, subject to international verification. In return, the international community would guarantee access to adequate nuclear fuel supplies, with assurances that all spent fuel would be returned to the country of origin, and to advanced power generation technology (whose export to Iran is currently restricted).[7]

But Tehran's leaders have already rejected this approach; saying "pretty please" won't help. The Islamic Republic wants to retain these capabilities because it wants to use the "legend" of nuclear power to mask its break-out capabilities. Iran's negotiating record with the IAEA shows that the only nuclear bargain it finds of interest is one that runs out the clock, playing on the delusions of the willfully naïve and the appeasers until Iran has enriched enough uranium for a modest arsenal. France, Britain, and Germany have further

encouraged Iran toward intransigence by allowing it to break the IAEA seals on centrifuge production equipment with impunity.

Conclusion 2: Iran will Leverage Its Friends and Suppliers.

The Islamic Republic has few real friends. Syria and Libya were allies in its 8-year war against Iraq; and while Syria has remained true, Libya has not. There are indications that Iran's ruling clerics fear what Qaddafi will tell the United States and Britain about their shared uranium enrichment procurement efforts, following Libya's unilateral decision in December 2003 to surrender its nuclear weapons programs and equipment to the United States and Britain. Unconfirmed reports suggest that Iran has been arming the Libyan Combat Islamic Group at camps in southern Iran, after Qaddafi expelled the group from Libya in 1997. The group initially relocated to Afghanistan, where it worked with al Qaeda, but relocated to Iran after the United States expelled the Taliban regime in late 2001.[8] A nuclear-ready Iran will feel more brazen to "punish" Qaddafi for cooperating with the United States and Britain by supporting this and other Libyan opposition groups. It also will reinforce ties with Syria, using Syria as a transit point for arming Hezbollah in Lebanon for stepped up attacks on Israel. It may be tempted to share weapons of mass destruction (WMD) technologies with Syria.

If friends are few, suppliers are many. The Islamic Republic's military and strategic relationship with North Korea goes back to the early 1980s and, because of the secrecy of both regimes, is not well-known to the general public. Iran's *Shahab*-3 missile program was developed with North Korean, as well as Russian assistance. Former Revolutionary Guards commander Major General Mohsen Rezai was a key player in the military exchanges with North Korea, and frequently traveled to Pyongyang to observe missile tests and purchase equipment. Considered by regime insiders as a nationalist, not an Islamist, Rezai's continued involvement in Iran's strategic weapons programs is another indicator that all factions of the ruling elite consider the acquisition of broad-based WMD capabilities critical for the regime's survival. In late June 2004, new reports surfaced that Iran had been purchasing highly enriched uranium (HEU) from

North Korea over the previous 2 years. A nuclear-ready Iran could step up these purchases as a counter to international inspections or surveillance of its own enrichment plants.

Russia has been a major supplier of conventional weapons and nuclear and missile technologies. Indicators of Russia's willingness to help Iran's nuclear weapons program first surfaced nearly a decade ago when President Yeltsin's advisor for Ecological Affairs, Alexei Yablokov, revealed that part of the $800 million nuclear deal signed between Russia and Iran in January 1995 included a Russian offer to supply a complete centrifuge enrichment plant.[9] This was further confirmed when the complete text of the accord was published in May 1995 by the Natural Resources Defence Council in Washington, DC.

After intense U.S. criticism, President Yeltsin acknowledged at the Moscow summit on May 10, 1995, that the agreement with Iran contained military as well as civilian nuclear technology and material, but insisted that it had been "concluded legitimately and in accordance with international law and no international treaties were violated in the process." Yeltsin added that Russia was now amenable,

> to separate those two. In as much as they relate to the military component and the potential for creating weapons grade fuel and other matters—the centrifuge, the construction of shafts—we have decided to exclude those aspects from the contract. So the military component falls away and what remains is just a civilian nuclear power station with light water reactors, which are designed to provide heat and power.[10]

Since that time, world attention has focused on Russia's ongoing negotiations with Iran over Bushier, not its involvement in the Iranian centrifuge enrichment program or the supply of know-how and expertise. In its public reports, the IAEA has pointedly excised all references to the "foreign sources" of Iran's centrifuge enrichment and reprocessing equipment.

Russia's role in helping Iran to design and build the nuclear-capable *Shahab*-3 missile is much better known and well-documented than North Korea's. On July 20, 2003, production missiles were delivered to the Iranian Revolutionary Guards Corps, following

a final evaluation test that demonstrated that the *Shahab*-3 was capable of launching a nuclear warhead to targets up to 800 miles distant, bringing Israel and U.S. bases throughout the Middle East into range. Top military and strategic advisors to Presidents Yeltsin and Putin have argued that Russia's long-term strategic interests are best-served by a powerful Iran capable of checking U.S. power in the Persian Gulf. Accordingly, Russia defied U.S. pressure throughout the mid and late 1990s by continuing to provide assistance to the Iranian missile programs, despite U.S. sanctions and threats of a cut-off in space cooperation.[11]

Far from alienating Russia, a nuclear-ready Iran will exploit this long-standing relationship in ways that on the surface could appear contradictory. On the one hand, Iran might grudgingly agree to a Russian cut-off in assistance to the Bushier nuclear plant—thereby allowing Russia to appear "helpful" to Western nations seeking to apply pressure on Iran to abandon its clandestine nuclear capabilities. But at the same time, the Russian government could "wink and nod" at "nongovernment actors" who provide nuclear assistance and technology to Iran through grey market deals, just as they did with Iran's missile programs.

If the United States and its allies take Iran's case to the United Nations (UN), Iran will seek Russia's support in preventing UN Security Council sanctions or resolutions authorizing the use of force. To achieve Russian cooperation, Iran's leaders will offer Russia commercial inducements (oil and gas development contracts, industrial contracts, etc.) and strategic inducements, such as a pledge not to support Islamic groups in Chechnya and elsewhere opposing Russian rule. Iran played a similar game with noteworthy success during the 1980-88 Iran-Iraq war. The Union of Soviet Socialist Republics (USSR) rewarded Iran for its refusal to tolerate anti-Soviet resistance activities by Afghan refugees with extensive covert arms deliveries from the USSR and its surrogates. The Soviet-Iran arms relationship emerged into the open in June 1989, when the two countries signed a $1.9 billion arms transfer agreement that included *MiG* 29 jet fighters and T-72 tanks.[12]

Communist China is another key partner. China's assistance to Iran's nuclear programs began with the supply of a subcritical

"training reactor" in 1985. China has helped Iran exploit uranium mines in Yazd province, giving Iran an unsafeguarded source of nuclear material for enrichment; it has supplied milling plants, and reportedly, a facility for producing uranium hexafluoride gas for enrichment centrifuges. Chinese assistance to Iran's nuclear efforts was so extensive by 1991 that President George H. W. Bush issued a rare public rebuke to China's leaders.[13] Iran has now acknowledged having built many of these facilities, and has opened some of them to inspection by the IAEA, which has been careful in its public reports not to name names or even identify the countries involved in transferring critical technologies and design information.

A nuclear ready Iran will leverage trade for political support from China as well—both to restrain the IAEA, and when that fails and Iran's case is referred to the UN, to veto UN Security Council action.

Conclusion 3: Iran will Attempt to Drive a Wedge between Europe and the United States.

Britain, France, and Germany have been trying since the fall of 2003 to convince Iran to abandon the most dangerous elements of its previously undeclared nuclear program. European Foreign Ministers have announced a series of "agreements" and "understandings" with Tehran aimed at freezing Iran's uranium enrichment, reprocessing, and heavy water programs. In exchange, the Europeans have pledged to block U.S. efforts to get the IAEA to refer Iran's noncompliance with the Non-Proliferation Treaty (NPT) to the UN Security Council for eventual sanctions. So far, Iran has found excuses for not respecting its commitments to the Europeans without any ill effects. Even after the IAEA announced that Iran had broken IAEA seals on its centrifuge production equipment in late July 2004, the Europeans refused to cancel a scheduled negotiating session with the Iranians in Paris.

The Islamic Republic has faced down Europe before. In 1997, after a German court convicted the Tehran leadership of having ordered the gangland murder of Iranian Kurdish dissidents at the Mykonos restaurant in Berlin, the European Union (EU) recalled its

ambassadors from Tehran and issued arrest warrants for top Iranian government officials. Iran denied the verdict, refused to hand over its officials, and the EU sent its ambassadors back to Tehran a few months later.

A nuclear-ready Iran will seek to turn Europe against the United States and Israel, offering lucrative trade agreements and superficial concessions at the IAEA to win EU backing. As further inducements, Iran could offer intelligence on terrorist groups operating in Europe (some of which it may itself be funding), or even concessionary oil supply arrangements. It could invite European journalists to tour its nuclear facilities, as a demonstration of Iran's peaceful intent. Should Europe adopt a harder line and back U.S.-led sanctions or military force, however, Iran could step up work on its *Shahab*-4 missiles, said to have sufficient range to target European capitols.

STRATEGIC AND MILITARY MOVES

Conclusion 4: The Regime's Core Values will Drive It Ineluctably toward Aggressive Military Action, Not Responsibility.

Until recently, U.S. policy toward Iran has been driven by two underlying assumptions. The first assumption was that there were "moderates" within the ruling elite who sincerely wanted to cooperate with the United States, and who had serious differences with hard-liners in areas of critical U.S. interest[14]. The second was that the United States could offer them sufficient incentives (or inflict enough pain on the hard-liners) to convince the clerics to change those policies the United States found objectionable: in this case, to freeze and ultimately abandon nuclear weapons development. For nearly 2 decades, these assumptions have rarely been debated, let alone challenged, except by a select group of analysts.

But as I have argued elsewhere,[15] the drive to obtain nuclear weapons and a broad spectrum of WMD capabilities is only one of five goals that unite the ruling clerical elite. These are the core values that form the bedrock of this regime, and will shape the actions of a nuclear-ready Iran. The remaining four are:

1. Maintaining the Islamic Republic at all costs, starting with the system of Velayat-e faghih (absolute clerical rule). Iran's ruling clerics

understand that their regime is increasingly unpopular at home. In July 1999, students at universities across the country revolted. While the regime has managed through heavy-handed repression to break the back of organized opposition, the signs that trouble is brewing just beneath the surface are many.

On the eve of the February 2004 parliamentary elections, 117 reformist members of Parliament resigned *en masse* to protest having been barred from running. The reformers had been seeking a "kinder, gentler" Islamic Republic, not an end to absolute clerical rule. The resulting election sweep by hard-liners effectively marked the end of the reform movement mirage. Iranian voters massively boycotted the elections but as of yet have not managed to otherwise challenge the regime, which has emerged emboldened from the election crisis.

At the same time, regime leaders fear foreign support for the pro-democracy movement, and increasingly view the proliferation of satellite radio and television broadcasts into Iran from abroad with alarm. As the United States contemplates providing support for the pro-democracy movement, we must understand that Iran's new nuclear capabilities increase the stakes. A nuclear-ready Iran will not stop at violently suppressing domestic dissent, but will actively seek ways of lashing out at what it sees as the sources of that dissent: the United States and Israel. Similarly, any outbreak of dissent inside Iran, whether fueled by outside forces or not, will be blamed on the United States and Israel.

2. Aggressive expansion of Iran's influence in the Persian Gulf region to become the predominant power, militarily, politically, and eventually economically. The Islamic Republic has a long history of using terror and subversion against neighboring states to achieve its goals. With a real or virtual nuclear arsenal at its disposal, Iran's leaders may be emboldened to take more aggressive steps to assert its pre-eminence and to weaken competitors. A few examples include:

*Saudi Arabia***.** Iran will resist Saudi efforts to step up oil production in order to lower world oil prices, and will want Saudi Arabia to feel the heat of Iran's new power. A nuclear ready Iran could feel emboldened to step up its support for Saudi terrorist groups and direct them to sabotage or otherwise attack Saudi oil installations, should the Saudis refuse to decrease production.

*Iraq***.** The Iranian government pursued an aggressive campaign of subversion against the Iraqi Governing Council following Operation IRAQI FREEDOM. It supported renegade Shiite cleric Muqtada Sadr, beamed anti-American propaganda into Iraq on 42 Arabic-language radio and television stations, and built a network of social services in southern Iraq that bested those provided by the Coalition Provisional Authority and the Iraqi Governing Council (IGC). A nuclear-ready Iran could step up subversion inside Iraq (attacks on oil installations, U.S. and Iraqi forces), with the goals of scaling back Iraqi oil exports, driving the United States to withdraw its troops, and preventing the emergence of a strong central Iraqi government that could challenge Iran.

*Qatar***.** Iran is competing with Qatar to attract international investment to develop a massive shared gas field in the Persian Gulf. (The Iranians refer to the offshore gas field as South Pars; the Qataris call it the North Dome.) They are also competing to supply natural gas to India and Pakistan.[16]. Fear of a natural gas "glut" could lead Iran to seek to limit foreign investment in Qatari gas projects.

*Turkey***.** Iran's main economic competitor in the region is Turkey. Should Turkey's secular parties or the military replace the current Islamic governing party, Iran could resume its support for Islamic terrorist groups to destabilize Turkey.

3. Calls to end the U.S. military presence in the Persian Gulf, which the Islamic Republic views as a direct challenge to its predominance. The Islamic Republic has long sought to force the withdrawal of U.S. military forces from the Gulf. Since the testimony of former Federal Bureau of Investigation (FBI) Director Louis Freeh on December 18, 2003, in a civil suit against the Islamic Republic of Iran brought by families of the Dhahran victims, Iran's direct involvement in the bombing has become a matter of public record. The Iranian attack was aimed at causing casualties unacceptable to the U.S. public that would force a U.S. withdrawal from Saudi Arabia. [17]

In the past, the regime's use of terror against U.S. targets has been selective, as Iran carefully gauged the U.S. response. A nuclear ready Iran will feel emboldened to launch terrorist attacks on U.S. forces wherever they are stationed in the region as the price of U.S. retaliation dramatically escalates. To step up pressure on the United

States to withdraw its forces, Iranian surrogates could also launch attacks against countries that host U.S. military bases (Qatar, Kuwait, the United Arab Emirates [UAE], Bahrain, Oman), and on U.S. naval ships patrolling the Gulf. (It is my judgment that Iran is less likely to seek to close the Strait of Hormuz, since this would cripple its own oil exports, or to openly challenge U.S. warships passing through the Strait, if it can achieve its goal of a U.S. military pullout through other means).

4. Active subversion of the Middle East peace process. Notwithstanding the vicious anti-Semitic rhetoric of its leaders, the Islamic Republic views Israel as a competitor. The ruling clerics fear that if the peace process succeeds, Israel will become the predominant economic power in the region and the partner of choice for the Arab world, Turkey, and Central Asia, instead of Iran. A nuclear-ready Iran will seek to broaden the struggle against Israel by expanding its support for terrorist groups based in the Palestinian territories, Syria and Lebanon. If war between Israel and its Arab neighbors were to break out, Iran has made clear it would throw its support behind Syria.

Conclusion 5: Iran Hopes Nuclear Capability will Deter a U.S. or Israeli Conventional Strike.

The chronology of Iranian nuclear development, which has accelerated rapidly since the September 11, 2001, attacks on America, strongly supports the view that Iran's leaders believe they can deter an American conventional attack with the threat of nuclear retaliation. "Iran's national defense doctrine has been based on the assumption that it will, one day, fight a war with the United States, plus its Arab allies and Israel," writes Iranian analyst Amir Taheri.

> The central assumption of Iranian strategists is that the U.S. cannot sustain a long war. It is therefore necessary to pin down its forces and raise the kill-die ratio to levels unacceptable to the American public. In the meantime, Iran would put its nuclear weapons program in high gear, and brandish the threat of nuclear war as a means of forcing the U.S to accept a ceasefire and withdraw its forces from whatever chunk of Iranian territory they may have seized.[18]

Iran's leaders have become increasingly bold in brandishing the threat of using nuclear weapons against Israel should the Israelis attempt a conventional strike against Iran's nuclear facilities. This is dramatically different from the Cold War logic of mutually-assured destruction, since it states that Iran would escalate a conventional conflict into a nuclear exchange.

But they have also hinted that they seek nuclear weapons (and the missiles needed to deliver them) to give them new offensive capabilities. Iran's Defense Minister Ali Shamkhani told reporters after a September 25, 1998, military parade that Iran would strike "in a way the Israelis cannot imagine" in the event Israel should launch a preemptive attack on Iran. "Today, we are much stronger than in the past. The most clear example is the *Shahab*-3. It will make the Israelis ponder about putting an end to the arms race one day," he said. Banners with the slogan, "Israel must be wiped off the map" in both Farsi and English, were hung from the *Shahab*-3 missiles put on parade. Shamkhani explained: "We have written on the warhead of the *Shahab*-3 that this will not land in any Islamic country. . . . Of course, this program will be pursued, and we will have the *Shahab*-4 and even the *Shahab*-5 to respond to our defense needs."[19]

At times, Iran's leaders speak with a kind of millennial exaltation when evoking a nuclear exchange with Israel. In a speech in Tehran in October 2000, former president Ali Akbar Hashemi-Rafsanjani clearly stated that Iran believed it would come out the winner. "In a nuclear duel in the region, Israel may kill 100 million Muslims," Rafsanjani said. "Muslims can sustain such casualties, knowing that, in exchange, there would be no Israel on the map."[20]

Rafsanjani expanded on this doomsday calculus in a oft-cited Friday prayer sermon in Tehran on December 14, 2001, noting "the use of a [single] nuclear bomb in Israel will leave nothing on the ground," whereas an Israeli strike on Iran "will *only damage* the world of Islam" [emphasis mine]. Rafsanjani said that Israel would be "removed from the region and the world of Islam [as] 'extraneous matter'," and that "those who have gathered together in Israel would one day be dispersed again." This is not the language of mutually assured destruction or deterrence. This is the language of genocide.[21]

When asked about the possibility of Israel launching a preemptive strike against Iran's nuclear facilities, Rafsanjani boasted to al-Jazeera television on September 18, 2003, "We are not worried about Israel and its threats. If Israel committed such an error, we would give it a slap it would never forget—not only during several years, but for all its history."[22]

Rafsanjani gets credited with having revived Iran's stalled nuclear program, first as Parliament Speaker in the early 1980s, and later as President from 1989-97. He now heads the Expediency Council, a leadership body capable of overturning the legislature or even the Islamic Republic's main religious court, the Council of Guardians. Once labeled a moderate by the *Washington Post* and the State Department, "either Rafsanjani fooled diplomats and pundits alike, or moderate in Iran implies first-strike use of nuclear weapons," scholar Michael Rubin commented.[23]

Other government spokesmen have reinforced Rafsanjani's threats, as Israeli officials began warning publicly that a preemptive strike against Iranian nuclear sites could become necessary. Seyed Masood Jazayeri, spokesman for Iran's Revolutionary Guards, accused Washington of using its "wild dog"—Israel—to go after Iran's nuclear programs. If Israel tried to disrupt the Iranian program, it "would be wiped off the face of the Earth and U.S. interests would be easily damaged," he warned in July 2004.[24] President Khatami added that Iran would consider the United States co-responsible for an Israeli attack. "In the international arena, America's capital is Tel Aviv, not Washington. It's the Zionists who dominate the United States," he told reporters as he emerged from a Cabinet meeting. He also announced that Iran had resumed uranium enrichment activities.[25]

The clarity of Iran's threats should not be dismissed as mere exaggeration or wishful thinking. A nuclear-ready Iran is likely to goad Israel into launching a preemptive attack, after it has dispersed its nuclear material to ensure that it survives the strike. If the regime feels threatened—from domestic dissent, or foreign attack—the risk of nuclear miscalculation is enormous.

U.S. OPTIONS

In my judgment, the United States has only two options if it allows Iran to achieve breakout nuclear capability: capitulation, or war. The United States might seek to encourage Iran to become a "responsible" member of the nuclear club, by opening a "dialogue" with the regime. In exchange for Iran's agreement to abide by "rules" such as no nuclear first use, and no onward proliferation to third parties, the United States might chose to offer incentives such as:

- a resumption of normal trade and investment,
- a resumption of diplomatic relations,
- an end to stigmatizing the Islamic Republic as a member of the Axis of Evil, and
- ending "the language of regime change."[26]

The recent Council on Foreign Relations report opines that the underlying rationale for Iran's persistent clandestine nuclear weapons programs is its fear of regional rivals, especially the United States. "Ultimately, only in the context of an overall rapprochement with Washington will there be any prospect of persuading Iran to make the strategic decision to relinquish its nuclear program," the report states.

Such an analysis assumes that Iran developed nuclear weapons as a bargaining chip, which it would be willing to give up in exchange for certain concessions. But the United States repeatedly has offered to resume normal trade and investment, to hold a security dialogue with the regime, and to eschew the language of regime change, if only Iran would abandon other objectionable behavior—in particular, its support of international terrorist groups and its violent opposition to the Middle East peace process. If the Islamic Republic was unwilling to take up the offer when the costs were relatively low, why should it take the offer now when the costs are much higher? At best, the Islamic Republic might agree to a U.S. offer of trade and relations, in exchange for a pledge of no nuclear first use and no onward proliferation. But Iran's leaders will take such a U.S. offer as a sign of weakness. Far from giving up its nuclear capability in exchange,

the Iranian regime will insist that it be treated with respect as a new member of the nuclear club. With the EU, Russia, and China in agreement to thwart strong UN Security Council action, the United States will have no levers available should Iran find a convenient excuse at some later date to break its promise and unsheath the nuclear sword.

The only other option for the United States is preemptive war. If so, it will be war in splendid isolation, and with active opposition from Europe, Russia, China, the Organization of the Islamic Conference, and just about every UN member state except, possibly, Israel.

Once the United States begins a buildup of offensive forces poised on Iran's borders, the Islamic regime is unlikely to wait before it uses whatever nuclear arsenal it possesses. Its first target will not be U.S. forces, but Israel. The Islamic regime will claim to be attacking in "self-defense" (and most of world public opinion will probably agree), since the U.S. administration will be portrayed as doing Israel's bidding, as the "moderate" president Khatami asserts.

Only one Iranian nuclear-tipped missile needs to penetrate Israel's *Arrow* anti-missile defenses to devastate Israel's highly-concentrated population. Even a cowed Israeli leadership, deterred from preemptively attacking Iranian nuclear sites, can be expected to unleash its nuclear arsenal, in a tragic reenactment of the Jewish defenders at Masada 2,000 years ago, who preferred suicide to surrendering to the Roman legion.

A NUCLEAR IRAN IS NOT AN OPTION

From the foregoing, it should be clear that allowing a nuclear Iran to emerge, for as long as Iran is ruled by a radical clerical regime, is not an option any U.S. policymaker wants to face. It should also be clear that the intentions of Iran's leaders are the issue, not the capabilities of its military. If nuclear weapons alone were the problem, the United States would have security issues with Great Britain.

It is my judgment that the United States must take decisive action before Iran becomes nuclear-ready, for as long as the Islamic regime remains in power in Tehran.

ENDNOTES - CHAPTER 5

1. Ali Akbar Dareini, "Tehran Says No to New Oversight," *Washington Times*, June 13, 2004, accessed at *http://www.washtimes.com/world/20040612-113944-3765r.htm*.

2. This 5 MegaWatt reactor, installed at the University of Tehran's Tehran Nuclear Research Center (TNRC), was supplied by AMF Atomics, a division of American Machine and Foundry, and was initially fueled with U.S.-supplied highly enriched uranium (HEU).

3. "No Impediments for Iran to Build Uranium Centrifuges," *Gulf News*, July 15, 2004. The IAEA acknowledged that its seals had been broken on July 27.

4. "Agents Seek Russian Sale of Nuke-Boosting Gas," *Washington Times*, July 29, 2004.

5. "Russia to Supply Iran with Nuclear Fuel," *Washington Times*, August 24, 1995; see also, "Russian Nuclear Deal Worries Germans," Iran Brief, September 5, 1995.

6. "Russia Not to Export Nuclear Fuel to Iran," *http://www.russiajournal.com/news/cnewswire.shtml?nw=40726#n40726*.

7. Zbigniew Brzezinski, Brent Scowcroft, *et.al*, *Iran: Time for a New Approach*, Council on Foreign Relations, July 2004, p. 39.

8. Con Coughlin, "Tehran Will Turn Terrorists on Gaddafi If The Former Ally Reveals Its Nuclear Weapon Secrets," *Sunday Telegraph* (London), February 29, 2004.

9. "Uranium Enrichment Program Confirmed," Iran Brief, May 1, 1005.

10. "Russian Nuclear Deals are On," Iran Brief, June 1, 1995. I provide a more detailed chronology of Iran's then clandestine nuclear weapons efforts and its suppliers in "Iran's Nuclear Program: Myth and Reality," a paper presented before the Sixth International Castiglioncello Conference, Castiglioncello, Italy, September 30, 1995. (Fifty Years of Nuclear Weapon: Proceedings of the Sixth Castiglioncello Conference, USPID, Milano (Italy), 1996.)

11. Kenneth R. Timmerman, "Russian Assistance to Iran's Missile Programs," testimony before the Subcommittee on Space and Aeronautics of the Committee on Science, U.S. House of Representatives, July 13, 1999.

12. "Post-Khomeini Iran: Looking for Friends," *Mednews*, Vol. 17, Issue 2, June 26, 1989.

13. "The China-Iran Nuclear Cloud," *Mednews*, July 22, 1991.

14. Many journalists and academics continue to use the terms "moderate" and "conservative" to describe the two main camps. I will discuss Khatami's "moderation" in this chapter. As for the "conservatism" of clerics such as Ayatollah Khamenei, who was educated at Patrice Lumumba University and has long

supported state control of the economy, he is about as "conservative" as Joseph Stalin. For a more detailed discussion, see "Change in Iran and Challenges for U.S. Policy-makers," a paper delivered at a Congressional Research Service forum on Iran, January 8, 1999, available at *http://www.iran.org/tib/krt/krt_index.htm*.

15. See, in particular, "Fighting Proliferation through Democracy: A Competitive Strategies Approach Toward Iran"; From *Prevailing in a Well-Armed World: Devising Competitive Strategies Against Weapons Proliferation*, Henry Sokolski, ed., Carlisle, PA: U.S. Army War College Strategic Studies Institute, March 2000. Versions of this thesis were presented in seminar format at the U.S. Army War College, the U.S. Department of Energy, and elsewhere.

16. In July 2004, Iran revived stalled efforts to attract investment to build an Iran-India natural gas pipeline that would cross Pakistan, either by land or in Pakistan's offshore economic zone.

17. Freeh and his deputy for Counterterrorism, Dale Watson, described FBI interviews with participants in the attack who provided evidence to the FBI that they had been trained, funded, and armed by the Iranian government. Testimony in Heiser v. Islamic Republic of Iran, U.S. District Court for the District of Columbia. See also Kenneth R. Timmerman, *Countdown to Crisis: The Coming Nuclear Showdown with Iran*, New York: Crown Forum, 2005, pp. 188-189.

18. 20. Amir Taheri, "Recipe for Disaster," *National Review*, November 14, 2003; *http://www.nationalreview.com/nr_comment/taheri200311140918.asp*.

19. "Shamkhani's Threats," Iran Brief, October 5, 1998.

20. Taheri.

21. Rafsanjani's sermon was paraphrased in Tehran newspapers. This quote comes from the English-language version that appeared in Tehran. "Former Iranian President Rafsanjani on Using a Nuclear Bomb Against Israel," MEMRI Special Dispatch No. 325, January 3, 2002.

22. "Iran's Rafsanjani Warns Israel against Attacking Nuclear Sites," AFP, September 18, 2003.

23. Michael Rubin, "The Iranian Ticking Bomb," *Jerusalem Post*, February 17, 2002.

24. David R. Sands, "Tehran Breaks U.N. Seals on Nukes," *Washington Times*, July 28, 2004.

25. "No Impediments for Iran to Build Uranium Centrifuges," *Gulf News*, July 15, 2004.

26. Most of these proposals are drawn from the final report of a Council on Foreign Relations task force on Iran chaired by Zbigniew Brzezinski and Robert Gates. See "Iran: Time for a New Approach," CFR, July 2004.

PART III

IS THERE A SIMPLE MILITARY OR SANCTIONS FIX?

CHAPTER 6

IS THE BEGIN DOCTRINE STILL A VIABLE OPTION FOR ISRAEL?

Shlomo Brom

THE BIRTH OF THE PREEMPTION DOCTRINE

A General Israeli Proclivity towards Preemption and Prevention.

Preemption and prevention were an important part of the security discourse in Israel since the inception of the state of Israel. The development of such a discourse was natural because of the unique geo-strategic situation of the state of Israel; a small state with a small population surrounded by much larger Arab states determined in these years to reverse the results of the 1948-49 Independence War and put an end to the existence of the Jewish state. When the Israeli defense doctrine was formulated by its first prime minister, David Ben-Gurion, it was evident that Israel could not afford a major invasion of its very limited territory. Two major principles were included in this doctrine to prevent the occurrence of such invasion. The first was "early warning" and the second was "transferring war to the enemy's territory as soon as possible."

"Early warning" was supposed to enable taking effective countermeasures against an invasion by the establishment of an efficient intelligence system that would be capable of giving accurate and timely warning of an approaching invasion. If time allowed and the necessary reserve forces could be mobilized, a preemptive strike could be launched. If time did not allow such a strike, then it was envisaged that a very short defensive battle would be utilized to gain enough time to mobilize the reserve forces that would carry the battle to the enemy's territory.

In this discourse sometimes the notion of *preemptive* war was mixed with the notion of *preventive* war, and there was no real distinction between them. The first example of an implementation of these doctrines was in the Sinai Campaign of 1956. The Israeli

leadership that was following the large weapons deals of Egypt in the Soviet Union and the Eastern Block suspected that these weapons deals served as preparation for an approaching Egyptian strike against Israel. They also decided to exploit the conflict that developed between Egypt and France and the United Kingdom (UK) following the nationalization of the Suez Canal; Israel formed an alliance with France and the UK that led to an attack on Egypt by the three powers. From the point of view of Israel, this operation was highly successful. It led to the de-facto demilitarization of the Sinai Desert separating Israel from Egypt, to a stoppage of terrorist attacks from Egypt, and to a substantial improvement of Israel's strategic situation.

In I967 the same scenario repeated itself, but this time with a more concrete threat. Egypt forced the United Nations (UN) peacekeeping force to leave the Sinai and deployed massive forces on Israel's border. This was interpreted by Israel as preparation for an all out attack. Israel preempted and attacked the Egyptian army in the Sinai before it had a chance to attack Israel. Once again, it was perceived that preemption saved Israel from an imminent threat to its existence.[1]

In 1973 the government of Golda Meir considered a premptive strike when it had reliable information about the approaching Egyptian-Syrian attack but decided not to take this step because of concern for the possibility of political repercussions, coupled with too much confidence in the Israeli Defense Force's (IDF) capabilities.

In 1982 Israel initiated the war in Lebanon. This war is very controversial in Israel because many Israelis were not convinced that it was really necessary. But its saliency for the understanding of Israel's security doctrine stems from the fact that the arguments of the supporters of the war, arguments that succeeded in convincing the Israeli cabinet to approve it, were based on the need to preempt the terrorist threat from Lebanon.

Weapons of Mass Destruction and Preemption/Prevention.

Early in the Israeli preemption discourse, weapons of mass destruction (WMD) played an important role because, for Israel, such threats touch raw nerves. First, they roused holocaust memories. The

Nazis tried to exterminate the Jews with the use of poisonous gas. The talk about chemical and biological weapons creates among Jews an association with the darkest time in Jewish history. At the same time, these weapons were posing an existential threat on a nation that was already highly aware of the opposition of its neighborhood to its existence. The first time these considerations played a major role was at the end of the 1950s, when Nasser's Egypt was leading the Arab opposition to the existence of Israel and initiated projects for the development and production of ballistic missiles and chemical weapons. For that purpose, German World War II scientists and engineers were mobilized by the Egyptians. They moved to Egypt and started to play a major role in these projects. German technology based firms were also used to supply components and technology for the Egyptian projects.[2]

In the years 1960-64, Israel made a concerted effort to preempt the Egyptian missile project by a combination of covert action by the Israeli external intelligence agency, the Mossad, against the German personnel that were involved in the project, and political action aimed at the German government. In this framework the means adopted were covert assassination attempts and intimidation. The combination worked and eventually the German assistance stopped, leading to the collapse of the Egyptian indigenous program.[3]

In the beginning of the 1970s, Saddam Hussein, already the de-facto ruler of Iraq, initiated a military nuclear program. The Iraqis decided to get fissile material through the production of plutonium in a reactor and its separation. The plutonium producing reactor was procured from France in the framework of a nuclear cooperation agreement concluded in 1975. The separation instrumentation was acquired in Italy.

Aware of the Iraqi program, Begin's government decided to preempt it by preventing the construction and operation of the French-built reactor. First, the well-proved combination of covert action and political action in France was attempted, but it failed to stop the project. Israeli agents succeeded in sabotaging the core of the reactor while it was stored in France prior to its shipment to Iraq. That only delayed the shipment, and the French government refused to acknowledge the real nature of the Iraqi project and stop French

involvement. In the next stage, Israel decided to attack the reactor and destroy it before it started operation. On June 7, 1981, eight Israeli F-16 aircraft attacked the Iraqi Osiraq reactor in Tuweitah, near Baghdad, and destroyed it completely.[4]

At first, world opinion reaction to the attack was hostile. It was described as a violation of acceptable norms in international relations. The U.S. administration condemned the action and decided to suspend the supply of military aircraft to Israel. The UN Security Council condemned Israel for this action as well. Ten years later, after the war on Iraq and the exposure of the Iraqi military nuclear program by the UN Special Commission (UNSCOM), there was general recognition that the attack on Osiraq was justified.[5]

While Israel chose to stop the above two programs by the use of force, either covertly or overtly, other ballistic missile programs and WMD programs were dealt with differently. The salient examples are:

- Egypt had an extensive chemical and biological weapons program from the end of the 1950s. Israel chose not to do any thing against this program.
- Syria initiated a chemical weapons program after the 1973 war. Once again, Israel chose not to act against this program. When Syria started a program for the indigenous production of ballistic missiles in the 1990s, the same approach was adopted.
- In 1981-83, Iraq, with the support of European companies, built a large scale facility for the production of chemical weapons at Al-Muthana, and nothing was done by Israel. The Iraqi missile production projects received the same Israeli attitude.[6]
- The most interesting example is that of the renewed Iraqi nuclear project after the destruction of Osiraq. This time, Iraq chose the track of enrichment of uranium for acquisition of military grade fissile material. Different methods were tested and developed; enrichment by gas centrifuges, electro-magnetic isotope separation (EMIS), chemical enrichment, and gaseous uranium diffusion enrichment. In parallel, much work was invested in the technologies of the production of a

warhead based on enriched uranium (explosives, electronics, and metallurgy). Israel had good information about important parts of these projects, but it choose, until the 1991 Gulf War, not to use force in any way and preferred to focus on political pressure directed at European governments to prevent assistance to the Iraqi program by companies that operated in these states, mainly, Germany, UK, Italy, and Switzerland.[7]

- Israel also did not make any real attempt to stop the Pakistani nuclear program during the 1970s and 1980s, although it was perceived as an "Islamic bomb" and a threat to Israel.[8] At the time, there were some rumors and suspicions that Israel was involved in acts against the Pakistani program, but they were never confirmed.

Developing a General Theory.

Following the Israeli attack on Osiraq, there was a tendency among researchers to propose that Israel had adopted a comprehensive and all encompassing preventive counterproliferation doctrine sometimes referred to as "the Begin Doctrine." This was based to a great extent on Israeli government statements. Shai Feldman, for example, describes how, in its June 9 announcement of Osiraq's destruction, Israel's government articulated its belief that, had Iraq's President Saddam Hussein acquired nuclear bombs, he would not have hesitated to drop them on Israeli cities and population centers. The Israeli government then went on to a general preventive doctrine: "under no circumstances would we allow the enemy to develop weapons of mass destruction against our nation; we will defend Israel's citizens, in time, with all the means at our disposal."[9] Feldman adds that this theme soon was crowned as a "doctrine," not only because it was immediately viewed as such by numerous observers worldwide, but also because Israel's leaders have since repeated it on numerous occasions. One example is a major policy address given by Israel's then Minister of Defense and present Prime Minister Ariel Sharon:

> The third element in our defense policy for the 1980s is our determination to prevent confrontation states from gaining access to nuclear weapons.

> Israel cannot afford the introduction of the nuclear weapon. For us, it is not a question of balance of terror but a question of survival. We shall therefore have to prevent such a threat at its inception.[10]

Feldman, however, doubts the long-term feasibility of the doctrine.[11]

Other scholars argue that Israel is more prone to launch preventive strikes against other proliferators because of its specific posture as the only Middle Eastern state that lives in a hostile environment, is perceived as a nuclear power, but keeps an "ambiguous nuclear policy." Etel Solingen proposes that "opaqueness" (that is the term she prefers for what is named elsewhere as "ambiguity") may include the use of compellence by actively preventing an adversary from achieving a nuclear capability, presumably because the power that chose opaqueness did it as a way of retaining its nuclear monopoly.[12] Scott D. Sagan sees a wider risk of preventive wars among proliferators when he refers to the perils of proliferation. He uses evidence from the U.S.-USSR, India-Pakistan, and Ukraine cases to argue that this evidence does suggest strongly that military officers have strong proclivity towards preventive war. His main concern, of course, is preventive nuclear wars and not conventional surgical strikes against nuclear installations. Strangely enough, Sagan does not discuss the Israeli case perhaps because he believes Israel succeeded in developing stable civil-military relations and therefore it is more likely to adopt a prudent policy.[13] Bruce Berkowitz is raising a similar concern when he says that, considering the expected costs of acquiring an opponent armed with nuclear weapons, a prospective nuclear power would present other countries with a temptation to conduct the ultimate "preemptive strike"--attacking the state's nuclear reactors or weapons fabrication plants before a bomb is tested. He adds that the Israelis did this to Iraq in 1981 with fighter-bombers armed with conventional bombs, but it would not be outlandish to argue that the Israelis would have been willing to consider using nuclear weapons on the mission if such weapons were available and if they were deemed necessary for success.[14] The ease with which Berkowitz describes Israel's resort to a nuclear preemptive strike looks quite outlandish, but it reflects a popular belief that Israel would do anything to prevent nuclear proliferation in the Middle

East. Frank Barnaby sees the Middle East as particularly unstable because of the danger of preemptive strikes against nuclear-weapons sites. "A large-scale Israeli deployment of nuclear weapons could provoke a preemptive Arab attack against production sites, arsenals, and command centers. Israel would almost certainly respond to any Arab attempt to acquire nuclear weapons with a military strike such as the one on Iraq's reactor."[15] This kind of almost automatic response to an Arab nuclear or other WMD program does not reflect the actual Israeli policies as describes in the previous chapter, and that raises the question: Under what circumstances is Israel willing to take violent preemptive action against an adversary's nuclear program?

Barry Schneider deals more generally with the question of the necessary specific set of conditions for any head of state to order a preemptive counterproliferation strike. He assumes the nuclear aspirant would have to be approaching the nuclear threshold and be led by a hostile government that appeared ready to take extreme risks. The developing scenario would have to directly and immediately threaten a vital interest of the country considering the preemptive strike. It would require information on important nuclear target locations of the adversary and the ability to achieve tactical surprise. The adversary should not be able to threaten the preemptor with nuclear arms or other WMD or have a strong ally who is likely to do so on its behalf. All other reasonable options should have been exhausted before such a strike is undertaken. The head of state should also have adequate domestic and international political support for the action and for bringing any military campaign to a successful conclusion before choosing this type of nonproliferation activity.[16]

Evidence suggests that in the Israeli case some modifications of this model are necessary. First, there is a need to define the meaning of approaching the nuclear threshold. In the Israeli case, it seems that this point is defined as the point of irreversibility, namely the time in which the proliferator stops being dependent on external assistance; it controls all the necessary technologies and knowledge; and it cannot be denied these capabilities through pressure over the states and private elements that supply assistance. Thus, Israel decided to attack Osiraq when it was clear that all the equipment of

the reactor and the separation cells was already supplied by France and Italy, respectively.

Second, there is a wider question of the feasibility of the military operations against the nuclear installations. It is not only a matter of having the necessary intelligence about their locations and having the capability to achieve tactical surprise.

Third, it is not true in the case of Israel that when the adversary can threaten the preemptor with any WMD, preemptive action will not be undertaken. Israel attacked Qsiraq although it was already argued at this stage that Iraq had chemical weapons, and there already were Iranian allegations, not corroborated, that Iraq used these weapons in the war.[17] It did not deter Israel from carrying out the attack.

Fourth, international support is not a must. Israel launched its 1981 attack without international support. The United States launched its recent war on Iraq without international support. The real issue is what is at stake and is it worth international condemnation. It seems that, in many cases, leaders are willing to take the risks.

Fifth, the proposition that the developing scenario is directly and immediately threatening a vital interest of the country considering the preemptive strike, is highly dependent on the perception of the preemptor. There is no objective way of measuring it. In Israel, there is high propensity to see any Arab and Iranian nuclear capability as an existential threat for Israel.[18]

The modified Israeli model that explains the differences in Israeli reaction to different ballistic missiles and WMD programs in the Middle East should include the following set of considerations that are taken during the decisionmaking process by the Israeli leaders:

The magnitude and severity of the threat. In Israel's case, the immediacy of a WMD threat does not play an important role. Israel destroyed Osiraq in 1981 when Iraq was embroiled in a long and difficult war with Iran and when it was clear that Iraq could not afford another conflict with Israel. On the contrary, Iraq started some gestures towards Israel at that time. The severity of the threat is dependent on the type of WMD and their delivery means. The term "weapons of mass destruction" is misleading. The destructive power of nuclear weapons surpasses significantly the other categories of WMD, and biological weapons are considered more destructive than chemical

weapons. It is dependent also on the availability of countermeasures. There are no countermeasures against nuclear weapons, while it is possible to acquire protection from chemical and biological weapons, whether by protective clothes or suitable building codes. There are also post-attack medical treatments for the victims of chemical and biological attacks. It is not surprising that in the 1980s and 1990s, the Israeli decisionmakers felt that they could deal with chemical weapons and possibly biological weapons, and therefore there was no acute need to take preemptive action. The availability of countermeasures is changing through time. In the 1960s, there was a feeling in Israel that there were no countermeasures against ballistic missiles, and hence preemptive actions were undertaken against the Egyptian missile program. Twenty years later, technological advancements made it possible to develop effective countermeasures. The severity of the threat is also linked to the level of animosity in the relationship between Israel and the proliferators. Thus Israel did not see Pakistan's nuclear capability as having a direct bearing on its security, while a nuclear Iraq presided over by megalomaniac Saddam was considered an existential threat.

Feasibility. Can use of force stop the program or at least delay it for a substantial time? The answer depends on the character of the program and on the availability of operational capabilities that can be used against the program. The decision to attack Osiraq was relatively easy because the entire nuclear project was dependent on this one facility, a Plutonium producing reactor. It was clear that the destruction of the reactor would lead to the stoppage of this nuclear project, and indeed after the attack the Iraqis abandoned the Plutonium track, and when they decided to resume the nuclear program, they based it on enrichment of uranium by a number of methods. The same thing was true for the Egyptian missile program in the 1960s. It was clear that the program was totally dependent on the assistance of the German personnel, and they provided an easy and soft target.

In comparison, it was difficult to find one link in the research, development, and production chain of the Iraqi chemical weapons that, when attacked, would have caused a stoppage or a substantial delay of the program. These programs were much more dispersed and redundant than the initial Iraqi nuclear program.

A good example was the Iraqi main chemical weapons production facility at Al Muthana. It was a huge facility, covering tens of acres, with several dozen buildings in which there were hundreds of equipment items. None of these buildings or equipment items was unique or irreplaceable.[19]

The same thing was true for the post-1981 Iraqi nuclear program. The Iraqis learned the lessons of the 1981 attack, and their new program was much less vulnerable and included many redundancies. They worked in parallel on several methods for the enrichment of uranium. When they started to build fully operational plants, they constructed two different plants at different areas of Iraq for the enrichment of uranium with EMIS. They also planned to build several facilities for gas centrifuges enrichment. The new system was dispersed and could not be destroyed with one surgical strike. One can assume that this added difficulty contributed to the Israeli decision not to attack these facilities.

Feasibility is also dependent upon the level of intelligence available to Israel. It should know the location and function of the different facilities, and be certain the intelligence at its disposal is complete enough to ascertain that, once these installations are destroyed, the WMD program will be stopped or delayed for a substantial time. In the case of the post-1981 Iraqi nuclear program, the findings of the IAEA Iraq action team show clearly that the intelligence that was available to Israel and its Western allies about the Iraqi nuclear program was partial,[20] and it is doubtful whether it allowed for an effective preventive strike.

Last, feasibility is dependent upon the operational capabilities needed for the desired effects in the targets. The Israeli Air Force (IAF) has formidable capabilities and enjoys unchallenged supremacy vis-à-vis the other Middle East air powers, but Israel has no aircraft carriers and it cannot use airbases in other Middle East states; therefore its operational capabilities are reduced when the targets are located far from its territory. Based on the past performance of the IAF, its order of battle that includes only F-15I and F-16C/D aircraft capable of long range strike, and the deployment of its aircraft,[21] it is possible to determine that at long ranges (more then 600 km), the IAF is capable of a few surgical strikes, but it is not capable of a

sustained air campaign against a full array of targets. The operational capability is dependent also on the expected opposition to the attack by the adversary's air defense system. Targets that are well-defended by ground air defense and interceptors have to be attacked by a larger aerial force composed of the attack aircraft, interceptors that protect them, and other support aircraft (for air refueling, electronic countermeasures [ECM] support, communication, and rescue).

Covert action demands other kind of operational capabilities. The intelligence needed for these kinds of operations is usually more detailed and necessitates a better penetration of the adversary's program. The covert sabotage options are linked to the adversary's program's dependence on other states' assistance. Usually it is easier to operate covertly outside the adversary's territory. The proliferators in the Middle East are usually states that are ruled by authoritarian regimes with strong control of their security services, and very limited freedom of movement for foreigners. The locations that are part of the WMD program are high security installations and are well-protected. The only vulnerable point is the connections with the outside world in states in which Israel's security services have better operational capabilities.

Israeli leaders, like other leaders, resort to use of violent means when other means are exhausted. Osiraq was attacked after many attempts to convince the French government not to supply the reactor to Iraq.[22] Israel acted against the German experts that helped the Egyptian missile program only when it seemed that the German government was not doing anything to prevent this assistance, and stopped its actions when it became clear that Germany was willing to take decisive action against these experts. This decision of Prime Minister Ben Gurion led to the resignation of Director of the Mossad Issar Harel who objected and argued for the continuation of the covert operations.[23]

An Israeli leader that considers preventive action has to take into account the cost of the action, externally and domestically. He has to consider two scenarios; a scenario of failure and a scenario of success. In case of failure, the cost is mainly in the loss of domestic support. Present Prime Minister of Israel Ariel Sharon suffered a real blow to his political career because he initiated a preventive war in

Lebanon in 1982 that was perceived by many in Israel as a failure. Nevertheless, it seems that because of the high sensitivity in the Israeli public to the acquisition of WMD by its adversaries, an Israeli leader may assume that the public will not punish him, even for a failed attempt of prevention. The external cost of a failure is smaller because the powers that would have objected to the action will feel that Israel was punished enough by the failure. In a case of success, the domestic opposition will be silenced, while Israel may pay a cost in its external relations. The attack on Osiraq is an interesting test case. Domestically, there was some opposition to the operation; some by opposition leaders and some by officials that knew about its preparations, but it subsided a short time after the successful implementation.[24] The external reactions were much harsher and included sanctions by the United States.

The discussion of the domestic cost raises the question whether the Israeli doctrine of preemption/prevention is affected by partisanship. Generally, one can argue that right-wing governments are more inclined to exhibit tough policies towards Israel's adversaries, and therefore it can be assumed that they will be more inclined to adopt preemptive/preventive policies. Nevertheless, it is not possible to reach this conclusion from the few cases of Israeli implementation of preventive action against WMD programs in the Middle East. A left-center government initiated violent preventive actions against the Egyptian ballistic missiles program, while a right-wing government decided on the destruction of Osiraq. In this latter case, there was opposition and support for the operation among opposition persons and among persons that were part of the right-wing administration. The operation became a highly contested political issue only because it was executed a short time before the general elections, and it was argued that it was a kind of elections campaign spin.[25] Therefore, it seems that usually such matters of national security are not considered a partisan subject as long as they are not perceived as something that is going to serve the domestic political agenda of the ruling party.

Another part of the perceived cost is the possible violent reaction of the attacked proliferators. The Israeli leader has to weigh the utility of the planned operations, especially in cases where it is clear that only a delay will be achieved, against the possible cost

in life and property as a result of the adversary's reprisals. There are several explanations for Saddam's decision to launch ballistic missiles against Israeli cities in 1991, but one of the simplest and most probable explanations is that Saddam used the opportunity of the war to settle the account of the 1981 attack by Israel. In considering the risk of reprisal, the Israeli leader will have to weigh the military capabilities of the adversary, the record of its regime, the potential of reprisal by nonmilitary means, e.g., terror, and the efficacy of Israel's defenses against these challenges.

THE IRANIAN CASE

Any estimation of a possible Israeli preemptive attack on the Iranian nuclear program should be based on the specific parameters of the Iranian case.

Israeli Perception of the Threat.

There are two schools of thought in Israel that have different perceptions of the Iranian threat. The first one is represented by persons like member of Knesset (the Israeli parliament) Ephraim Sneh and by the Military Intelligence community who perceive Iran as a bitter ideological enemy that is determined to bring about the physical annihilation of Israel. This school does not believe that a regime change in Iran is possible in the foreseeable future. The clear conclusion is that Israel cannot live with an Iran that has military nuclear capabilities, because sooner or later Iran will use them against Israel.

The other school of thought looks at Iran as a more complex entity with a policy that is influenced by many considerations, the ideological consideration being only one of them. According to this line of thinking, Iranian policies are motivated more by national interests and preservation of the regime considerations than by ideology. In the case of the Iranian policy vis-à-vis Israel, Iran is pursuing its ideological agenda because it serves its national interest of getting influence in the Arab world and a status of leadership in the Moslem world, and it helps the regime to retain its revolutionary

image and thus keep its *raison d'etre* for being a legitimate regime. This school of thought is represented in the Israeli intelligence community by the Mossad, Israel's foreign intelligence agency,[26] and has supporters in the Ministry of Defense and the National Security Council.

Different perceptions lead to different conclusions. While the first school assumes no political pressure can force Iran to stop its military nuclear program, the other school believes that political pressure can be effective in at least delaying the nuclear program significantly. The second school believes that a nuclear Iran with a different regime will not pose a high risk to Israel and can be easily deterred. Furthermore, they believe that, if the nuclear program is to be deferred sufficiently, regime change eventually will occur in Iran, and it will diminish substantially the risk to Israel of an Iranian nuclear program. The first school believes that Israel cannot accept Iran being nuclearized under any political circumstances. These differences of view between those that can be defined as Iran hawks and those that can be defined as Iran doves imply that the first will be more prone to recommend proactive and preemptive/preventive violent operations against the Iranian nuclear program. The dividing line is not partisan. One of the most vociferous Iran Hawks is Labor (left-wing) Member of Knesset and ex-minister Ephraim Sneh, while the present Likud (right-wing) Minister of Defense Shaul Mofaz sometimes preaches for restraint in Israel's approach to Iran, even when he points at the danger of Iran's nuclear program.

The Nature of the Iranian Nuclear Program and Its Vulnerabilities.

The Israeli attack on the Iraqi reactor, Osiraq, had a deep impact on the evolution of other nuclear programs in the Middle East. States that were determined to continue with such programs learned the lessons of the attack and concluded that they should strive to decrease the vulnerability of their program by adding more protection and more redundancy. The new nuclear projects are much more dispersed and well-protected. That is also true for the Iranian nuclear program. The most essential part of every military

nuclear program is the production of fissile materials. According to recent revelations concerning the Iranian nuclear program, Iran intends to produce fissile materials in two tracks; the uranium track and the plutonium track. First, using the excuse of a plan to produce fuel for nuclear power plants, Iran is building uranium enrichment capabilities. Iran is also pursuing different methods of enrichment to ensure redundancy. It is vigorously building an industrial size facility for uranium enrichment with gas centrifuges in Natanz, and it pursued also LASER enrichment of uranium. In parallel, it is striving to control technologies that will enable it to build a plutonium production heavy water reactor. In this context, it was recently discovered that Iran is building a heavy water production facility in Arak, and also has an intention to build at the same location a heavy water so-called "research reactor," which will probably be used for irradiating of uranium, and later separation of plutonium from the irradiated uranium rods.[27] Uranium enrichment specifically enables dispersion of the production facilities in a relatively large number of small facilities. It is very difficult to assure that there are no additional facilities other than those that were already traced. According to one estimate, there are 19 traced suspected nuclear facilities in Iran without assurance that this number is finite.[28]

The nuclear facilities that Iran is constructing are also well-defended. The centrifuge plant built at Natanz is underground, and it is defended by an extensive ground air defense system.[29]

It is very difficult to find in the Iranian nuclear program one vulnerable point that, once it is attacked and destroyed, the Iranian program is stopped or stalled for a long time. The Bushier nuclear power plant, which is relatively vulnerable to attacks, is not really a part of the military nuclear program, and it mostly serves as an excuse for an Iranian wish to have control over the full fuel cycle, namely building a capacity for uranium enrichment. Its attack would not have a real effect on the military program. The net effect is that any attempt to attack the Iranian nuclear program would necessitate sustainable attacks on a relatively large number of targets that are well-defended, passively and actively.

Israeli Operational Capabilities vis-à-vis Iran.

Iran is situated more then 1,000 kms from Israel. It is a vast country, and all the meaningful nuclear targets are, and most probably will continue to be, situated far from its Western borders. That means that once Israel decides to attack Iran's nuclear facilities, it will have to plan a sustainable attack on a number of targets that are situated 1,500-1,700 kms from Israel. For that purpose, Israel can use only its air force. The targets usually are far from the Indian Ocean, and Israel has no significant seaborne air power assets. Although Israel has some military relationships with friendly states that are situated closer to Iran, most notably, Turkey and India, these states also are keeping a friendly relationship with Iran, and it is highly unlikely that they would let Israel use their territories for the purpose of attacking Iran's nuclear infrastructure. This means that the Israeli attack aircraft would have to take off from air bases in Israel, fly 1,500-1,700 kms to the targets, destroy them, and then fly back 1,500-1,700 kms. It is also possible that the flight would be even longer for the Israeli planes because they would have to fly through the air space of Jordan and Iraq to use the direct shorter route to Iran. Flying through Jordan without the explicit or implicit permission of the Jordanians would hurt relations with a friendly Arab state. Flying over Iraq without coordination with the United States would lead to a clash with U.S. interceptors. Any attempt at coordination with the United States or asking permission from Jordan might compromise the operation. It is also very doubtful whether Jordan and the United States would be willing to be involved in such Israeli operations. As a result, the Israeli planes would have to use the longer route over the Indian Ocean, with minimal penetration of the air space of other states.

The IAF does not have any bombers. Its air fleet consists only of fighter-bombers with limited range of action. Israel has 25 F-15I and 137 F-16C/D fighter-bombers. It is going to improve its long range capability in 2004 with few operational F-16I aircraft with greater range of action then the F-15I, but the burden of the attacks would be laid mostly on the F-15I aircraft that have better capabilities at longer ranges. F-15I has a radius of action of 1,270 kms. The corresponding

one for F-16C/D is 925 kms and for F-16I, 2,100 kms (but Israel will have only few of them at the relevant time).[30] The real operational radius is even shorter because for parts of the route, the planes would have to fly at low altitude to avoid radar detection. That shortens the range of flight because of higher fuel consumption at low altitudes. It means that the attack aircraft would need to be refueled at least twice, on their way to the targets and from the targets. That adds complication to the operation because Israel has only a few air refuelers based on Boeing 707 aircraft platforms. Such aircraft are very vulnerable, and therefore air refueling cannot take place in hostile air space.

Assuming that the attack aircraft succeeded in entering the Iranian air space, they would have to avoid early detection and be capable of dealing with Iranian interceptors. Iran is a vast country, and the radar assets available to the Iranian air defense system are limited. If the Israeli planners had good information about their location, it would be possible to plan approach routes to the targets that would avoid early detection. If the attacking aircraft were detected and intercepted, the Israeli F-15s and F-16s enjoy vast superiority over the Iranian interceptors and would probably defend themselves successfully. The problem is that such long range attacks are very sensitive to interferences, and therefore the intercepted attack formation might have to abort its mission.

If the Israeli attack aircraft succeed in avoiding early detection and interception, it can be safely assumed that they would be capable of avoiding the surface to air missile defenses and the antiaircraft artillery (AAA) defenses deployed closer to the targets and destroy the targets by use of a combination of tactics, ECM, and smart munitions.

In any case, any Israeli attack on an Iranian nuclear target would be a very complex operation in which a relatively large number of attack aircraft and support aircraft (interceptors, ECM aircraft, refuelers, and rescue aircraft) would participate. The conclusion is that Israel could attack only a few Iranian targets and not as part of a sustainable operation over time, but as a one time surprise operation.

Even if Israel had the attack capabilities needed for the destruction of the all elements of the Iranian nuclear program, it is doubtful

whether Israel has the kind of intelligence needed to be certain that all the necessary elements of the program were traced and destroyed fully. Israel has good photographic coverage of Iran with the Ofeq series of reconnaissance satellites, but being so distant from Iran, one can assume that other kinds of intelligence coverage are rather partial and weak.

Covert action demands different kinds of operational capabilities and intelligence. There is no indication that Israel has capabilities of covert operations in Iran. The recent information about the development of the Iranian program indicated that it reached a status of being independent of external assistance. Moreover, the assistance Iran got was mostly from Pakistan, another place which is not a traditional area of operations for the Israeli secret services, like Europe or South America. It seems that there is no real potential for covert Israeli operations against the Iranian Nuclear program.

Were Other Options Exhausted?

So far, Israel has no reason to believe that the political negotiated option was exhausted. Developments uncovered since the new advances in the Iranian nuclear program indicate that a coordinated action of the United States, the EU, and IAEA succeeded in forcing the Iranians to suspend their uranium enrichment activities and accept the additional protocol that will tighten monitoring of their nuclear program. It seems that this success is also a byproduct of the war in Iraq. It is feasible that the United States can deter Iran from continuing its military nuclear program, especially when Europe is cooperating with the United States and not letting Iran exploit the differences of views between them.

In the meantime, the Israeli government doubts whether Iran will, indeed, keep its commitments to stop the enrichment project and adopts a "wait and see" policy, keeping all options open.[31]

The Domestic Cost of Action.

Iran is on a clash course with Israel since Humeini's revolution. It is leading a flagrant anti-Israeli policy. It supports terror groups that operate against Israel; Hezbollah in Lebanon, and the Islamic

Palestinian terror groups.[32] It was directly involved in the terrorist bombings of the Israeli embassy and the Jewish community center in Buenos Aires, Argentina. It is no wonder that at present Iran has a very negative image in the eyes of the Israeli public. Israelis constantly are bombarded with anti-Iranian declarations by political leaders and the media. They hear the director of the General Security Service (GSS)[33] saying at an open conference on December 16, 2003, that Iran is the number one terror state in the world and a strategic threat to Israel, and that it operates against Israel and its interests everywhere.[34] The director of the Mossad said that Iran is a threat to world peace and is an existential threat to Israel when he appeared in the Knesset's Security and Foreign policy committee.[35] It can be safely assumed that any Israeli action against the Iranian nuclear program would enjoy vast support by Israeli public opinion. Even a failure of the operation would not erode the support because of the almost general consensus of the public. Most probably, such an action would not become a matter of partisan debate because there are supporters and opposers of proactive action against the Iranian nuclear program among the coalition and opposition parties.

Iranian Possible Responses as a Constraint.

Although presently Israel enjoys vast superiority in long range strike capabilities in comparison with Iran, Iran is succeeding in maintaining a balance of mutual deterrence with Israel. Until recently, Iran's deterrence was based on the use of proxies, terror groups that operated from areas close to Israel or in the global arena. Iran could balance Israel's ability to strike at targets in its territory with the ability of these proxies to attack Israeli towns in northern Israel or Israeli interests all over the world, using the infrastructure that these terror groups have established in many states. The most salient of these groups is Hezbollah in Lebanon. It succeeded, with the support of Iran, in building a large array of surface to surface rockets in South Lebanon that presents a constant threat over the civilian population in a large part of Israel. In recent years, Hezbollah has acquired from Iran longer range rockets (Fajr 3 and 5) and expanded its strike capability to a larger part of Israel.[36] Iran also demonstrated

its ability to hurt Israeli interests in others states when its agents were involved in the bombing of the Israeli embassy and the Jewish community center in Buenos Aires.

Iran is developing a 1,330 kms range ballistic missile, *Sheab*-3, that will give Iran the capability to strike directly at targets in Israel's territory. The missiles have reached initial operational capabilities.[37]

Iran admitted after signing the Chemical Weapons Convention (CWC) that it developed and stockpiled chemical weapons, probably mustard gas and nerve agents. It was supposed to destroy these weapons in accordance with the provisions of the CWC, but there is no report that this was done and Iran is suspected of continuing its activities in this area.[38]

If Israel decides to attack Iran's nuclear installations, it will have to take into account a response in kind. Iran may use its ballistic missiles to attack Israeli nuclear installations. Such attacks will not be effective because of the inaccuracy of its missiles. The probability of an attempted Iranian attack with aircraft is lower, although strike aircraft may be more accurate. Iran has a very small number of long range SU-24 strike aircraft and some air-refueling capability, but such a long range attack with the challenge of the Israeli air defense system is a formidable task for its air force. It is possible that Iran would follow the example of Iraq, and, being aware of the ineffectiveness of the missile attack on nuclear installations, it would launch its missiles against Israeli cities.

Iran would probably use its proxies to hit at Israeli targets and interests in Israel and elsewhere. Under the present circumstances, striking Israel from Lebanon would be difficult because Israel probably would react harshly against Syria, Iran's ally, which is in a position of weakness; and that does not serve Iran's Interests. Hitting Israeli and Jewish targets abroad may look to the Iranians as less risky.

If an Israeli strike in Iran caused some radioactive contamination, Israel would have to take into account Iranian use of chemical weapons. In all other circumstances, such use is highly improbable because an Iranian chemical attack would be a blatant violation of the CWC, and might lead to international action against Iran.

It is not possible to ascertain accurately what would be the Iranian response, but the experience of the Israeli- Iranian relationship in

the last 2 decades and the declarations of the Iranian leadership[39] indicate clearly that there would be a violent Iranian reaction to any Israeli attack in Iran.

Global and Regional Responses as Constraints.

The Israeli leadership will have to assess the ramifications of such an attack on its foreign relations when it weighs arguments for and against the preemptive action. Israel enjoys the position of a state that already has been through such an experience, attacking the Iraqi reactor, absorbing general international condemnation, and being vindicated later. It seems that the Israeli leadership can only be encouraged by this experience. First, the political price it had to pay eventually was insignificant; U.S. sanctions were limited and stopped after a short time, and the negative effect on its relations with other states also subsided very quickly. Second, the environment is more conducive today for an Israeli preemptive action, because in 1991 Iraq was considered an ally of the West, while Iran is a member of the "Axis of Evil," and because after 9/11 and the war on Iraq, the concept of preemption is not rejected by everyone as it was in 1991; at least the only global superpower, the United States, adopted it as part of its doctrine. Third, after the experience of Iraq, one can assume that some states will be more cautious in their reaction to the Israeli action.

From Israel's point of view, the ramifications of such an action would be in three arenas; the Middle East, the United States, and Europe. Israel can assume that the reactions in the Middle East would be mixed. On the one hand, the Arab States would look on the Israeli operation as another example of Israel's intransigence and aggressiveness, and would object to the manifestation of Israel's wish to retain a nuclear monopoly. But on the other hand, they would feel relieved, because the Iranian nuclear posture is a threat to them as well. It is quite probable that they would condemn the Israeli action but would not take any other steps.

Assuming that the preemptive operation took place when it was clear that the Iranian program could not be stopped in any other way, it would be difficult for the United States to condemn an action

that suits perfectly its own positions. Israel can be assured that the action would not harm its relationship with the United States.

The EU is composed of a majority of states already voicing their opposition to the U.S. preemption doctrine and the war on Iraq as a manifestation of this doctrine. They would most probably condemn Israel. Nevertheless, Israel can assume that such an attack that came after an European failure to make Iran stop the nuclear program would not lead to sanctions other than verbal condemnation.

CONCLUSION

The Iranian decision to suspend its uranium enrichment activities and to sign the additional protocol with the IAEA implies to Israel that Israel does not yet have to decide on a violent preventive action against the Iranian nuclear program, and can postpone this difficult decision. As long as it is possible to stop the Iranian program and roll it back without resort to violence, Israel will prefer it because it will minimize risks and the price it would have to pay for this objective.

The decision is difficult because the probability of success is not high, the risks are high, and the cost is certain. The probability of success is not high because, on one hand, the Iranian nuclear installations are dispersed, well-defended and have much redundancy; and on the other, the Israeli operational capabilities for sustainable operations, and not a one of its kind surgical strike, are limited. It is not certain at all whether any Israeli operation will stop the Iranian nuclear program or delay it substantially. The risks are high because the operational difficulties may lead to a high casualty rate and because of the high probability of failure. The cost is certain, because an Iranian violent reaction is almost a certainty. The Israeli leadership will have to consider whether it is willing to take the risks and pay the costs for an operation with doubtful results. On the other hand, there are no real political constraints domestically or in Israel's foreign relations that should prevent it from making such a decision. The conclusion is that eventually the two parameters that will be decisive in the Israeli decision will be the assessment whether the Iranian program can be stopped by other means and the assessment of the operational feasibility.

It is not surprising that, based on these assessments, Israel believes that the key to the fight against the Iranian nuclear program is in the hands of the United States, especially after the war in Iraq. On November 8, 2002, Israeli Prime Minister Ariel Sharon said, in an interview given to the *New York Post*, that the U.S. war on terror should not end with Iraq. He added, "as soon as Iraq is dealt with, I will push for Iran to be at the top of the 'to do' list . . . Iran makes every effort to possess weapons of mass destruction . . . and ballistic missiles . . . That is a danger to the Middle East and a danger to the world."[40]

Israel's preferred policy is to let the United States and the European states help deal with Iran. It believes that keeping the ambiguity concerning possible Israeli reactions in case the attempts to stop Iran fail may help the U.S.-European effort because it may induce some actors—those who wish to prevent Israeli operations that may lead to further destabilization of the Middle East (especially the Europeans)—to increase their pressures on Iran, and it also may have a deterring effect on Iran. An examination of Israeli statements on the Iranian nuclear program shows a constant emphasis on the danger to the civilized world of this program; concern that the Iranians are using deceitful tactics; and threats of an Israeli action against the nuclear installations as a last resort, combined with declarations that Israel prefers peaceful solutions.[41]

The United States has to take into account the possibility of an Israeli preemptive strike against the Iranian nuclear facilities when considering its policy options. First, such an attack, especially if it did not achieve its planned objectives, would have a destabilizing effect on the Middle East. It could lead to acceleration of the Iranian program and to a chain of violent clashes between Iran and Israel. The United States should prepare contingency plans for such an event that include actions aimed at deterring Iran from destabilizing the Middle East, and the necessary political reactions, including prevention of initiatives aimed at a show of support for Iran internationally from such organizations as the UN. The United States has an interest in knowing the Israeli intentions and affecting them. That can be achieved only through an open, detailed, and continuous dialogue between the two nations.

Second, if the United States is considering preemptive strikes against Iran, it should weigh the pros and cons of cooperation with Israel in such attacks. The main argument against such cooperation is that it would fortify the existing perception in the Moslem world of an anti-Islamic Judeo-Christian conspiracy. That could be balanced only by very convincing and clear operational advantages of such an alliance.

Last, the United States should make use of the threat of a preemptive Israeli strike in its deliberations with its other allies, mostly its European allies. It may help convince them to take a more robust stand against the Iranian nuclear program. The Europeans most probably will consider an Israeli preemptive strike a disaster and will be ready to invest in an effort to induce Israel to avoid it.

ENDNOTES - CHAPTER 6

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31. *Maariv*, November 16, 2003; *Ha'aretz*, October 28, 2003, in Hebrew.

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33. Israel's internal security organization.

34. *Maariv*, December 17, 2003, in Hebrew.

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37. *Ibid*., p. 148.

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39. For example, in December 24, 2003, Iranian Minister of Defense Admiral Samhani said, "if the Zionist regime will attack our nuclear installations, we will strike back with all the means available to us . . . the Zionist entity will pay a heavy price . . . its leadership will not have any safe place." *Maariv*, December 25, 2003, in Hebrew.

40. Another example is a statement by then Israeli Minister of Defense Binyamin Beb Eliezer who said on the eve of a visit in the United States that he intends in this visit to focus on the accelerated efforts of Iran to acquire nuclear weapons and long range missiles. "His aim is to convince the U.S. administration that it is not only a threat to Israel, but a threat to all the world. Such strategic capabilities at the hands of the Ayatullahs in Teheran will threaten the whole Gulf and even Europe." *Maariv*, January 18, 2002.

41. One example is the Israeli Minister of Foreign Affairs' statement during a meeting with his Austrian colleague on November 19, 2003, in which he said that Israel does not have plans to attack Iran's nuclear installations and it intends to use only peaceful means. *Reuters*, Vol. 16, November 19, 2003, p. 57.

CHAPTER 7

STRATEGY FOR A NUCLEAR IRAN

Thomas Donnelly

The Islamic Republic of Iran continues to speed toward acquiring nuclear weapons—a reality that has provoked a "do something" moment across Washington. Conventional wisdom among the mandarins of America's foreign policy establishment is that the Bush administration should pursue some kind of "bargain" with Tehran. A recent report by the Council on Foreign Relations, for instance, calls for the United States to offer the regime incentives for disarmament while dropping the "rhetoric of regime change."

Such a "balance-of-power" approach, which attempts to divorce U.S. concerns about Iran's nuclear ambitions from any broader regional or global strategic framework, is an intellectual relic of an earlier era. It ignores new geopolitical realities of the post-September 11, 2001 (9/11), era, most profoundly the Bush Doctrine's commitment to a "forward strategy of freedom" that seeks to transform the politics of the greater Middle East while containing China's rising geostrategic power. Iran stands directly athwart this project, as a sponsor of Islamist terrorism and an increasingly important patron of Beijing. A nuclear-armed Iran is doubly threatening to U.S. interests not only because of the possibility it might employ its weapons or pass them to terrorist groups, but also because of the constraining effect it will impose on U.S. behavior in the region.

Any overt bargain with Iran surely will be read as a retreat from the Bush administration's proclaimed project of democratization and regional transformation. However, direct military confrontation is equally problematic, particularly given that a single, surgical strike is unlikely to be fully successful or have a lasting effect. Rather, the most attractive long-term strategy for Iran is traditional containment, which would emphasize breaking Iran's ties to China while pressing for reform and transformation in the greater Middle East. The real isolation of Iran will come when it is drowned in a larger sea of liberal, accountable governments in the region.

The Islamic Republic in Iran continues to speed toward acquiring nuclear weapons, with every week, it seems, bringing further evidence of its progress. In late September 2004, the head of Iran's Atomic Energy Organization, Gholamreza Aghazadeh, announced his country had begun enriching a "test amount" of uranium—enough, that is, for several nuclear weapons. Soon, there will be no insurmountable hurdles left; it is simply a matter of engineering, time, and Tehran's choice. This is a reality that the next U.S. administration will have to confront—and a very unpleasant reality it will be. As Max Boot recently observed:

> [Iran] is also working on missiles with the range to strike targets in Europe and North America, though the likeliest vehicles for delivering an Iranian nuke would be its terrorist networks. Hassan Abasi, a senior member of the Revolutionary Guards, recently boasted that Iran had "a strategy drawn up for the destruction of Anglo-Saxon civilization."[1]

The anxiety raised by the prospect of nuclear-armed Iran is creating a "do something!" moment across Washington and within parts of the Bush administration. Boot, a strong supporter of the Bush administration's strategy for the greater Middle East, allows that, "On Iran, as in so many other areas, the administration seems to be paralyzed by disagreements between Defense Department hawks and State Department doves."[2] During the 2004 election season, the Democrats, by contrast, made a point of advocating a "grand bargain" with the mullahs that would allow them to keep their nuclear power plants in exchange for a promise to give up the kind of nuclear fuel used to make bombs. To some degree, this was a recycling of Clinton-era Iran policy with a sprinkling of the ideas that underlay the 1994 "Agreed Framework" with North Korea, a widely celebrated bit of arms control that did nothing to prevent Kim Jong Il from acquiring his current arsenal. Undeterred by that failure, Senators Kerry and Edwards made a point of advancing a "nonconfrontational" approach to Iran that emphasized areas of "mutual interest."

Divining mutual interests between the United States and Iran has been an addiction of many American diplomats since the Iranian revolution of 1979. Even at the height of the Iran-Iraq war of the

1980s, the Reagan administration proved itself open to dealing with Ayatollah Khomeini; witness the infamous "Iran-contra" affair. The first Bush administration came to office, sending the Iranians the message, in the President's words, that "Goodwill begets goodwill."[3] After Khomeini's death in 1989, the rise of Hashemi Rafsanjani appeared as a moment of renewed dialogue and moderation, but in the end, Iran remained implacably hostile to the United States, ever more so after the first Gulf War. As Kenneth Pollack has observed, the period of 1991-92 marked a newly aggressive period in Iranian foreign policy and, significantly, a correlating strategic emphasis on nuclear weapons:

> The [former] shah had an interest in nuclear weapons, but it was actually rather restrained, given his approach to other aspects of military power. He did have a nuclear weapons program, but it had not progressed beyond basic research and was not lavishly funded . . . . The end of [the Iran-Iraq] war did not diminish Iran's desire for nuclear weapons. Instead, it actually began to pump additional resources into its program. . . . Iran's logic for accelerating its nuclear weapons program was very straightforward: if you want to pursue a policy that runs contrary to the vital interest of the United States, you must be able to deter an American invasion, and the only sure way to do that is to have a nuclear arsenal. . . . Deterring the United States was not the only motive Iran had for acquiring nuclear weapons (deterring Israel, building prestige, and dealing with a revived threat from Iraq were also considerations), but it was its most important incentive.[4]

Indeed, after the disaster of the Iran-Iraq war, Iran began to coordinate its nuclear program more closely with its overall strategy. The United States responded in exactly the inverse fashion, by separating its nuclear concerns from its larger strategic framework. As in the Cold War, questions of nuclear proliferation were considered quite apart from their proper policy context; in fact, proliferation was often believed to be the primary concern.

In the Central Intelligence Agency (CIA) and at the National Security Council, Pollack had a front-row seat for Clinton administration policymaking toward Iran. Despite a supposedly nuanced policy of "dual containment" that was to weigh more heavily on Saddam Hussein's Iraq than Rasfanjani's Iran, American hopes for moderation were frustrated constantly. The new pan-European

engagement with Iran, dubbed "Critical Dialogue," only made matters worse; what was meant to be a carrot-and-stick approach left Tehran free to snack on European carrots while dodging American sticks. Yet, when Rafsanjani stepped down as president and was replaced by Mohammed Khatami in 1997, the chimera of Iranian "reformists" beckoned again to the administration.

From 1997 to 1999, U.S.-Iranian diplomacy resulted in a series of public displays of affection. As Pollack tells it, the Clinton administration had all but talked itself into the belief that a big breakthrough was at hand. All that was required was one final grand gesture on the part of the United States.[5] And so, on April 12, 1999, at a state dinner, President Clinton admitted in "unprompted" remarks that "Iran . . . has been the subject of quite a lot of abuse from various Western nations. And I think sometimes it's quite important to tell people, look, you have a right to be angry at something my country or my culture or others that are generally allied with us today did to you 50 or 60 or 100 or 150 years ago."[6] The President's feel-Iran's-pain impulse soon became formal administration rhetoric. On March 17, 2000, at Washington's Omni Shoreham hotel, Secretary of State Madeleine Albright acknowledged and apologized for past American policy toward Iran:

> In 1953, the United States played a significant role in orchestrating the overthrow of Iran's popular Prime Minister, Mohammed Mosaddeq. The Eisenhower administration believed its actions were justified for strategic reasons; but the coup was clearly a setback for Iran's political development. And it is easy to see now why many Iranians continue to resent this intervention by America in their internal affairs. Moreover, during the next quarter century, the United States and the West gave sustained backing to the Shah's regime. Although it did much to develop the country economically, the Shah's government also brutally repressed political dissent. As President Clinton has said, the United States must bear its full share of responsibility for the problems that have arisen in U.S.-Iranian relations. Even in more recent years, aspects of U.S. policy towards Iraq during its conflict with Iran appear now to have been regrettably short-sighted, especially in light of our subsequent experiences with Saddam Hussein.[7]

Yet even as Albright was speaking, the Iranian government had begun to crack down on internal dissent and resume a hard-line,

anti-American stance abroad. Pollack's verdict on Clinton's opening to Tehran is remarkably blunt and worth recounting at length:

> I felt [at the time] that we had come very close to making a major breakthrough with Iran and that if only we had done a few things differently . . . we might have been able to make it happen. Over the years, however, I have come to the conclusion that I was wrong in this assessment. Any rapprochement that could be nixed by two words in a speech was a rapprochement that was doomed to failure anyway. That is the fundamental lesson of the Clinton initiative with Iran. The Iranians were not ready . . . . Iran was ruled by a regime in which the lion's share of power—and everything that truly mattered—was in the hands of people who were not ready or interested in improving ties with the United States.[8]

But it is rare when a member of the U.S. foreign policy establishment comes to such a moment of clarity about Iran. Prior to September 11, even Bush administration principals were prone to speak hopefully about the future of relations between Washington and Tehran. Vice President Richard Cheney, while at Haliburton, had described U.S. sanctions on Iran as "self-defeating." At his confirmation hearings, former Secretary of State Colin Powell observed changing conditions in Iran and stressed that "Iranians are not our enemies . . . to the extent that we can nuance our policy in that regard, I think it serves our interests and the interests of the region."[9]

Even in a post-9/11, post-Iraq world, the siren call of an American-Iranian bargain remains attractive to many in the establishment. The latest call—for a "modest bargain" alternative—is encapsulated in the recent report, *Iran: Time for a New Approach*, by the Council on Foreign Relations (CFR).[10] As is so often the case, this "task force" of foreign policy mandarins calling for a new approach is really just rehashing old ideas. Thus, the CFR report finds:

> [Tehran] could play a potentially significant role in promoting a stable, pluralistic government in Baghdad. It might be induced to be a constructive actor toward both Iraq and Afghanistan, but it retains the capacity to create significant difficulties for these regimes if it is alienated from the new post-conflict governments in those two countries.[11]

Thus, inevitably, it is the council's recommendation that the United States "engage selectively with Iran to promote regional stability."

This, in the task force's eyes, constitutes a "revised strategic approach to Iran."

At least the CFR task force acknowledges that the "grand bargain" notion "that would settle comprehensively the outstanding conflicts between Iran and the United States is not a realistic goal, and pursuing such an outcome would be unlikely to produce near-term progress on Washington's central interests."[12] However, the depth of the differences between the United States and Iran is no excuse for restricting "engagement," in the report's view, and in particular the use of "incentives," including expanded trade relations: "Given the increasingly important role of economic interests in shaping Iran's policy options at home and abroad, the prospect of commercial relations with the United States could be a powerful tool in Washington's arsenal."[13] Even more saliently, the task force believes that, while the United States is right to advocate democracy, America should abandon the "rhetoric of regime change, as it would be likely to rouse nationalist sentiments in defense of the regime, even among those who currently oppose it."[14] While willing to forgo the grandeur, the Council of Foreign Relations hates to pass up a bargain.

Indeed, to the extent that the CFR report proves anything, it is that the Cold War is not over: it lives on, and not just in time-warp regimes like Kim Jong Il's North Korea or Saparmurat Niyazov's Turkmenistan, but among the strategic smart set in the United States, for whom détente never dies. But in reality, new geopolitical facts obtain, and the United States has started to formulate new strategies based upon them. First among these new facts is that the United States is the global guarantor of international order, history's sole superpower, and wishes to remain so. The second fact is that the "greater Middle East"—the immense swath of the planet stretching from West Africa to Southeast Asia—is now the central strategic focus of American security policy. The notion of a bargain with Iran is the by-product of an earlier era when Europe was the strategic key and the Middle East a secondary theater. Thus, the third about-to-be fact—Iran's development of a nuclear arsenal—demands a genuinely strategic response, one consistent with our broader global and regional goals.

Remember the Bush Doctrine?

The central question for the second Bush administration is whether the "Bush Doctrine"—whose main purpose is to preserve the generally liberal, stable, and peaceful international order that has resulted from the collapse of the Soviet empire and that is predicated upon the U.S. role as global guarantor of international security—is really the foundation for a lasting security strategy or was simply a rhetorical exercise meant to justify invading Iraq. The Bush Doctrine represents not just a continuation of the de facto policies of the Clinton administration, but a reaffirmation of the most basic American strategic habits; it is consistent with what might be called American strategic culture. And, in a realpolitik sense, there is no quiet life for the world's sole superpower.

At the same time, there is a strong yearning, even among the grandees of the Republican Party, to avoid further involvement in the greater Middle East and to try to preserve the status quo governments—and the status quo relationships—across the region. This is not just an expression of "Iraq fatigue," but a more deep-seated skepticism about the prospects for democracy in the Islamic world, and Arabia in particular. At the same time, the pretense of a return to the status quo in the greater Middle East, of balancing one thuggish regime against another, and making strategy in partnership with Western European "powers" such as France and Germany, is impossible to take seriously in a post-9/11, post-Iraq world. Even if the United States could neatly withdraw from Iraq—itself an almost oxymoronic formulation—the "war on terrorism" would not end and would still include many other actors besides Osama bin Laden.

Thus there may be little alternative to the Bush Doctrine's "forward strategy of freedom"; a purely defensive approach is impossible exactly because the pre-9/11 political order in the regime was the primary source of the nihilism and violence that led to those attacks. The Bush Doctrine's fundamental set of premises may prove remarkably stable: the rollback of both Islamic terror organizations and the governments that support them; containing China's military ambitions; and, key to it all, preventing any true "axis of evil" that marks a conjunction of Islamic radicalism with the rising great-power capabilities in Beijing.

This strategy is nothing if not ambitious. We are attempting to resolve a massive civil war within the Islamic world while simultaneously preventing a dissatisfied China—even more dependent for its economic growth on Middle Eastern oil than the United States—from interfering with our efforts. The Bush administration's occasional confessions about the magnitude of the effort required, reflected in Defense Secretary Donald Rumsfeld's forecast of a "long, hard slog" in Iraq and then National Security Adviser Condoleezza Rice's profession of a "generational commitment" to the project of transforming the Middle East, only begin to hint at the task before the United States. The only good news is that, while our enemies are many, they are individually weak and not immediately disposed to unite against us.

U.S. strategy for a nuclear Iran must be made to fit this broader framework. The greatest danger is that Tehran's acquisition of nuclear weapons will distort and derail American strategy. Strategic realists will once again see the need to pursue a "balance of power" approach, undercutting the Bush "liberation strategy." "Engagers" and Europhiles will see an opportunity to rush forward with a great new bunch of "carrots" to tempt Iranian moderates. Arms controllers will attempt to subordinate real strategy-making to the establishment of international agreements limiting weaponry. Perhaps most dangerous of all will be those policymakers who rightly propose a hard-line against the mullahs: their commendable willingness to pressure Tehran, even to the point of military action, has a tendency to obscure their strategic judgment. Indeed, hardliners may be most prone to the "do something!" fever. It may well be that the United States finds itself forced to do something militarily in the case of the Islamic Republic, but if so, it is more important to do the right something. And the "right" strategy for Iran is one that fits the Iran piece within the larger puzzle of political transformation for the Middle East.

Sources of Iranian Conduct.

To be sure, Iran stands directly athwart this project of regional transformation. Indeed, the regime in Tehran came to power by ousting Shah Reza Pahlavi in the tumultuous year of 1979, when

the old, autocratic order in the greater Middle East began to crumble. Ayatollah Ruhollah Khomeini established an unabashedly theocratic and revolutionary government, at the same time calling for a broader Muslim uprising and attacks upon the United States, the "Great Satan." And despite international isolation, devastating defeat in war, and widespread internal unrest, the regime retains its ideological character, as well as a firm grip on power. As the Council on Foreign Relations notes, the Islamic Republic has achieved some "durability."[15]

But if its political and strategic ends have been consistent, Tehran's means have changed dramatically. One of the best studies of the Iran-Iraq War, done by the United States Marine Corps, observed that the casualties of that conflict were so great that it essentially bled the Iranian revolution to death.[16] Khomeini and his fellow mullahs were more than willing to spread revolution by conventional military means, but a generation of young Pasdaran zealots broke itself in human wave attacks on Saddam Hussein's army; what the U.S. military was able to do so decisively in 1991 and again in 2003—slice through the Iraqi field force—the Iranian army could not manage even at the cost of perhaps a million casualties over 8 years.

If Iran could not export its revolution by conventional military means, then unconventional means would have to suffice. Iran's sponsorship of terrorists is well-known. As the U.S. State Department's most recent report on global terrorism puts it, "Iran remained the most active state sponsor of terrorism in 2003. Its Islamic Revolutionary Guard Corps and Ministry of Intelligence and Security were involved in the planning of and support for terrorist acts and continued to exhort a variety of groups that use terrorism to pursue their goals."[17]

From Beirut to Buenos Aires, international terrorism has been central to Iran's foreign policy since the 1979 revolution. Tehran openly provides funding, training, and weapons to Hezbollah, Hamas, Palestinian Islamic Jihad, and the Popular Front for the Liberation of Palestine. Iran also has a long relationship with al Qaeda. As early as late 1991, Sudan's Islamist leader, Hassan al-Turabi, sponsored meetings designed to encourage Shia and Sunni fundamentalists to put aside their differences and work together

against the United States. "Not long afterward," according to the 9/11 Commission report, "senior Al Qaeda operatives and trainers traveled to Iran to receive training in explosives."[18]

Senior al Qaeda operatives captured by the United States have revealed that Tehran attempted to strengthen its ties to Osama bin Laden after the USS *Cole* attack in 2000, and that Iranian officials have facilitated the travel of al Qaeda members through their territory, failing to stamp their passports. It is also believed that 8 to 14 of the 9/11 hijackers took advantage of this arrangement to transit through Iran in 2000-01.[19]

After the fall of the Taliban, several senior al Qaeda operatives fled to Iran, where they have found a safe haven from which to plot further attacks—including the May 2003 terrorist bombing in Riyadh, in which 34 people were killed.[20] Although Iran claims to hold several al Qaeda members in custody, it refuses to disclose their identities publicly and has rebuffed attempts to arrange for their transfer.[21]

Yet for all the vehemence of its ideology and the violence of its anti-Americanism, the clerical regime in Tehran has found itself incapable of stemming the seeping U.S. presence in the Persian Gulf and in the broader region. While Iran essentially stood aside when Operation DESERT STORM drove the Iraqi army from Kuwait and contained Saddam Hussein's regional ambitions, the war ushered in the policy of "dual containment," targeted at Tehran as well as Baghdad; indeed, the first Bush administration left Saddam in power primarily to serve as a bulwark against Iranian expansionism. The "no-fly-zones" and other U.S. operations in the area throughout the 1990s attested to the fact that, even with no real regional partner—beyond the on-again, off-again support offered by the Saudis—the United States was more than capable of maintaining its military forces at Iran's doorstep and had no intention of withdrawing.

And while the mullahs may have celebrated the attacks of 9/11, they have come to rue many of the subsequent events. Although there was little love lost between Tehran and the Taliban, the expanded American military presence along Iran's eastern flank is far from welcome. The invasion of Iraq, though it removed Tehran's longtime nemesis in Baghdad, completed the near-encirclement of

Iran by U.S. military forces. Iran's attempts to influence the direction of post-Saddam Iraq have yet to produce anything more substantive than its past efforts to undermine Saddam; Tehran's sponsorship of Moqtada al Sadr helped the "Mahdi army" make headlines, but the finality with which mainstream Iraqi cleric Ayatollah Ali al Sistani evicted Sadr's forces from the shrine of Imam Ali in Najaf reinforced the truth that the majority of Iraq's Shia still have little interest in taking orders from Iran.

Under such apparently bleak circumstances, Tehran's traditional hankering for nuclear weapons has sharpened significantly. Iran's conventional options are now restricted to attempts to limit American access to the region, such as by pointing missiles at the Straits of Hormuz and bolstering ground-based air defenses. Terrorism with a return address carries greater risks, too: it is interesting to speculate what the U.S. reaction would be now, in a post-9/11 world, to a Khobar Towers–type bombing. What the Iranians could safely sponsor in 1996 might not be so safe now. The surest deterrent to American action is a functioning nuclear arsenal.

What to Do?

To be sure, the prospect of a nuclear Iran is a nightmare. But it is less a nightmare because of the high likelihood that Tehran would employ its weapons or pass them on to terrorist groups—although that is not beyond the realm of possibility—and more because of the constraining effect it threatens to impose upon U.S. strategy for the greater Middle East. The danger is that Iran will "extend" its deterrence, either directly or de facto, to a variety of states and other actors throughout the region. This would be an ironic echo of the extended deterrence thought to apply to U.S. allies during the Cold War. But in the greater Middle East of the 21st century, we are the truly revolutionary force, and "revolutionary" Iran is more the status quo power.

The attitudes of the Council on Foreign Relations Iran task force reveal this dynamic with creepy perfection. Aware that the fundamental strategic choice on Iran is between policies of regime change and détente, the consensus among the task force members is

that the problem is the weapons, not the government building them. Indeed, the report makes it clear that the task force was divided about the state of Iran's nuclear program.

Although Task Force members voiced differing opinions on whether evidence is sufficient to determine that Iran has fully committed itself to developing nuclear weapons, the Task Force agreed that Iran is likely to continue its pattern of tactical cooperation with the International Atomic Energy Agency (IAEA), while attempting to conceal the scope of its nuclear program in order to keep its options open as long as possible.[22] But if there were nuances about the state of Tehran's nukes, there seems to be consensus about American policy: forget the regime-change idea and concentrate on the weapons. By focusing narrowly on the issues of Iran's weapons, any discussion of the larger consequences for American policy can be avoided.

What would the consequences be of a bargain with Iran—be it grand or small—for a strategy of political transformation in the greater Middle East? Is it possible to pursue détente with Iran and regime change elsewhere?

Throughout the greater Middle East, any overt bargain with Iran will surely be read as a retreat on the part of the United States. Three years after September 11, the question remains: do the Americans have the strength, stomach, and sincerity to carry through their project of democratization and regional transformation? Observers in the Middle East can see that President Bush is committed, but there are doubts about the rest of his government, even heading into his second term. The world's other industrial powers either are openly afraid and thus hostile, skeptical, or at best noncommittal; but for a handful of allies, America stands alone. Détente with Iran would compel the forces of freedom in the Middle East to further hedge their bets, and our sometime allies, like the Saudis, who through the 1990s tried to reach an accommodation with Tehran, would equally reckon that U.S. ambitions for change had overleaped themselves. Even Pakistan, congenitally unstable and prone to play all ends against the middle absent unceasing American attention, might toy with the idea of reversing its post-9/11 policies.

Even more importantly, an obsessive attention to Iran would divert the United States from the most important, ideological aspect

of its effort in the Middle East: the project to reform politics among the Sunni Arabs. This is the real heart of the conflict in the region. The essential question is whether the Sunni community will cling to near-monarchical autocracies—be they relatively benign and modern, as in Jordan, or actively aggressive, such as the Wahhabi-fueled Saudis—or opt for an even more repressive, Osama-bin-Laden-style revolution. U.S. strategy is to foment a genuinely democratic and modernizing revolution. Over the coming decades, the hearts and minds of Sunnis represent the strategic center of gravity in the region, and the likely effect of an Iran-centric U.S. policy would be to obscure this fact and reinforce the impulse to cling to the Sunni status quo—an "old order" which almost certainly is in the midst of collapsing.

A bargain with Iran would also have global effects. The most serious would not be in France or Germany, whose governments have made it plain that they have no heart for transformation in the Middle East or for a serious effort to oppose Iran, but in China. Beijing and Tehran share a mutual dissatisfaction with the Pax Americana and have a long record of direct and indirect cooperation on nuclear and missile programs. Hu Jintao and the new generation of leaders in China have a much larger, global perspective than did Jiang Zemin and Deng Xiaoping before them, greater confidence flowing from China's economic modernization, and, almost certainly, an appetite to play the geopolitical game more actively. Their horizons very clearly extend throughout the greater Middle East—China's energy interest in Sudan already has posed perhaps the largest roadblock to stopping the genocide in Darfur, for example—and they are deeply conscious of the potential U.S. stranglehold on China's future growth. Torn between their interests in U.S. security guarantees and a desire for greater autonomy, Beijing will keenly note, and perhaps be happy to broker, any bargain for Iran.

Regime Change by Other Means.

If détente with a nuclear Islamic Republic jeopardizes the project of Middle East transformation, then direct military confrontation is an equally unappetizing method of regime change. In the heat of the

"do something!" moment, the difficulties of even limited military strikes are too little appreciated. While a full discussion of the operational realities is beyond the scope of this chapter, some hard truths are worth mentioning. Iran is large, populous, rugged, and its nuclear facilities are spread throughout the country.[23] Its nuclear program probably cannot be crippled in a single, surgical strike, as was Iraq's in Israel's famous Osiraq raid.

And speaking of the Israelis, it is not uncommon to hear the hope expressed among U.S. policymakers, albeit sotto voce, that they somehow will solve the puzzle that perplexes us. Earlier in September, the Israeli newspaper, *Haaretz*, reported that Tel Aviv was planning on buying 500 bunker-busters, precisely the kind of munitions that might be able to destroy Iran's underground nuclear facilities.[24] In truth, however, a preemptive strike by Tel Aviv would be exceedingly difficult. Israel's long-range strike capacity is a fraction of the U.S. military's and would, as a matter of logistics, require at least American acquiescence (we own a good deal of the airspace between Tel Aviv and Tehran). And even if, miraculously, an Israeli strike achieved some tactical success, the Iranians would surely hold us responsible and target U.S. interests in retaliation. In sum, punitive strikes cannot be designed to end the Iranian nuclear threat nor ensure regime change, as our decade-long experience with Saddam Hussein should remind us.

A full-scale invasion would be a "porridge-too-hot" prospect in other than the most dire circumstances. While in a conventional fight, the Iranian army might provide no stiffer resistance than did the Iraqi army in 1991 or 2003, and a post-invasion campaign might concentrate solely on a full dismantling of Iranian nuclear infrastructure and identifying scientists and program officials, it is far from certain that U.S. objectives could be so neatly limited. It is impossible to know the degree of post-invasion resistance, but to underestimate it would be an even greater folly than underestimating it was in Iraq.

The military approach that perhaps best balances risks and rewards might be a comprehensive air campaign, lasting perhaps a week, to be followed by fomenting an Afghanistan-style insurgency. Iran continues to suppress separatist moments among Iranian

Kurds, Azeris, and Baluchis—Tehran has never had perfect control of its own borders. Even the most successful strike campaign would have only transitory effect; having crossed the military threshold, the United States must be ready to keep regime-threatening pressure on the mullahs. Indeed, the Bush administration would do well to put in place covert contacts with Iranian dissident factions—as well as military supplies capable of sustaining them if needed—before considering any punitive air campaign. And while there are tremendous risks associated with any proxy war, it provides an improvement over air strikes alone. The United States should not enter a war with Iran without at least some reasonable plan for victory, measured by regime change in Tehran.

Yet perhaps the most attractive strategy for a nuclear Iran is traditional containment. There are risks associated with this approach, and it does not mean "multilateral" diplomacy. From Khartoum to Tehran, the "international community" is proving again that it is unwilling to confront renegade regimes. Iran's flouting of the IAEA and the United Nations (UN) also takes a page from Saddam's book. Despite growing evidence of Iran's nuclear malfeasance, many countries are reluctant to sanction it for what they view as its legitimate right to develop a complete nuclear fuel cycle. We must anticipate that the primary burden of isolating and containing a nearly nuclear Iran rests with the United States. Like so much of our future work in the greater Middle East, this must be a long-term effort requiring patience and resolve.

The first order of business is to keep Iran from establishing a deeper relationship with great-power sponsors. Breaking Tehran's ties to China will be difficult, given that no American administration, Republican or Democrat, has yet been willing to force Beijing to choose between the constraints and the benefits of the Pax Americana—witness Taiwan, North Korea, and now Sudan. Better hopes lie with India, which, if pressured to scale back its links to Iran as the price of a real strategic partnership with the United States, might become a serious future ally.

The second order of business is for the United States to retain the initiative in its new project of reform and transformation in the greater Middle East. The real isolation of revolutionary Iran will come when

it is drowned in a larger sea of liberal, accountable governments in the region. As democracy takes hold in Afghanistan and Iraq, Iran's dictatorship will come under increasing pressure.

In a curious way, Iran suffers from both the Middle East's great maladies: it is both a sclerotic autocracy and a backward-looking theocracy. The success of democracy in Afghanistan and Iraq not only will surround Iran strategically, but ideologically as well. In the final analysis, supporting and expanding the forces of freedom in the region offers, for now, our best hope for containing Iran and diluting the value of its nuclear deterrent.

ENDNOTES - CHAPTER 7

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23. The December 2004 issue of *The Atlantic* magazine printed a long article discussing the operational issues involved in both an air campaign targeted at Iran's nuclear program and an invasion aimed at regime change. The discussion in many ways was manipulated to lead a reader to the conclusion that any military action against Iran would not be worth the cost, but the discussion nonetheless was illustrative of the magnitude of the challenge. See James Fallows, "Will Iran Be Next?" *The Atlantic*, December 2004.

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CHAPTER 8

IRAN GETS THE BOMB—THEN WHAT?

George Perkovich with Silvia Manzanero

The acquisition of nuclear weapons by terrorists or any additional states would shake the international system. The more strategically important the state, the greater the potential threat to global security.

Iran is a strategically vital actor in the international system. It incarnates an historically major civilization. It is the largest state in the regional complex that comprises the Persian Gulf, the Middle East, and Central Asia, including Turkey. Major developments in Iran, therefore, have wide reverberations simply as a matter of political geophysics. Iran's large role in the global supply of fossil fuels makes it still more important. As a direct source of fuel, and also as a shaper of regional dynamics, Iran can significantly affect the global economy, and therefore politics. Iran's ties to terrorist organizations operating (primarily) in the Middle East renders Tehran a vital actor in the international campaign against terrorism. Iran has the capability to peacefully augment or violently disrupt U.S. missions in Afghanistan and Iraq. Thus, a major change in Iran's military strength and/or political status would directly affect major U.S. and international interests.

Iran's acquisition of nuclear weapons would upset international order significantly more than did the acquisition of nuclear weapons by India, Israel, Pakistan, and North Korea. It would strain the North Atlantic Treaty Organization (NATO): Turkey would perhaps seek a countervailing capability or reassurances, and the United States and other NATO allies would differ in responses to Iran. Iran's acquisition of the bomb would threaten the viability of the Nonproliferation Treaty (NPT) and the International Atomic Energy Agency (IAEA): unlike India, Israel, and Pakistan, Iran did sign the NPT and now puts the treaty's enforcers in a position of having to uphold its terms. A nuclear Iran would widen fissures within the Arab world and

between Arabs and Iran, fissures that run through the Persian Gulf and that would shake international oil markets.

Curiously, almost no literature has emerged to discuss how Iran's acquisition of nuclear weapons would affect the international system beyond the Middle East. Discussion has tended to focus on potential knock-on effects in the Persian Gulf and Middle East (i.e., Saudi Arabia, Turkey, Egypt, and Israel), to the exclusion of broader implications.

In the absence of official indicators, we are left to speculate that the international community could respond broadly in two ways to Iran's going nuclear. It could seek to roll back this acquisition and bring Iran back into compliance with the obligations of non-nuclear-weapon states, or the world could adapt itself to Iran's new status and seek a modus vivendi through deterrence, containment and diplomacy.

This paper assumes that the first response will be to seek roll back. Iran has been caught in noncompliance with its reporting obligations under the NPT. This violation of the NPT has been recognized by the IAEA, by all leading states in the international system, and by Iran itself. Having violated its compliance obligations, Iran cannot now withdraw from the treaty and escape the consequences of its violations. Thus, if Iran goes ahead and acquires nuclear weapons, it will be in *open* defiance of the international regime designed to prevent such acquisition. This distinguishes Iran from North Korea, whose initial acquisition of nuclear weapons capability occurred *before* the international system declared it to be in clear violation. The net effect is that Iran poses the most severe test yet to enforcers of the nonproliferation regime, and acquiescence to Iran's proliferation is not a viable option.

It can be assumed that the United States (with others if possible) would use various forms of coercion to achieve roll back.[1] Coercion or punishment would have three aims. First, to impose enough pain to compel Iranian leaders to change their minds and abandon nuclear weapon capabilities. Second, to reduce the perceived benefits Iran would gain from nuclear weapons and to otherwise weaken Iran. Third, drawing on the former two desired effects to punish Iran, thus deterring future proliferators.

Potential coercive options are discussed below, as are the roles of key institutions in authorizing or implementing them. It is worth noting that if Iran were compelled to roll back its acquisition, the benefits to the international system in terms of security, political, and economic developments would be far reaching. The greater challenge is to assess whether the international community would muster enough will and muscle to coerce Iran to roll back, and if it failed, what the consequences might be. These are the matters we address.

We proceed first by assessing Iran's susceptibility to various forms of coercion. This analysis is rudimentary, but suggestive. How susceptible would Iran be to international political ostracism? To economic sanctions? Would military force of various scales be effective? After considering types of coercion, we then assess the considerations that different actors likely would have in deciding whether to apply each form of coercion. How would the permanent five members of the United Nations (UN) Security Council respond? What about the European Union (EU)? How would Iran's going nuclear affect U.S. relations with Russia? Russia's position vis-à-vis the United States and the EU? How would the broader Muslim community and the oil importing states of Northeast Asia likely react to U.S.-led efforts to deal with a nuclear Iran?

Finally, although this paper assesses the challenge of reversing Iran's proliferation, it also would be wise to consider the alternative strategy of adaptation to a nuclear Iran. If Iran effectively resisted roll back, the United States and others would shift to a strategy of deterring Iran from "using" its nuclear capability as an instrument of coercive diplomacy (nuclear blackmail) or military aggression (using a nuclear umbrella to shield low-intensity conflict in other states). A shift from roll back to a strategy of deterrence and containment would come early if Iran indicated it is deterrable and desired nuclear weapons only to protect its own autonomy, not to alter the status quo in the Gulf and Middle East. Iran's more pragmatic international policy since 1997 suggests that it is moving toward a more status quo orientation and would not wield nuclear weapons provocatively. If this were to prove true, the United States would find it extremely difficult to sustain international cooperation in seeking to coerce Iranian roll back. This paper, however, does not explore the adaptive

strategy of deterrence and containment because such a strategy would not be nearly so difficult for the United States to execute as would be the strategy of rallying international cooperation in roll back.

COERCIVE ROLL BACK OPTIONS

Coercion can be framed as an escalating ladder of potential measures to raise the cost and pain Iran would experience, with the aim of making Tehran's leaders finally decide to let go of their nuclear weapons capabilities. Political isolation is the first rung. Economic sanctions and potential embargoes comprise a rising series of mid-range steps up this ladder. Various forms of military action occupy the next highest rungs.

Political Isolation.

Iranian elites display great pride in Persian civilization and history. They resent pariahdom in ways, for example, that North Koreans or even Pakistanis do not seem to. The intensity of the Iranian elite's desire for international respect is easily underestimated by U.S. commentators and officials who have little or no contact with Iran. To be sure, the desire to be integrated into the broader international community, to partake in a dialogue of civilizations, is felt most keenly by Western-educated reformers, urban youth, and some business interests. The most conservative elements in Iran, particularly those associated with the Revolutionary Guard, the Guardian Council, and autarkic economic interests, do not consider political isolation a major threat. However, these elements must take care not to stimulate active resistance against themselves by causing Iran's further isolation.

The utility of political ostracism depends on the political dynamics within Iran at any given moment. The threat of isolation will be more effective in preventing Iran from completing acquisition of nuclear weapon capabilities than it would be in reversing acquisition if Iranian decisionmakers choose to take that course. The conservatives who would decide to defy the international community and acquire the bomb would calculate that political isolation does not threaten their

hold on power. Otherwise they would be less inclined to take the risk in the first place. Once they have the bomb, abandoning it would be seen as admitting a grave mistake and capitulating to outside pressure. Conservatives would not be compelled by international political opprobrium alone. Were the bomb to be acquired under autarkic leadership, the capacity of subsequent reformist leaders to reverse course would depend on variables that simply cannot be anticipated at this time.

Economic Sanctions.

Iran is economically vulnerable. Unemployment is a grave problem, hovering at around 20 percent, and even worse for youth. The Revolutionary government simply has not been able to manage the economy in ways that produce jobs at a pace with growth of the job-seeking public. Beyond necessary regulatory and policy reforms, Iran needs massive capital infusion from abroad to stimulate growth. Therefore, sanctions to cut off investment and exports can deprive the country of badly needed capital and, consequently, growth.

Two types and targets of sanctions could be considered: against foreign investment into Iran, and against exports of oil, natural gas, and other commodities out from Iran. Between 40 percent and 50 percent of the central government's revenue comes from oil exports, and they constitute about 80 percent of Iran's total export earnings.[2] In order to remain a profitable source of revenue, however, the oil industry needs to be modernized, and new oil fields have to be developed. Iran is counting on approximately $5 billion per year in foreign investment in order to update onshore fields and develop new ones. Iran needs $8 to $10 billion to develop its offshore fields. Similarly, Iran expends about $1 billion a year in oil imports, mainly gasoline, because it lacks the infrastructure and technology to produce it on its own.[3] Blocking the flow of gasoline imports would, therefore, constitute an additional pressure measure.

Iran also possesses the second-largest natural gas resources in the world. Although it now lacks the capacity and infrastructure to export significant amounts, Iran could become a leading exporter of natural gas in coming years. Sanctions on natural gas exports would

send a strong message, but they would not cripple significantly Iran's economy in the short term. Curtailing foreign investment in this industry, however, would more dramatically increase the cost of Iran's noncompliance with the demands of the international community.

Imposing Sanctions on Foreign Investment in Iran's Energy Sector. Without new investment, Iranian officials say that Iran might become a net importer of oil by 2010.[4] Despite the threat from U.S. secondary sanctions, several countries have already invested significantly in Iran's energy industry, and more companies are expected to take advantage of latest deals presented by the National Iranian Oil Company, a state-owned enterprise offering 16 new "buyback"[5] contracts.

In the next 2 decades, world energy demand also will shift from oil to natural gas. North America, Europe, and Asia are expected to account for 60 percent of this growth. Because of its proximity, Iran hopes to become a key supplier of European and Asian countries. Despite its vast resources, however, Iran needs large amounts of foreign investment to develop treatment facilities, pipelines, and liquefied natural gas (LNG) tankers for transportation. Moreover, many of these deals are still being negotiated, providing the option of stopping investments before they begin rather than the more difficult task of reining in projects already underway.

Stopping ongoing projects and deterring key potential investors from Iran's energy industry will be difficult, however. Through 2004, the Iran-Libya Sanctions Act (ILSA) sanctions had not yet been imposed on any foreign company investing in Iran's energy industry. This sanction-forbearance is due largely to questions over the legality of the Act outside U.S. national territory and its jurisdiction over non-U.S. entities. Furthermore, if secondary sanctions were actually to be imposed, the effects on trade relations would be harmful to both parties. It is also not certain that other governments would sanction companies under their own jurisdiction. Iran could threaten to annul any agreements with current partners and offer "sweet" deals to less prominent investors. For instance, China Petroleum & Chemical Corporation (SNP) has already stated that it will not yield to Washington's pressure.[6] Further, despite growing concerns over Iran's nuclear program, Total (France) and Petronas (Malaysia)

recently have agreed to invest $2 billion for the creation of Pars LNG Company, which will manage the production of 8 million tons of LNG a year.[7]

Year	Country	Company	Field	Value
1999	France	Elf Aquitaine/Totalfina	Doroud	$1,000
1999	France & Canada	Elf Aquitaine & Bow Valley	Balal	$300
1999	U.K. & Netherlands	Royal Dutch & Shell	Soroush & Nowruz	$800
2000	Italy	ENI	South Pars, 4 & 5	$3,800
2000	Norway	Statoil	Salman	$850
2000	Norway	Norsk Hydro	Anaran	N/A
2001	U.K.	Enterprise Oil	South Pars, 6,7 & 8	N/A
2001	Sweden	GVA Consultants	Caspian Sea	$226
2001	Italy	ENI	Darkhovin	$550-1,000
2001	Japan	Japex, Indonesia Petroleum & Tomen	Azadegan	$2,500
2002	Canada	Sheer Energy	Masjid-e-Soleman	$80
2002	South Korea	LG Engineering Group	South Pars, 9&10	$1,600
2002	Norway	Statoil	South Pars, 6,7 & 8	$300
2002	South Korea	Hyundai	Processing Trains	$1,000
2002	Spain	Cepsa & OMV*	Cheshmeh-Khosh	$300
2003	Japan	Japanese Consortium	South Pars, 6,7, &8	$1,200
2004	Japan	Japex, Indonesia Petroleum & Tomen	Azadegan	$2,500
2004	France & Malaysia	Total & Petronas	Pars LNG	$2,000
2005	China	Zhuhai Zhenrong Co.	LNG deal	$20,000

* Cepsa and OMV annulled their contract after 3 years of negotiations.

Table 1. Foreign Investment in Iran's Energy Sector (millions of dollars).[8]

Yet, the task is not impossible. Steps have already been taken toward building a coalition to block new investments in Iran's oil sector, where Iran might have tremendous natural resources but is certainly not the only place to invest. Russia and the nearby Caspian oil fields of Kazakhstan and Azerbaijan are potential destinations for foreign investors.

Furthermore, after 3 years of negotiations, Spanish companies have pulled back, alleging commercial issues.[9] John Browne, chief executive of U.K's British Petroleum (BP), has also expressed his concerns over investing in Iran, given the current international

political environment.[10] And although a Japanese consortium has recently agreed to develop the vast Azadegan oil field, negotiations took 4 years, in part because Japan shares U.S. interests in nonproliferation and also did not want to jeopardize U.S.-Japanese trade relations.

Oil Exports. Iran's key oil customers include Japan, China, South Korea, Taiwan, France, Germany, and Italy. These countries are among the world's top petroleum net importers, and together they receive about 1.2 million bbl/d out of the 2.6 million that Iran exports daily.[11] Although Germany and France have shown a decrease in demand for Iranian oil in the last decade, Japan, China, and South Korea have increased it, and even Italy still imports about 8.8 percent of its oil from Iran. Therefore, establishing sanctions on Iranian oil would entail convincing these countries to stop oil trade with Iran, or at least to significantly decrease it. Their compliance would, in turn, require that they be provided with a reliable alternative source of oil supply.

	1991			2001		
	Total	Iran	Percent	Total	Iran	Percent
Japan	5,458	385	7.053	5,324	531	9.973
China	N/A	N/A	N/A	N/A	242[12]	6.700
South Korea	1,384	N/A	N/A	2,831	155	5.475
France	2,166	172	7.94	2,241	76	3.391
Germany	2,829	53	1.873	2,922	1	0.342
Italy	2,168	233	10.747	2,129	188	8.830

Table 2. Main Importers of Iranian Oil (Million Barrels per Day).[13]

Approximately 1.2 million bpd would have to be redirected to this group of countries.[14] One possible source is Saudi Arabia, which, on its own, has an excess capacity of 1.4-1.9 million bpd, as of the year 2003.[15] Venezuela, too, has the capacity to expand production by 1 million bpd with stable foreign investment.[16] Other Organization of Petroleum Exporting Countries (OPEC)[17] such as the United Arab Emirates (UAE), Kuwait, Nigeria, and Libya also have the capability to increase production at no significant additional cost.[18] In addition, non-OPEC countries such as Norway, Mexico, and more importantly,

Russia, would be prime sources of extra oil supply. Without almost one-half of its oil exports revenue, the Iranian central government would be seriously depleted of important resources.

Country	Production	Consumption	Net Exports
Saudi Arabia	9.1	1.3	7.8
Russia	6.7	2.4	4.3
Norway	3.3	0.2	3.1
Venezuela	3.1	0.5	2.7
Iran	3.8	1.2	2.6
United Arab Emirates	2.5	0.3	2.2
Iraq	2.6	0.5	2.1
Kuwait	2.2	0.2	2.1
Nigeria	2.1	0.3	1.9
Mexico	3.5	2.0	1.4
Libya	1.5	0.2	1.3
Algeria	1.4	0.2	1.2
United Kingdom	2.8	1.7	1.1

Table 3. Top Petroleum Net Exporters, 2000 (Million Barrels per Day).[19]

More complex issues to consider are the political and economic implications that could derive from this kind of punishment. Sanctions against Iranian oil could be seen as an indirect reward to substitute supplier countries that are less than democratic. This could undermine international will to cooperate with sanctions. More likely, countries necessary for effective sanctions against Iranian exports would be reluctant to endanger their important non-oil trade relations with Iran (see discussion below.) At the same time, it is difficult to predict how oil-producing states would react to the oil sanctions. Although oil prices have been highly volatile in the last 25 years, Iranian oil customers might decide not to comply with the oil embargo if oil producers take advantage of the situation by significantly increasing already-high oil prices. Furthermore, the political instability in countries such as Venezuela might add to the pressure on oil prices to reach levels not acceptable to importing states.

In short, sanctioning Iranian oil exports would require many major states to put nuclear counter-proliferation ahead of economic

well-being, at least in the near term. In democracies, elected leaders would calculate whether their publics would care more about the security implications of Iranian nuclear weapons than rises in their cost of living. These calculations would in turn be affected by national threat perceptions and by the process by which sanctions would be authorized. Would a nuclear Iran be seen as a threat primarily to Israel and U.S. forces in the Persian Gulf? Would key European Union states feel more threatened by Iranian nuclear weapons or by inflation? Major Asian importers of Iranian oil probably would not feel directly threatened by Iranian nuclear weapons and therefore less inclined to cooperate with sanctions. This reluctance would be greater still, if sanctions were seen as primarily a U.S. "project". Thus, it would be vital to obtain UN Security Council authority for such sanctions, in order to broaden the legitimacy of such action, and if done under Chapter VII, to make all states obligated to impose sanctions.

Tackling Iran's Non-oil Exports. Iran's non-oil exports constitute about 15 percent of the country's total export revenues (about $6 billion in 2003). Products include carpets, fruits and nuts, and chemicals. The United Arab Emirates, Germany, Azerbaijan, Italy, Japan, China, and India are among Iran's major customers. Curtailing imports from Iran might not significantly cripple Iran's economy. If the ban on imports was multilateral, however, the message to Iran might be significant enough that, in addition to other sanctions, it could either force Iranian leadership to reconsider its nuclear aspirations, or provoke strong protest within Iran's civilian population against the direction of the government's policies.

Tackling Exports to Iran. Perhaps as significant and hard to achieve as a multilateral ban on Iranian non-oil exports, would be to restrain other countries' exports to Iran. Although previous sanctions on U.S. exports forced Iran to find new providers, the cost that Iran has incurred in value and quality, particularly on high-tech products, has been significant. Iran is presently in great need of machinery, transportation vehicles, chemical products, iron, and steel. Current major suppliers to Iran include the European Union (EU), with 37.2 percent of Iran's total imports; Russia, with 5.6 percent; the UAE, with 5.5 percent; and Japan, with 5 percent.[20]

	1997/98	2001/02
United Arab Emirates	286	641
Germany	392	313
Azerbaijan	194	314
Italy	276	192
China	62	177
India	95	187
Japan	104	239
Ukraine	84	142
USA	5	108
Others	1,412	2,252
Total[21]	**2,910**	**4,565**

Table 4. Main Customers of Iran's Non-oil Exports (millions of dollars).[22]

The EU in this case is in a very strong position to influence Iran's behavior. The EU and Iran are negotiating a "Trade and Co-operation Agreement" that is contingent on Iran's compliance with the Europeans' demands to resolve the nuclear proliferation crisis, to cease support of terrorist groups and actions, to support a peaceful resolution of the Middle East conflict, and to end abuses of human rights. This treaty is of particular significance because, despite repeated attempts, the World Trade Organization (WTO) keeps denying Iran access into the trade organization. The fear of isolation against a unified front between the United States, Europe, and Japan would dramatize the cost in any cost/benefit analysis by the Iranian leadership and thus compel it to abandon any desires to pursue a nuclear weapons program. Moreover, Iran's dependence on Germany, France, Italy, and the U.K. for imported machine tools poses a vulnerability that could be exploited by targeted sanctions. Russia, too, would be forced to collaborate with this multilateral sanctions regime or face the possibility of being left without its privileges at the G8 negotiation table.[23]

Product	1997/98	2001/02
Food and live animals	2,508	2,106
Grains and derivatives	1,705	1,472
Beverages and Tobacco	8	18
Raw nonedible products	647	675
Mineral products, fuel, oil products, and derivatives	265	578
Vegetable and animal shortening	434	388
Chemical products	1,890	2,384
Goods classified by composition	2,720	3,319
Iron and steel	1,290	1,895
Transportation vehicles, machinery and tools	5,045	7,565
Nonelectric machinery	2,672	4,051
Electric machinery, tools and appliances	1,444	1,819
Transportation vehicles	929	1,696
Miscellaneous finished products	384	535
Other	295	57
Total	**14,196**	**17,626**

Table 5. Value of Imports by Product (millions of dollars).[24]

	1997/98	2001/02
Germany	1,854	1,807
UA Emirates	562	1,633
Russia	704	914
Italy	795	996
South Korea	552	958
Japan	882	787
France	675	1,109
China	395	887
Brazil	294	896
U.K.	681	666

Table 6. Iran Main Import Suppliers (millions of dollars).[25]

France, Germany, Italy, and the U.K might be faced with a difficult but necessary choice. Regardless of their differences with the United States, these countries must prove that they are truly committed to the basic premises of the "Trade and Co-operation Agreement." If Iran decides to restart its uranium enrichment program or impede IAEA inspections, French, German, Italian, and U.K leaders will have to compromise very significant profits (based on 2002 data, about $1,109, $1,807, $996, $666 million in exports, respectively.) The gains from doing so, however, would translate into international security.

Again, the question would be the relative priority that various polities attach to nonproliferation compared to economic growth. Attaining collaboration from these countries is uncertain precisely because the economic relations between the two sides are very significant. Italy, for instance, has not only shown great reluctance to constrain trade with Iran, but has also claimed that some sort of recognition or reward measures should be given to Iran for showing improved cooperation regarding its nuclear program.[26]

Tackling Credit by International Financial Organizations. As a state designated a supporter of terrorism, Iran has been forbidden since 1984 from receiving any U.S. contributions to international financial institutions. The U.S. Government has also lobbied other country members of such international bodies to uphold their donations. For 7 years, the United States was successful in ensuring multilateral cooperation from members of the World Bank Group. Between July 1993 and May 2000, a coalition among the G7 states blocked all contributions from the World Bank to Iran. Consensus broke, however, when European partners adopted an engagement strategy with Iran. Since then, the World Bank has awarded four loans for development projects in Iran: $145 million for the Tehran Sewerage Project, $87 million for the Primary Health Care and Nutrition Project, $20 million for the Environmental Management Support Project, and $180 million for the Earthquake Emergency Recovery Project.[27] In addition, $150 million will be directed to establishing a local development fund, $80 million for a low-income housing project, $120 million for a water supply and sanitation project and $295 million for a "deurbanization" project.[28] As major contributors to international financial institutions and trade partners with Iran, European countries have, once again, a pressure point to force Iran to comply with its obligations under the NPT.

It should be noted, however, that despite economic pressures throughout the last 3 decades, Iran has never applied for assistance to the International Monetary Fund (IMF). While other countries have chosen to receive loans from the IMF's Contingency and Compensatory Financing Facility (CCFF), Iran has implemented arduous structural reforms that, in the long term, have helped the country to ensure economic growth.[29]

Use of Force.

The most direct and limited way to apply force to reverse or contain Iran's nuclear acquisition would be to destroy key nodes of Iran's nuclear infrastructure. If, for the sake of this analysis, Iran is assumed already to have acquired at least a few nuclear weapons, the military task becomes even more complicated. Enforcers would want to destroy extant weapons as well as production infrastructure.

Experience with Iraq and, more speculatively, North Korea suggests that reliable intelligence will not exist on the exact location of Iran's nuclear weapons and all relevant production infrastructure. The lack of high confidence that all desired targets could be identified and destroyed need not preclude attacks. Degradation of some but not all capabilities could still be deemed valuable enough to warrant attack, both to limit Iran's capacities and to demonstrate resolve.

Yet, lack of high confidence in destroying all weapons and production capabilities would raise the major question of Iran's potential use of surviving nuclear weapons against U.S. forces and allies. An attack on Iran would make Iranian counterattacks more likely. Many, especially in the Muslim world, would find such responses justified. This would affect the calculus of the long-term political and strategic effects of attacks on Iran. Would such attacks weaken, rather than strengthen, international support for those who authorized and/or conducted the attacks? Depending on the perceived legitimacy of the attacks, and their consequences, the lesson could be that a few select states should seek nuclear weapons to deter illegitimate exercise of force by, say, the United States. Others, including in Europe, could express disaffection with "U.S. militarism" by defecting from cooperation with the United States in nonmilitary nonproliferation initiatives. Again, the conditions and agencies through which such attacks on Iran were authorized would affect their perceived legitimacy.

Iran does not lack means to deter and/or retaliate against military attacks against it. Iranian Revolutionary Guards reportedly have deployed action cells in Iraq. These cells appear not to have been activated yet, but rather are to provide capabilities to attack U.S. forces in the region if Iranian decisionmakers judge it necessary to respond to U.S. actions in Iraq and/or against Iran. Nor can the possibility be

dismissed that Iran has "terrorist" capabilities deployed in Europe, South America, or even the continental United States for activation "if necessary." Again, these capabilities could be seen as a form of asymmetric strategic deterrence against U.S. action.

Of course, the United States and/or a multilateral coalition, or the UN Security Council could decide that a nuclear Iran poses a threat to international peace and security sufficient to warrant military action to remove the current government in Iran. Regime removal in Iran would be more demanding than the invasion of Iraq. Without pretending a detailed analysis, one can say that current military and international political and economic conditions militate against such a risky enterprise. Among other things, it is practically impossible to estimate how events in Iran would evolve following a military action to remove the current government, even if such action were feasible. Those who would contemplate forcible regime change would be obligated to posit realistic scenarios and means to effect a future in Iran better than the current situation.

The United States also could contemplate supporting armed opponents of the current regime to take power in Iran. This would lower the direct risk to the United States, but would attract almost no international support. The United States likely would rely in part on the Mujaheddin-e-Khalq (MeK) to conduct such an insurgency. Given that the United States itself has deemed the MeK a terrorist organization, and given widespread international misgivings over the U.S.-U.K. 1953 coup in Iran, Washington could expect almost no international support for such a regime change effort. Indeed, the effort would seriously harm U.S. legitimacy.

In sum, if Iran acquires nuclear weapons, the options for coercive measures to roll back this capability are highly problematic. Political isolation, alone, would seem inadequate. Military force would be unlikely to "solve" the problem in the sense of completely eliminating Iran's nuclear wherewithal. Use of force would likely unleash dangerous counteractions by Iran, which, in turn, would likely dissuade many in the international community from supporting such measures. A tremendous campaign to remove the offending government in Iran would seem beyond the means and will of the United States and the international community today. Robust economic sanctions, beyond those yet applied to any country,

would seem more promising, though still highly problematic. The willingness to effectively apply such sanctions would depend heavily on the development of a widespread consensus that Iran's proliferation is such a grave threat to international security and order that leading states and institutions of the international system must act decisively.

How are key national and international actors likely to interpret and respond to Iran's acquisition of nuclear weapons?

This section explores how key actors likely would deal with the aftershocks of Iran's acquisition and cooperate with efforts to compel Iran to roll back. It should be noted, however, that if roll back fails within a couple of years, many in the international community will defect and pursue a strategy of adapting to a nuclear Iran through deterrence, containment, and diplomacy.

The UN Security Council.

The United States, U.K., and France, as well as other leading UN states such as Japan and Germany, appear determined to compel Iran to adhere to its obligations under the NPT and to prevent Tehran from acquiring nuclear weapons capabilities. Yet the ultimate (or penultimate) test will come if and when the Iranian matter is forwarded to the UN Security Council. The course of prevention will not be complete unless and until the Security Council, as the ultimate enforcer of the NPT, addresses the challenge.

Presumably, then, if Iran does acquire nuclear weapons, it will be either in defiance of the Security Council or in the aftermath of the Council's failure to act. Specifically, this means that the United States, U.K., France, Russia, and China will have failed to act effectively together. In this case, some of these five states will either have to act more decisively to roll back a capability they failed to prevent from developing, or adjust their own policies and global institutions to overcome the implications of this failure.

If the Security Council were unified in the "prevention" stage, and Iran had defied a strong Council position, then the Council would be more likely to cooperate to authorize punitive measures

such as strong sanctions. Authorization of military action would be less likely, especially if events in Iraq do not yield durable progress. Still, under this scenario, the Council could be expected to impose unprecedented political and economic costs on a proliferator—Iran. The imposition of such costs would preserve at least some vital role for the Council as an enforcer of international peace and security.

If Iran's defiance came before the Security Council had occasion to consider proposed antiproliferation resolutions by the United States and other states, Iranian proliferation would hasten the adoption of tougher new norms and enforcement mechanisms. The ensuing response would be like shutting the barn door after at least one horse escaped, but the argument would be "better late than never."

It is more likely, though, that if Iran acquires nuclear weapons, it will be in the context of disunity among the P-5 in trying to prevent it. In this scenario, there would be mutual recriminations among the P-5 over blame for the breakdown in prevention. Some members, then, would have to be willing to retreat from prior positions and rededicate themselves to seeking unity. Decisions whether to alter policies would occur in a highly charged international atmosphere, with domestic tensions in each of the capitals—not an environment conducive to the sort of statesmanship the situation will require.

Based on recent performance, we can anticipate that the United States would be charging at least one or two of the other members with fecklessness, and they in turn would be charging the United States with recklessness. Depending on how this contest played out, it is conceivable that the United States and other members would conclude for different reasons that the Security Council simply cannot fulfill its security-providing function. In such a circumstance, it is unlikely that the Security Council would authorize truly robust economic sanctions against Iran, or military reprisals. The Security Council's position in the international system would be gravely damaged, perhaps beyond repair for the foreseeable future.

The European Union.

If any entity has economic and political leverage over Iran, the EU is it. Historical and current animosities between Iran and the United States make rapprochement between them extremely

difficult, whereas Iranian desire for community with Europe is relatively uncomplicated. The more revolutionary segments of Iran do not appear so interested in ties with Europe that they would alter policies significantly, but reformers and pragmatic conservatives wish to take steps to accommodate European concerns.

Iranians desire ties with Europe for identity and political reasons and for economic interests. The EU has conditioned its willingness to open relations with Iran on Tehran's compliance with nonproliferation rules, human rights, and disavowal of terrorism. A special trade relationship is the key incentive the EU offers conditionally.

If Iran goes ahead and acquires nuclear weapons, EU leaders will likely block trade and other forms of normalization. Imposing more punitive sanctions would be more difficult, given aspirations of European energy corporations. However, proscriptions on investment in Iran could be seen as a minimal EU action to uphold the international norm against proliferation. An embargo on Iranian oil exports would be more difficult, but if the United States were prepared to suffer the global economic consequences, the EU would be hard-pressed not to go along given the failure of their strategy of engagement to dissuade Iran from acquiring nuclear weapons. (Again, this calculus would be altered if the United States were seen to undermine the EU's diplomatic strategy to prevent Iran's acquisition and could be "blamed" for "driving" Iran toward the bomb.)

France has demonstrated real determination to block Iran's proliferation, and as long as the United States does not move precipitously and unilaterally to use force, France appears likely to join with a tough U.S. approach. Thus, if the United States and France stay aligned on preventive strategy and tactics, and Iran nonetheless defies them, France would be inclined to work with Washington on punitive measures short of force. German Foreign Minister Fischer, according to knowledgeable sources, evinces strong determination to prevent Iran from acquiring nuclear weapons. The United Kingdom, though politically chastened by opposition to its participation in the Iraq War, and therefore publicly dismissing the prospects of military action against Iran, nonetheless recognizes the need for success in diplomatically diverting Iran from obtaining nuclear weapons capability. Italy would find an embargo most difficult, on economic grounds.

Were the EU to participate in sanctions and other punitive measures against Iran, and then be hit by terrorist reprisals, some politicians would urge steps to learn to live with a nuclear Iran. Their aim would be to obtain Iranian assurances that its nuclear capability would be used only to deter attack against Iran, and not for offensive purposes. Some would also move quickly to note that Israel possesses nuclear weapons and that Iran's acquisition was inevitable because of this. The prospect of knock-on proliferation in Saudi Arabia, Egypt, or other states would be left for the United States to deal with. Many in Europe would urge the opening of a regional security dialogue to address the Israel-Palestine conflict and WMD issues as a comprehensive problem.

Still, Europeans would be chastened by Iran's acquisition and could be expected to join with IAEA Director General El Baradei's call to reinterpret the rules of nuclear technology management. Members of the Nuclear Suppliers Group would probably agree to proscribe exports of fuel-cycle capabilities to states that do not already possess them, and to toughen export control enforcement.

The IAEA.

The IAEA has much riding on preventing Iran from acquiring nuclear weapons. The Agency failed to detect key proliferation steps in Iran, but, once given leads and authority to press, Iran has investigated admirably within the limitations of its mandate as determined by the states comprising its Board of Governors.[30]

IAEA professionals do not determine policy, the states on the board of governors do. The Board will determine how to press Iran to comply with its obligations and whether and when to send the matter to the Security Council for enforcement. If action or inaction by the Board is subsequently blamed for failing to prevent Iran from acquiring nuclear weapons, the value of the IAEA in the international system will come under severe doubt.

If the board is divided, and these divisions later explain fateful inaction, the United States and others will press to reform the Agency's governance. Such reforms likely would seek to disempower countries that were loath to pursue tough enforcement, probably

developing countries. Rancor would ensue over the discriminatory effort by the United States and others to rewrite the long-standing nuclear bargain to disadvantage developing countries in favor of those who already possess nuclear weapons and now want to impose backwardness on the poor. The United States and its allies would press for streamlined authority and specialization to strengthen the Agency's detection and inspection capabilities, while others would demand greater nuclear cooperation. If this struggle over governance reform appeared intractable, the United States and likeminded states would be inclined to disinvest the Agency of authority and resources to facilitate nuclear cooperation.

It is impossible to predict how this drama would unfold, but the net effect would be polarization of the nuclear order. Nuclear technology-providing states that are most security minded would act coalitionally to toughen the standards and terms of nuclear cooperation and the operation of nuclear complexes, while countries that depend more on assistance would suffer the consequences. The future of nuclear energy would come under doubt on proliferation grounds. The nuclear industry's argument that nuclear power must expand to reduce growth in greenhouse gas emissions, would bump hard against evidence that nuclear power provides cover for dangerous proliferation.

The NPT Community.

Many states participate in the international nonproliferation regime primarily through their membership in the NPT and involvement in the treaty's review process. Argentina, Brazil, South Africa, Japan, Sweden, Egypt, Mexico, Australia, and Canada are among the most important participants. These non-nuclear-weapons states would help determine whether and how to adjust interpretations of NPT requirements in the aftermath of Iran's acquisition of nuclear weapons.

Much would depend on the context in which Iran acquired nuclear weapons. The U.S., leading EU states, and the IAEA Board of Governors have not yet developed a consensus to demand that Iran permanently abjure acquisition of national fuel-cycle capabilities. Such a demand, hinted at by Director General el Baradei and

explicitly endorsed by President Bush on February 11, amounts to a reinterpretation of NPT Article IV. That article does not specify that particular technologies must be shared with states in good standing with the NPT, but it also does not say that particular technologies may be categorically exempted from cooperation. As long as Iran (or any other state) is not in full compliance with the treaty, it is reasonable to insist that no cooperation should be extended to it. (The UN Security Council would do well to make this a rule: no state not deemed in full compliance with the NPT shall receive nuclear cooperation, except for safety purposes, and it should be illegal for any person or entity to provide such cooperation to such a state.) The more ambitious NPT interpretation would be that even states in good standing should no longer be eligible to acquire (indigenously or through import) uranium enrichment and plutonium separation capability under national control.

If NPT members had not agreed on this rule before Iran acquired nuclear weapons, they would be more likely to do so afterward to try to contain follow-on proliferation. But non-nuclear-weapons states would demand "quids" for the quo. Article IV contains one of the two major bargains in the NPT: in return for renouncing nuclear weapons, non-nuclear-weapons states received guarantees of generous civilian assistance from the nuclear-weapons states and the IAEA. If the terms of nuclear assistance are to be radically reinterpreted, the non-nuclear-weapons states will demand corresponding gains. These demands could be for significantly subsidized fuel-cycle services to be provided to states that have or will acquire nuclear-power reactors. The other major NPT bargain is Article VI's pledge by the five nuclear-weapons states to cease the nuclear arms race and unequivocally to seek "the total elimination of their nuclear arsenals." A reinterpretation of Article IV would be perceived to favor the nuclear-weapons states. Leading non-nuclear-weapons states would demand a corresponding concession by the nuclear-weapon states on the disarmament front.

In other words, efforts to strengthen NPT norms and rules following Iran's break out would entail intense and confrontational negotiations over the core tradeoffs between the nuclear-weapons and non-nuclear weapons states. Many developing non-nuclear-weapons states would use the opportunity to blame the United

States, Russia and other nuclear-weapons states for failing to reduce the perceived value of nuclear weapons. Many states also would cite Israel's possession of nuclear weapons and refusal to join the NPT as a central cause of Iran's proliferation. Parties would blame the United States for indulging Israel on this score and more broadly.

Beyond the conflict between nuclear-weapons "haves" and "have nots," NPT parties would divide over the future of the nuclear industry. States that have large and export-hungry nuclear industrial establishments will resist efforts to tighten severely the conditions under which nuclear technology can be transferred. The United States and like-minded states focusing on proliferation risks will call for greater concentration of inspection and enforcement efforts on ill-defined "suspect" states, while developing countries will resist. The United States will press to exclude further separation and use of plutonium as a reactor fuel, while Japan and India (not an NPT state) will cling to hopes for breeder reactors.

Thus, in the wake of Iranian acquisition of nuclear weapons,the United States and other nonproliferation stalwarts would not yet give up on nonproliferation. They would seek to create new norms and rules to prevent states from acquiring dual-use fuel cycle capabilities, strengthen inspections and other processes to detect and deter proliferation, and establish more automatic measures to enforce compliance and punish non-compliance with NPT norms and rules. Key non-nuclear-weapons states would see the merits of such measures but also would argue that the blame for proliferation lies with the United States and other nuclear-weapons states that have failed to comply with their disarmament obligations. To the extent that knock-on proliferation pressures would center on the Middle East, NPT debates would elicit enormous pressure on Israel, and the United States as Israel's patron. Intense bargaining would ensue, the outcome of which cannot be predicted. Not only would major U.S. security interests be at stake; the legitimacy of U.S. leadership in nonproliferation also would hang in the balance.

U.S.-Russian Relations.

Washington and Moscow have butted heads over the Iranian nuclear issue for a decade. The United States feels vindicated by

IAEA acknowledgement that Iran has been lying and deceiving the international community about its nuclear activities. Russia appears a bit chastened by this, and also perturbed that Iran had secretly acquired enrichment capabilities through non-Russian channels. Yet, Moscow's frustration with Tehran is tempered by an ongoing desire to conduct lucrative nuclear commerce with Iran. Russia has pledged that if the IAEA finds Iran noncompliant with its NPT obligations, Russia will discontinue nuclear cooperation with Iran until Iran has brought itself back into compliance.

Moscow's willingness to cooperate in a roll back strategy will depend significantly on how the United States and the EU first manage negotiations to bring Iran into compliance with its obligations. Iran still must clarify the complete story of its past nuclear activities, ensure total transparency, and, in the meantime, not violate a still-undefined suspension of fuel-cycle activity. The United States and key EU states also condition Iran's rehabilitation on Tehran's agreement permanently to forgo acquisition of national fuel-cycle capabilities. From Russia's point of view, the key element is whether the United States and the EU will induce Iran to accept these terms by blessing the completion of the Bushier power reactor (and perhaps others) with a guaranteed fuel services agreement with Russia. Such a deal would satisfy the economic, bureaucratic and political interests of Russia, including the Ministry of Atomic Energy. If the United States were to endorse such a deal, and the package were offered to Iran via talks with the EU, the IAEA Board of Governors or even the Security Council, and Iran were to turn it down, then Russia would be much more willing to support a coercive response against Iran. If, on the other hand, Iran were not "allowed" to complete nuclear power stations, Russia would be reluctant to penalize subsequent Iranian acquisition of nuclear weapons.

Russian leaders (and increasingly society) evince disdain for Muslims, in large part due to the Chechen war. But Iran is an exception, in many ways. Iran has cooperated with Russia in containing unrest in Tajikistan. Iran has not exploited the Chechen war. Nor has Iran worked against Russian interests in the Armenian-Azerbaijani conflict. The two states regard each other warily over dispensation of Caspian Sea resources, but neither has appeared

inclined to make the matter a source of crisis. The two states seek business-like relations; neither needs another adversary to worry about, so both seem interested in strategies of reassurance.

Against this background, Russia will be reluctant to accede to U.S. demands to punish severely Iran's acquisition of nuclear weapons. As noted above, this reluctance will be even greater if the United States does not endorse Russian-Iranian nuclear cooperation in the current prevention-phase of diplomacy with Iran. Still, if Iran acquires nuclear weapons despite a "fair" effort by the United States, EU, and the IAEA to stop it, Russia will acknowledge the need for a punitive response. Russia's historic leadership role in the nonproliferation regime and its desire for greater integration with the West will impel it to cooperate with Western leaders. That is, Russia's equities in the NPT-system and a strong UN Security Council would be the only strong motivations for joining the United States in trying to coerce Iranian roll back.

Because Russia will feel less directly threatened by Iranian nuclear capability than the United States and others, it will seek side payments for supporting sanctions. Such payments could come in the form of agreements for Russia to be a substitute supplier of oil to states embargoing Iranian exports. The powerful Russian nuclear industry also would seek compensation for the closing of the Iranian market. Over time, Russia may actually benefit from the consequences of Iranian nuclear acquisition. Tensions within NATO over Turkey's response to Iran, would not alarm Russia. Knock-on proliferation in Saudi Arabia or Egypt would destabilize the Middle East and perhaps raise oil prices, which would advantage Russia as an exporter. Russia faces terrorist challenges from Chechnya, Uzbekistan, and perhaps elsewhere on its southern periphery, but even if turmoil in the Persian Gulf and Middle East produced more terrorists, it is not evident that Russia would be affected worse by such developments than the United States or Western European states would be.

From a perspective of relative gains or losses, then, Russia would not see Iranian nuclear acquisition as a major problem.

The United States and Other Muslim States.

Despite deep splits within the Muslim world—Sunni versus Shia; Arab versus Persian, Pakistani, Indonesian,; fundamentalist versus modernist; and regime versus civil society—several issues unite most Muslims. The Israeli-Palestinian conflict, and the perceived double standard with which the United States treats Israel, rallies many Muslims' hatred of the United States Similarly, displays of U.S. military prowess in attacks that defeat and kill apparently hapless Muslims generates widespread hatred of Washington. These two coalescing tendencies would be relevant in the event that Iran acquired nuclear weapons, and they probably would not be offset by appreciation of U.S. efforts to promote freedom in Arab societies.

Neighboring Arabs and Turkey would be alarmed by arrogant Persia's acquisition. This alarm would be greater or weaker depending on the bellicosity and character of the Iranian government. But the United States would find it difficult to channel neighboring states' concerns into support for coercion against Iran if the United States were not simultaneously pressing Israel to relinquish its nuclear weapons, and if Israel were not closer to a resolution with the Palestinians. Privately, Arab leaders might welcome coercion against Iran, but publicly they and their societies would denounce the United States for its favoritism of Israel. Iranian leaders know this and would be expected to frame their acquisition of nuclear weapons as a necessity to counter the nuclear-armed Zionist entity and the arrogant United States.

Antipathy toward the United States (and any coalition it would muster) would be greatest in the event of military attacks on Iran. Strikes pinpointed against Iran's "illegal" nuclear infrastructure would be more understandable than a wider military campaign that could harm civilians, especially if Iran completed its nuclear facilities despite promises not to. Common people would see military action in a now-common narrative: the United States, with its overwhelming military machine and thousands of nuclear weapons, does Israel's bidding by smashing poor Muslims who, after all, are only trying to acquire what Israel has. The narrative extends further to a U.S. determination to keep Muslims backward by denying them advanced technology.

If the United States eschewed military action against Iran and implicitly or explicitly recognized that Iran's capability were not going to be rolled back, Iran's neighbors would quietly seek greater U.S. security assurances against potential aggression or intimidation by Iran. It is possible for people in Arab states, Pakistan, and elsewhere simultaneously to denounce the United States for being anti-Muslim and imperialistic and at the same time demand that the United States insert itself more robustly to protect them. If attempts to coerce Iranian roll back gave way to a strategy of deterrence, Iran's neighbors would be receptive to U.S. security guarantees against Iran.

U.S. Relations with Oil Hungry Asia.

China receives one-sixth of its oil from Iran, Japan imports one-tenth, and five percent of South Korea's total oil needs come from Iran. China and Japan are key: China is a permanent member of the UN Security Council, and Japan is a leading advocate of civilian nuclear power and of preventing new states from being accepted as nuclear-weapons possessors. Both Asian leaders can play important roles in diplomacy to prevent Iran from acquiring nuclear weapons. If this diplomacy fails, however, it is difficult to see either state supporting sanctions against Iranian oil exports. The resultant economic dislocations would be daunting, and a nuclear-armed Iran would not directly threaten them militarily or in terms of international status.

By contrast, Japan saw India's acquisition as a greater threat insofar as India bids to be a great power and therefore a rival to Japan. Similarly, China views India as a direct military and major-power competitor. Both Japan and China have accommodated India's nuclear evolution. Iran would be significantly less "threatening" to Tokyo and Beijing. The only major interest a nuclear Iran would threaten is the viability of the NPT-related nonproliferation regime. China gradually has determined that it genuinely benefits from nonproliferation and would not welcome the disorder that proliferation could cause, but if the effects could be contained in the Gulf region, China could live with it. Japan is an NPT stalwart, but it also has latent nuclear-weapons capabilities and a frustrated-nationalist vein that could be

tapped to favor "going nuclear" if the NPT dam collapsed. If in the wake of Pakistan and India going nuclear, Iran and North Korea were to follow suit and the five recognized nuclear-weapon states continued not to take nuclear disarmament seriously, Japan could adopt a more overt hedge strategy. This would alarm China, but is probably a sufficiently uncertain and indirect possibility that it would not inform China's strategy toward Iran.

In short, given their economic equities in Iran, and the distance of the Iranian threat, it is difficult to see China and Japan favoring a truly robust coercive strategy to roll back or punish Iran's acquisition of nuclear weapons. Unlike a tough strategy to persuade Iran to comply with its NPT obligations and abjuration of national fuel-cycle capabilities, coercion to achieve roll back would seem open-ended. Neither Japan nor China likely would feel it could afford indefinite biting economic sanctions against Iran's oil exports.

ENDNOTES - CHAPTER 8

1. Presumably, if we were willing to use positive inducements, we would offer them now while there is still opportunity to prevent Iran from acquiring nuclear weapons. If Iran rejected positive inducements in the prevention phase, then the United States and others would be less likely to deploy such incentives to seek roll back. On the other hand, if we refuse to offer positive inducements to dissuade Iran from acquiring nuclear weapons and rely only on pressure, then if that pressure fails and Iran goes ahead and acquires nuclear weapons, many will argue that positive inducements should have been offered earlier and should be given a try as part of a roll back strategy. Thus, failure to offer positive inducements in the prevention phase may undermine Washington's capacity to rally international support in a roll-back-and-punish phase.

2. Iran Country Analysis Brief, EIA, November, 2003.

3. *Ibid*.

4. Kenneth Katzman, *The Iran-Libya Sanctions Act (ILSA)*, CRS Report for Congress, updated July 31, 2003, p. 2.

5. Arrangements made possible by the 1987 Petroleum Act whereby foreign firms fund and manage the development of oil and gas fields in exchange for a preaccorded share of production. All production operations are eventually transferred to the National Iranian Oil Company.

6. Sally Jones, "Sinopec Wants Iranian Oil Deal Despite U.S. Pressure-Exec," *Dow Jones Newswires*, January 29, 2004.

7. "Iran Wins $2bn Gas Deal with Total and Petronas," *Daily News*, February 26, 2004.

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9. "Iranian Oilfield Bids Soldier On Despite Set-back," *Daily Times*, January 30, 2004.

10. *Ibid*.

11. The United States tops the list, with Spain and India in 7th and 8th place. respectively.

12. Expected amount for 2003, "Chinese Oil Imports from Iran To Hold Steady," Alexander's Gas & Oil Connections, October 30, 2002.

13. Energy Information Administration/International Petroleum Monthly, December 2003, Tables 411, 413, 414, 415, 416; "Chinese Oil Imports to Hold Steady," Alexander's Gas and Oil Connections, October 30, 2002.

14. Based on 2003 production levels and not including Taiwan's data.

15. "The New Geopolitics of Oil," *The National Interest*, Winter 2003/04.

16. "International Energy Outlook: World Oil Markets," 2003.

17. OPEC countries include Algeria, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, UAE, and Venezuela.

18. "International Energy Outlook: World Oil Markets," 2003.

19. Energy Information Administration, available at *www.eia.doe.gov/emeu/security/topexp.html.*

20. "Trade Issues: Bilateral Trade Relations, Iran," *http://europa.eu.int/comm/trade/issues/bilateral/countries/iran/index_en.htm*, website accessed January 13, 2004.

21. Total of all Iran's non-oil exports.

22. IMF, Islamic Republic of Iran, Statistical Appendix, Country Report No. 03/280, Septemner 5, 2003.

23. Patrick Clawson, "Can ILSA help stop Iranian Proliferation and Terrorism?" Committee on International Relations, Statement for June 25, 2003, Hearing of the House International Relations Committee, Sub-Committee on the Middle East and Central Asia on Enforcement of ILSA and Increasing Security Threats from Iran.

24. IMF, Islamic Republic of Iran, Statistical Appendix, Country Report, No. 03/280.

25. *Ibid*.

26. Italian Foreign Minister Franco Frattini remarked on a recent meeting with his Iranian counterpart that "the decision [to sign the Additional Protocol] should

spur Europe to make some kind of return gesture toward Iran." "Frattini, EU Should Made Return Gesture Toward Iran," *AGI*, January 27, 2004.

27. Projects & Programs, The World Bank Group, website accessed January 8, 2004.

28. Testimony by Deputy Assistant Secretary of Treasury William E. Schuerch before the House Financial Services Subcommittee on Domestic and International Monetary Policy, Trade and Technology, October 29, 2003. *http://www.treas.gov/releases/js952.htm* website accessed November 20, 2003.

29. Meghan L. O'Sullivan, *Shrewd Sanctions,* Washington, DC: Brookings Institution Press, 2003, p. 70.

30. National intelligence services with assets the IAEA lacks also failed at detection. The bigger issue is failure by leading states to adapt national and IAEA policies to act on the *strategic warning* they have had of Iran's efforts to acquire suspect capabilities.

PART IV

FURTHER COURSES OF ACTION

CHAPTER 9

REDUCING VULNERABILITY OF THE STRAIT OF HORMUZ

Dagobert Brito and Amy Myers Jaffe

The Strait of Hormuz is a vitally important international waterway that connects the Persian Gulf with the Gulf of Oman. The passageway is by far the single most important chokepoint in the world oil transportation system. It consists of two, mile-wide channels for inbound and outbound tanker traffic in addition to a 2-mile-wide buffer zone. It is 50 kilometers wide at its narrowest point.[1]

The Strait is the main passageway for 15 to 16 million barrels of oil a day, roughly two-thirds of total world oil trade by tanker and 20 percent of total world daily oil demand. Oil and petroleum products from Iraq, Iran, Kuwait, Saudi Arabia, Qatar, and the United Arab Emirates (UAE) transit the Strait of Hormuz. Large quantities of liquefied natural gas are also exported from Qatar through the Strait. The significance of the Strait of Hormuz has become enhanced in recent years because virtually all of the world's excess spare production capacity that can be brought on line quickly to defend against the adverse effects of a sudden oil supply crisis or disruption is located in Saudi Arabia, Kuwait, and the UAE and thereby could be cut off, if the Strait could be closed.

Maintaining the free flow of oil through the Strait of Hormuz is of vital strategic importance to the world economy and to the United States and its allies. The United States receives about 25 percent of its imported oil via the Straits. Asia buyers are other key purchasers of Persian Gulf oil with China, Japan, South Korea, India, and Singapore receiving the lion's share of Middle East exports through the Strait of Hormuz. Keeping the Strait open is important as a matter of protecting the international order and global economy by maintaining the indisputable right of the freedom of navigation of international seaways that is so vital to international trade and commerce. About 30 U.S. warships now patrol the Persian Gulf and nearby waters, about twice the level posted there during the Iran-Iraq war in the 1980s.[2]

There have been several challenges to the freedom of navigation in the Strait of Hormuz and adjacent territories over the last several decades. The most prolonged threat to navigation in the Persian Gulf in recent years arose during the 8-year war between Iraq and Iran. By 1984, the then 3-year-old Iraq-Iran war entered its so-called "tanker phase," with regular bombings of shipping and oil export facilities, and mining of the waters of the Persian Gulf.[3] By 1987, the United States responded to the escalation of attacks on Persian Gulf shipping by organizing a fleet of frigates, destroyers, and minesweepers in the region to combat the threat against shipping.[4] In March 1987, the U.S. Government agreed to transfer Kuwaiti oil and gas tankers to the American flag, and in July 1987, the U.S. Navy initiated Operation EARNEST WILL, providing naval escorts to tankers passing through the Persian Gulf.[5]

In April 2004, U.S. Navy vessels were called to service to repel attacks by terrorist suicide bombers on both of Iraq's offshore oil shipping terminals, and shippers from the Persian Gulf region are again asking the U.S. military to provide naval escorts.[6] The possibility of terrorist attacks at the Strait of Hormuz cannot be ruled out as similar threats already have been identified in Asia against another vital oil waterway, the Straits of Malacca.[7]

The nature of future risks against free navigation in the Strait of Hormuz appear at present to come mainly from two directions: (1) the possibility that a nongovernmental group, such as al-Qaeda, will plot to disrupt traffic in the Strait through suicide bombings attacks using divers or small ships, or by deploying a dirty bomb or other kinds of weapons of mass destruction (WMD); or (2) the possibility that a neighboring state would threaten passage of the Strait through conventional or nonconventional military means to gain leverage in a localized dispute or during a political or strategic conflict with a major power such as the United States or a major Asian oil consuming nation.

The U.S. naval presence in the Persian Gulf and overwhelming U.S. naval superiority for the foreseeable future is likely to discourage a major conventional attack on shipping in the Persian Gulf by any nation with naval capabilities. There currently does not appear to be an emerging naval power with the means or inclination to challenge the U.S. mission of protecting the Strait of Hormuz. However, the

possibility of a smaller, regional nation-state threatening free passage through the Strait using non-naval military capabilities cannot be ruled out. Iran, for example, has a history of challenging the status quo in the region and might, under extreme circumstances, pose a risk to the safety of passage through the waterway.

A territorial dispute between Iran and the UAE over three islands inside the shipping lanes of the Strait of Hormuz has continued for several decades. The islands, Abu Musa and the Greater and Lesser Tunbs, were determined to be run under co-sovereignty by the two nations in 1971, following the departure of British colonial rule from the region. However, since 1992, Iran has occupied the islands and taken steps towards unilateral control over the course of the 1990s, restricting outside access, building an airstrip, and deploying SA-6 surface-to-air missiles, 155 millimeter artillery, and seersucker anti-aircraft missiles on Abu Musa.[8] Iran test fired an anti-ship missile near the Strait of Hormuz in 1987[9] and again in January 1996.[10] Iran has silkworm missiles deployed at Qeshm, Abu Musa Island, and on Sirri Island, all within range of shipping through the Strait.[11]

In June 2004, a UAE warship fired on an Iranian fishing vessel in waters close to Abu Musa Island.[12] The Arab Gulf Cooperation Council has backed UAE claims to the islands, but Iran has refused to agree to international arbitration on their status. In April 2004, Iran also accused Qatar of overproducing its share of natural gas from the giant offshore North Field that straddles the Qatari-Iranian border, warning that Iran would resort to "other ways and means of resolving the issue" if Qatar did not enter new negotiations about regulating production from the field. The North Field/South Pars gas reserves were clearly demarcated in a maritime border deal in the late 1980s.[13]

Assessing The Threat of a Nuclear Iran to the Strait.

The backdrop of conventional Iranian military actions inside the Persian Gulf has raised concerns about whether a nuclear Iran would use the leverage of nuclear capability to demand political or other gains by threatening traffic through the Strait of Hormuz via conventional or nonconventional means. A potential conflict between the United States and Iran on a number of issues, including

international terrorism or the proliferation of WMD, would raise the stakes of such a risk. The possibility of such a threat, however, must be evaluated against the backdrop of improved U.S.-Iranian cooperation in several arenas in recent years. In the 1990 Gulf War, Iran "helped" the coalition by "not interfering."[14] During the U.S. war in Afghanistan, Tehran assisted in efforts to form the interim Afghan government at a meeting in Bonn in December 2001. Iran also was relatively cooperative during the early days of the campaign in Iraq, although its long-term intentions are unclear.[15] Iran also is seeking better ties with the European Union (EU), whose long term strategy with Iran focuses on linking into potential economic and political reform there. As starting points, Iran has attained observer status to the EU Energy Charter and is discussing a proposed gas pipeline to Greece.[16]

Still, it remains a possibility that a nuclear Iran could make a threat in political negotiations to use conventional weapons to close the Strait of Hormuz. "Words of warning" from Israeli officials that Tel Aviv could hit vulnerable oil export facilities like Kharg Island and other offshore regions instead of preemptively attacking the Bushier nuclear plant could bring such an issue to the fore, as suggested by Geoff Kemp of the Nixon Center in his monograph, "U.S. and Iran: The Nuclear Dilemma, Next Steps."[17] In the context of issues discussed in this chapter, Israeli grandstanding against Iranian oil facilities is not constructive to common goals and, in fact, aggravates the issues rather than serving as a deterrent. A threat of this nature has immediate cost ramifications in that it would instantly raise the price of oil, benefiting Iran overnight as it is a major oil exporter, and hurting the United States and its allies in the industrial world who are major oil importers.

Iran traditionally has been a strong advocate for higher oil prices at meetings of the Organization for Petroleum Exporting Countries (OPEC) and is considered a pivotal price hawk leader inside the producer oil cartel, inclined to ignore concerns that soaring oil prices might hurt future oil demand or damage world economic conditions. Its policy history on the subject of oil prices has been relatively consistent since the early days of the Islamic revolution, and Tehran has used its influence when it could to boost world oil price levels

through a combination of public statements, diplomatic initiatives, and outright threats.

In autumn 1984, as an oil price war was looming, influential speaker of the Iranian Parliament Hojjatolislam Hashmi Rafsanjani indicated in a sermon that Iran might attempt to block the flow of oil from the Persian Gulf if oil prices continued to fall, warning if Iran "was one day pressured in a price-cutting war, it will create such a crisis in the region that it will be similar to the days of the revolution and oil would not flow to the other side."[18] Iran's minister of oil announced the country would like to see $25 per barrel oil remain OPEC's minimum price in the aftermath of the Gulf War and was able to orchestrate a high level political agreement with Saudi Crown Prince Abdullah to boost prices above the traditional $18 a barrel target price starting in 1999.[19] In recent years, Iran has lobbied within OPEC to keep prices high by pressing the producer cartel to maintain a pattern of pivotal oil production cuts. It has used its leadership position inside OPEC to try to thwart the producer group from raising production during times of market disruptions.

Iran's economy is highly dependent on oil export revenues, which constitute roughly 80 percent of its total export earnings, 40-50 percent of the government budget, and 10-20 percent of its gross domestic product (GDP). The U.S. Department of State concluded in its 2002 *Patterns of Global Terrorism Report* that Iran remained "the most active state sponsor of terrorism in 2002." Oil revenue represents a significant portion of Iran's disposable income. This report concluded that Iran provided Lebanese Hezbollah and Palestinian rejectionist groups, such as HAMAS, the Palestine Islamic Jihad, and the Popular Front for the Liberation of Palestine-General Command, with funding, safe haven, training, and weapons. Iranian funding for Hezbollah was reportedly about $60 million to $80 million a year in the 1980s. The report also asserted that Iran provided support to extremist groups in Central Asia, Afghanistan, and Iraq.

The United States first placed Iran on the State Department terrorism list in 1984, in response to allegations of Iranian involvement in the 1983 suicide attack by Hezbollah on the U.S. Marine barracks in Lebanon.[20] Iran was also linked to the bombing of Khobar Towers in Saudi Arabia, where 19 American servicemen were killed. On June 21, the Justice Department announced that it had indicted 13

Saudis and one Lebanese who were members of Saudi Hezbollah. The indictment said that these individuals belonged to groups that were "inspired, supported, and supervised" by elements of the Iranian government.[21] In April 2001, Iran sponsored an international conference supporting Palestinian groups, including groups promoting violence in Israel. In January 2002, a shipment of 50 tons of arms from Iran to the Palestinian Authority was uncovered.[22] The United States maintains economic sanctions against Iran because of its terrorist links, and American firms are not allowed to purchase oil from Iran nor invest in its oil fields.[23]

Political negotiations between Iran and the United States and its allies can result in different outcomes. If the points in the bargaining set dominate a war outcome, both sides, if they are rational, may very well decide to choose to negotiate a solution rather than fight a war. However, if they choose not to bargain or if they cannot agree, then one option open to Iran is to try to block the Strait using conventional force. The United States currently has the ability to attack Iranian missile sites and can, at some cost, reopen the Straits. Iran's shift to nuclear status most likely would alter its political leverage vis-à -vis conflict with the United States and its allies.

The implications for an Iran that has acquired nuclear capability differs from the above scenarios. It is unlikely that Iran would have nuclear weapons in sufficient number and sophistication that they would use them to attack the United States and it allies. From the Iranian point of view, perhaps the greatest utility to attaining nuclear weapons is to protect its territory from outside aggression, and deny the United States aggressive interference in its internal affairs or at the extreme, an Iraq-style invasion by U.S. or allied troops. Iran also is concerned about the nature of the military balance in its neighborhood, which includes several nuclear powers (Israel, Pakistan, and India). Iran is not expected to deploy an intercontinental ballistic missile capable of striking the continental United States. This means that for Iran even to consider implementing an actual regional nuclear attack, it would have to be able to withstand a massive preemptive U.S. conventional attack, or if Iran used nuclear weapons first in the theatre, a nuclear second strike by the United States. In strategic terms, therefore, it is difficult to see why a rational Iran would use its

nuclear weapons except under dire circumstances where its existence was threatened.

However, it cannot be ruled out that a more radicalized regime in Tehran might pass nuclear material to a terrorist group. Alternatively, should the political climate in the region change, it would be possible for Iran to threaten to use its nuclear weapons as an umbrella to close the Strait of Hormuz. It has been estimated that a 3-month closure of the Strait of Hormuz, without any offsetting oil export procedures or market intervention, could cost the United States a 4 to 5 percent drop in GDP, with up to 2 percent added to the unemployment rate and 7 percent added to the inflation rate.[24]

Bargaining with threats is really a two-stage process.[25] The first stage is explicit bargaining. The second stage, in which the threat point will be implemented should the bargaining process fail, is implicit. The logical difficulty is that such games usually are not subgame perfect. In the bargaining process, it may be optimal to threaten to use nuclear weapons should a player's demands not be met. However, it is unlikely that the player will want to implement its threats. One way to address this problem is through a commitment mechanism. If a player can restrict its freedom of action so that it has no alternative but to implement the threat, then the threat is credible.

Precommitment mechanisms can be subtle.[26] One example would be to transfer control of nuclear weapons to battlefield commanders. This creates the possibility that in the "fog of war," the weapons will be used. The aggressor is forced to try to evaluate the probability that the other side will use its nuclear weapons. If it is a nuclear power, it can invoke the threat point by using the argument in its negotiations that political instability may create the danger that the nuclear weapons may fall into irresponsible hands. Thus, the potential for political instability is itself a form of a precommitment mechanism. A non-nuclear power does not have the advantage of this type of leverage. Given the enormous damage nuclear weapons can inflict, their expected loss can be large, even though the subjective probability of their use is small. Given the political instability of Iran, it would be dangerous to assume that all bargaining would be rational, as there would the very real possibility that the nuclear weapons would be under the control of the more radical elements of the government.

Since the nuclear threat is credible, the status quo is likely to be stable. Nuclear weapons put the burden of accepting the risk of the threat being implemented on the party that wants to change the status quo. The potential use of nuclear weapons also can change the probability distribution of potential gains and losses from conventional war so as to reduce its expected gain. In fact, a very small probability of enormous loss due to the use of nuclear weapons can change the expected value of a conventional war from positive to negative.

The acquisition of nuclear weapons is thus a means to validate conventional superiority. If a country has both conventional superiority and nuclear weapons, it can use the threat of conventional weapons to achieve the result it desires and use its nuclear weapons to validate this action. This threat would deter third parties from intervening in a regional conflict. Suppose, for example, that Iraq had been a nuclear power in the summer of 1990. Having taken Kuwait, Iraq would have forced the allies to choose between accepting the new allocation, or risking that its threat of using nuclear weapons would be implemented.

Iran's arsenal of *Silkworm* and *Seersucker* missiles mean that it could use these missiles in an attempt to close the Strait.[27] Under normal circumstances, this would be a problem, but one that could be addressed by U.S. naval power. However, if Iran has nuclear weapons, the nature of the threat to the Strait or other Persian Gulf energy facilities would change. The military problem would be much more complex, as it would be necessary to destroy Iran's nuclear weapons before attacking the conventional forces that are blocking the Strait. Under such circumstances, time becomes a precious commodity, and the ability to buy time by moving Saudi and other Gulf production to the Red Sea and the Mediterranean becomes a key resource.

Strategies for Reducing Threats to the Closure of Strait of Hormuz.

Maintaining alternatives to shipments of Persian Gulf oil through the Strait of Hormuz will be a critical aspect to limiting the economic damage to oil importing countries of a major shutdown of the Strait.

The first line of defense in this regard is the existence of the emergency stockpiling system of the International Energy Agency (IEA) which includes the joint release of oil from U.S. strategic petroleum reserve, together with strategic oil stocks of other Organization for Economic Cooperation and Development (OECD) member states. However, the potential of the IEA strategic stocks is limited, as it can only replace the volume of oil coming through the Strait for less than 30 days. Western industrialized nations likely would have to resort to emergency conservation measures in combination with a major stock release to mitigate the damage of a prolonged closure of the Strait of Hormuz, barring other alternative strategies.

Emergency Preparedness

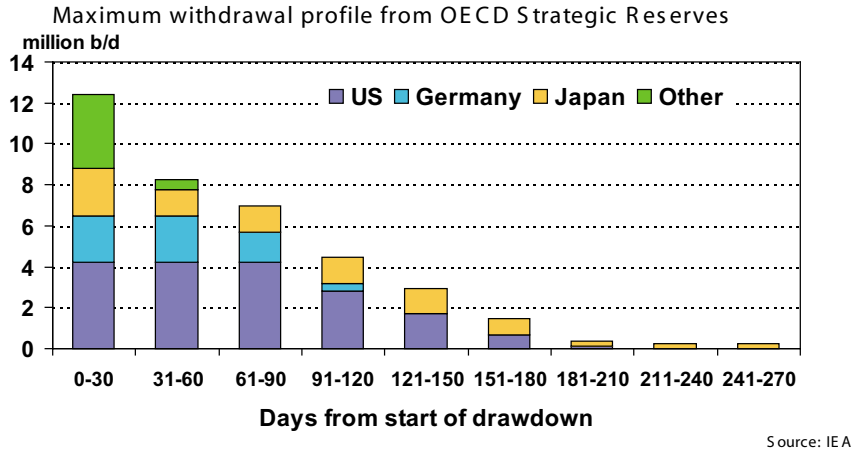

Table 1.

Western strategic oil stocks could be supplemented by unsold oil stored near end-user markets by key producers like Saudi Arabia or Russia. Such "floating" stocks were pivotal in stabilizing oil markets in 1990 when Iraq invaded Kuwait.[28] Floating stocks would be beneficial in today's circumstances and should be considered. However, other alternative strategies do exist that could give the United States and its allies time to pursue a negotiated solution or to properly prepare for a military response. Among those alternatives

are to use existing pipeline and oil export infrastructure to create a bypass to the Strait of Hormuz. The costs and options for doing so have been studied in detail by the James A. Baker III Institute and the Center for Naval Analysis.[29]

One significant existing Strait of Hormuz bypass is the trans-Saudi Arabian Petroline, an oil pipeline that has existing capacity to move over 5 million barrels a day of crude oil from Saudi oil fields to the Red Sea port of Yanbu.

A second pipeline, the Ipsa-2 pipeline, which extends from southern Iraq to the Saudi Red Sea port of Mu'jiz, could be refurbished and adjusted to carry an additional 1.65 million barrels a day of oil from Iraq and Saudi Arabia (and with construction of a spur line, Kuwait) to the Red Sea, bypassing the Persian Gulf. The 1.65 million b/d Iraqi-Saudi (Ipsa-2) pipeline was closed indefinitely by Riyadh during the Gulf War. Although Saudi Arabia has refused to comment on whether it would ever bring the line back on stream, it has maintained its portion in good working order. In June 2001, the kingdom announced that it had taken ownership of Ipsa-2, which was used to export Iraqi crude oil via Saudi Arabia in the 1980s during the Iraq-Iran war. Riyadh said that it was seizing the line, including pumping stations, storage tanks, and the maritime terminal, as Gulf War reparations for Iraqi military actions. Baghdad, for its part, has insisted that it still owns the line and has not accepted the legitimacy of the Saudi appropriation. Utilization of this line would require a diplomatic initiative involving both Saudi Arabia and Iraq.

The capacities of both of these pipelines could be upgraded by 65 percent in the event of a Hormuz incident to 11 million barrels a day by upgrading the lines through the use of drag reduction agents that reduce turbulent eddies in the oil which lessen the volume of oil that can be transported through a pipeline at any given time. Costs of such a project are calculated to be relatively low at around $600 million. Drag reduction agents (DRAs) are chemicals that are injected into crude oil pipelines to reduce energy loss. DRAs have been used on the Alaskan pipeline, and frequently on the Colombian pipeline system, to make up for lost flows during times of operational interruption. Another option would be to build a spur line from Abu Dhabi and other regional production centers so that oil could exit to world markets via Oman.

Upgrading these pipelines could allow the United States to respond to a closure on a deliberate and risk-minimizing timeline, potentially lessening the need for U.S. military deployment during a crisis. The existence of such contingency options also could be used to reduce Iranian motivation to close the Strait of Hormuz by reducing the political leverage and gain from doing so. Studies show that full use of a bypass option would mean that a closure of the Strait of Hormuz would only result in a loss of U.S. GDP of roughly 1 percent, also mitigating the impact on unemployment and inflation.[30] However, the bypass option only would be effective if Iran did not have the capability to simultaneously threaten the bypass facilities or Saudi Arabian oil production facilities themselves, but focused solely on closing the Strait as its primary target.

The bypass contingency plan described above certainly would be extremely effective against a one-of-a-kind terrorist attack that temporarily affected the passage of oil through the Strait. Rapid public announcement of the planned utilization of bypass routes could be used in combination with strategic stocks to keep oil markets calm during such an event by demonstrating to the markets that Persian Gulf oil will still be made available.

High Costs of a Loss of Access to Saudi Facilities.

While there exist several alternative ways to bypass a loss of access to the Strait of Hormuz, a major attack on Saudi oil production facilities would be harder to counterbalance. Saudi oil export infrastructure has important, substantial built-in redundancies on both the east and west coasts of the kingdom that would make it extremely difficult for terrorist cells or saboteurs to knock out Saudi export capacity for any significant period of time. The same would apply to military attacks by air. The kingdom's export capacity is over 14 million b/d, almost twice as much as current export levels, and a wide variety of facilities would have to be substantially jeopardized simultaneously before any oil export curtailment would be unavoidable. The kingdom also has access to other less well-known offshore loading facilities and makeshift systems, such as single-buoy mooring systems that could be used to load ships for export of Saudi oil.

However, a major attack on core Saudi oil production facilities that significantly affected oil production and handling operations at the major processing facilities at Abqaiq would prove far more difficult to replace quickly. As noted in the Economist Magazine, "Saudi Arabia remains the indispensable nation of oil."[31] Saudi Arabia not only exports more oil than any other producer, it maintains over one million barrels a day of idle swing capacity on hand for emergencies and can, in a relatively short order, bring on new fields to replace the exports of any other single exporter in the world. No other nation currently sits in this important position. The ramifications of Iran or some other nuclear power or group being able to blackmail the West would be quite extreme. A loss of access to Saudi production facilities at Abqaiq would leave world markets with a deficit in the millions of barrels a day (depending on the extent of damage) and would not be replaced easily, even in the 3 to 6-month timeframe when strategic stocks could be used to replace lost Saudi barrels. Certain facilities can take between 1 to 2 years to rebuild on an expedited basis. To lessen the impact of an attack by a terrorist group or others on important Saudi oil processing facilities, construction of some alternative bypass facilities should be considered and implemented where possible, and critical parts for the repair or reconstruction of such oil processing facilities should be stockpiled in country.

In the event of a major attack on Abqaiq facilities, Saudi production eventually could be replaced with investment in new fields in Venezuela, Iraq, Russia, and West Africa, but this process is also likely to take several years. In the meantime, the United States and other large industrial and emerging economies would be forced to restrict the use of oil through rationing and other extreme measures to prevent a full blown market crisis of proportions reminiscent of the crisis of 1973.

Conclusion.

The United States has acted to protect the freedom of navigation of the Strait of Hormuz for several decades. However, military strategies alone may be less effective than a combination of strategic options, should hostile parties in the region acquire WMD and be

willing to use them to threaten core Saudi oil production facilities significantly as a means of deterring a military response to a closure of the Strait.

The United States, through a combination of release of IEA emergency strategic stockpiles, utilization of strategic export bypass facilities, and military operations, could ease any threat or actual blockade to the Strait of Hormuz. For an investment totaling roughly $600 million, existing pipeline systems in Saudi Arabia could be modified to permit the export of up to 11 million barrels a day of oil to bypass the Strait of Hormuz.[32] Used in combination with the release of strategic stocks, an upgraded bypass system could almost completely offset the loss of oil due to the closure of the Strait of Hormuz for as much as 90 days. Such a strategy would allow the United States to respond to the threat of a closure or an actual closure on a deliberate and risk-minimizing timeline and could limit the extent of military engagement needed. The existence of such contingencies could reduce the Iranian motivation to close the Strait of Hormuz and reduce the political leverage they get from threatening to do so.

However, the effectiveness of this deterrent is reduced under scenarios where Iran is a nuclear power and might consider threatening Saudi oil production surface facilities. A nonconventional attack on certain key Saudi oil production facilities would be extremely difficult to deal with, given the lack of alternative idle production capacity that could be brought on line in other oil producing countries. This extreme case, however, would have to be considered by Iran in the context of a massive U.S. response.

Given all the factors considered in this question, having the ability to by-pass the Strait of Hormuz has two significant benefits. First, it buys time, allowing the United States to move forces into the region to address the Iranian nuclear threat. Second, Iran would have to use its nuclear weapons without provocation; this weakens their position in negotiations. It is one thing to threaten to use nuclear weapons in response to an attack and quite another to threaten to use nuclear weapons if a concession is not made in negotiations. In the latter case, Iran runs high risks of serious consequences that its small nuclear arsenal would not enable it to guard against.

ENDNOTES - CHAPTER 9

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8. BBC website, BBC Timeline, Abu Dhabi; Al-Alkim.

9. See *http://www.nti.org/e_research/profiles/Iran/Missile/3876_4086.html*.

10. See *http://www.converger.com/eiacab/chron.htm*.

11. See *http://www.nti.org/e_research/profiles/Iran/Missile/3876_4086.html*.

12. AFP news service, June 13, 2004.

13. "Iran Accuses Qatar of Overproducing Gas," Oil Daily International, Energy Intelligence Group, April 24, 2004, available at *www.energyintel.com*.

14. So argues Geoffrey Kemp in his monograph, *U.S. and Iran: The Nuclear Dilemma: Next Steps*, available at *www.nixoncenter.org*.

15. Details available in *ibid*.

16. Friedemann Miller, "Why Iran is Key for Europe's Security of Energy Supply," Eugene Whitlock, ed., *Iran and Its Neighbors Diverging Views on a Strategic Region*, SWP Berlin: German Institute for International and Security Affairs, July 2003.

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18. "Iran Threatens Action if Oil Price War Erupts," *Middle East Economic Survey* (MEES), Vol. XXVII, No. 6, November 19, 1984.

19. "Iran Hopes $25/barrel Minimum Price Remains After Gulf Crisis," MEES, Vol. XXXIII, No. 49, September 10, 1990; "Saudi Arabia and Iran See Eye to Eye on Oil Price Issue," MEES, Vol. XLII, No. 21, May 24, 1999.

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22. An overview on Iranian terrorism links also is outlined by George Tenet, Testimony given on "Current and Future Threats to National Security," Senate Armed Services Committee, February 2, 1999.

23. For a detailed account of the U.S. oil sanctions policy against Iran, see Meghan L. O'Sullivan, "Shrewd Sanctions: Statecraft and State Sponsors of Terrorism," Washington, DC: Brookings Institute Press, 2003.

24. Estimates are based on the U.S. Department of Energy DIS model and do not cover any ameliorating policies such as the release of the strategic petroleum reserve or utilization of alternative export routes.

25. Dagobert Brito and M. D. Intriligator, "The Economic and Political Incentives to Acquire Nuclear Weapons," *Security Studies*, 1993.

26. *Ibid*.

27. For details on Iran's military capabilities, see Wisconsin Project on Nuclear Arms Control, *Iran Missile Update*, 2004, Risk Report, Vol. 10, No. 2, March-April 2004; also see Al-Alkim.

28. Because of weak markets in mid-1990, Saudi Arabia and Iran held tens of millions of barrels of oil afloat, unsold, that served as a cushion to the sudden loss of Kuwaiti and Iraqi oil production. Throughout the late 1980s and early 1990s, Saudi Arabia maintained a policy of storing oil abroad in the Caribbean and Northwest Europe to make sure it could respond to any sudden disruption in oil markets. See Ronald Soligo, Amy Myers Jaffe, and Peter Mieszkowski, "Energy Security," working paper, The Political, Economic, Social, Cultural and Religious Trends in the Middle East and the Gulf and Their Impact on Energy Supply, Security and Pricing, available at *www.rice.edu/energy*.

29. For a detailed study of this subject which is the basis for this section of this chapter, see M. Webster Ewell, Jr., Dagobert Brito, and John Noer, "An Alternative Pipeline Strategy in the Persian Gulf," available at *www.rice.edu/energy*, under Research/Other Publications and Presentations. A classified version of the study also exists that should be revisited by policymakers, given the risks to Persian Gulf facilities described in this chapter.

30. *Ibid*.

31. "What If?" *The Economist*, May 29, 2004, p. 69-70.

32. Ewell, Brito, and Noer.

CHAPTER 10

DETER AND CONTAIN: DEALING WITH A NUCLEAR IRAN

Michael Eisenstadt

For nearly 2 decades, Iran has been acquiring nuclear technology from around the world, ostensibly to support its civilian nuclear power program. These efforts have made slow, but steady progress. Reviewing the scope and nature of Iran's clandestine and overt nuclear-related activities over the past 20 years, and the long trail of partial, misleading, and/or untruthful declarations about these activities that it has provided to the International Atomic Energy Agency (IAEA), it is hard to avoid the conclusion that many of these activities were likely intended to support a clandestine nuclear weapons program.[1]

How close might Iran be to acquiring a capability to produce "the bomb"? It is hard to say, as estimating nuclear timelines is far from an exact science, and Iran's nuclear program often has moved slower than reasonably might have been expected, given what is known about other nuclear programs in the developing world. That being said, several nongovernmental analysts and organizations have estimated that were it to decide to do so, and were it to encounter no major obstacles, Iran could probably produce a nuclear weapon within 3-5 years.

- Were Iran to employ clandestine gas centrifuge cascades of the type being built for its declared civil program (presumably its preferred path), it might be able to acquire enough fissile material for a bomb in 3-5 years—provided that it resolves technical problems that have apparently dogged this effort and centrifuge programs elsewhere.[2]
- If it were to fall back on its reactor at Bushier, which is nearly complete and which, according to Russian officials, will commence operations by the end of 2006 if there are no teething problems, Iran could produce enough fissile

material for its first bomb within 2-3 years of start-up. To do so, however, it would have to be willing to openly violate its Nuclear Nonproliferation Treaty (NPT) obligations by diverting safeguarded spent fuel, or to withdraw from the NPT before taking this step.[3]

- If Iran were to secretly obtain fissile material from abroad (i.e., North Korea or Pakistan), it could conceivably build a device or weapon within a year—assuming it possessed plans for a viable design and the necessary special materials and components needed to build a bomb.

By contrast, according to public statements by U.S. intelligence officials and news reports summarizing authoritative U.S. and Israeli intelligence assessments, Iran could have a nuclear weapon by early to mid-next decade—that is, within 5-10 years. [4]

In any case, due to uncertainty about the Islamic Republic's actual nuclear status (as a result of enduring concerns about the possible existence of a clandestine weapons program), Iran increasingly is likely to be perceived as a nuclear capable or *de facto* nuclear weapons state in the coming years. Accordingly, some of its neighbors, and some members of the international community, are likely to start treating Iran with the deference generally reserved for nuclear weapons states.

For this reason, U.S. policymakers and military planners can be expected to devote more attention to the special challenges of deterring and containing a nuclear Iran that derive from the nature of the Islamic Republic, regional political realities, and Iran's support for and involvement in terrorism.

DETERRING THE "MARTYRDOM-SEEKING NATION"

Because Shi'i religious doctrine exalts the suffering and martyrdom of the faithful, and because religion plays a central role in the official ideology of the Islamic Republic, Iran is sometimes portrayed as an "undeterrable" state driven by the absolute imperatives of religion, rather than by the pragmatic concerns of statecraft. This impression has been reinforced by Iran's use of costly human-wave attacks during the Iran-Iraq War, its prolongation of the war with

Iraq due to its single-minded pursuit of the overthrow of Saddam Hussein, and its support for groups such as the Lebanese Hizballah and the Palestinian Islamic Jihad, that have pioneered the tactic of the suicide bombing.[5]

Is Iran "Undeterrable"?

Iranian officials frequently have sought to cultivate and play on this image of Iran abroad as a fanatical, indefatigable foe, whose soldiers seek martyrdom, and whose society is willing and able to absorb heavy punishment, in order to bolster the country's deterrent capability. Thus, according to Iran's former Army chief of staff, Major General 'Ali Shahbazi, though

> . . . the United States or some country incited by it may be able to begin a military conflict . . . it will not be strong enough to end it. This is because only Muslims believe that "whether we kill or are killed, we are the victors." Others do not think this way. [6]

The perception, however, of Iran as an irrational, undeterrable state with a high pain threshold is both anachronistic and wrong. Within the context of a relatively activist foreign policy, Iranian decisionmakers have generally sought to minimize risk by shunning direct confrontation and by acting through surrogates (such as the Lebanese Hizballah) or by means of stealth (Iranian small boat and mine operations against shipping in the Gulf during the Iran-Iraq War) in order to preserve deniability and create ambiguity about their intentions. Such behavior is evidence of an ability to engage in rational calculation and to accurately assess power relationships.

Moreover, despite the frequent resort to religious imagery in speeches and interviews, Iranian officials often employ the language of deterrence as it is spoken and understood in the West when discussing the country's national security strategy. Thus, shortly after the *Shehab-3* missile test launch in July 1998, Defense Minister Ali Shamkhani explained that to bolster Iran's deterrent capability "we have prepared ourselves to absorb the first strike so that it inflicts the least damage on us. We have, however, prepared a second strike which can decisively avenge the first one, while preventing a third strike against us."[7]

Tehran's conduct during the later stages of the Iran-Iraq War demonstrated that Iran is not insensitive to costs. It is possible to argue that in the heady, optimistic, early days of the revolution—from the early-to-mid 1980s—Iran, as a society, had a relatively high threshold for pain. During the early years of the war, Tehran was willing to endure hardships, make great sacrifices, and incur heavy losses in support of the war effort—eschewing the opportunity for a cease-fire in 1982 to pursue the overthrow of the Ba'th regime in Baghdad and the export of the revolution. But as the war with Iran dragged on, popular support for it had waned: the population was demoralized and wearied by years of inconclusive fighting, making it increasingly difficult to attract volunteers for the front. Many clerics had come to the conclusion that the war was unwinnable.[8] This was not, as Ayatollah Khomeini was fond of saying, "a nation of martyrs."

Khomeini was probably the only figure with the charisma and moral authority to inspire the Iranian people to sustain the level of sacrifice required to continue the war for 8 years. The double blow embodied by the unsuccessful conclusion of the war in August 1988 and the death of Khomeini in June 1989 marked the end of the decade of revolutionary radicalism in Iranian politics. Years of revolutionary turmoil and the long, bloody war with Iraq made Iranians weary of political violence and war, and risk averse. With respect to its ability to absorb casualties and bear costs, Iran has since become a much more "normal" state.

This has clearly been manifest in Iran's domestic and foreign policy behavior during the past decade and a half. Its cautious behavior during the 1991 uprising in Iraq, and the 1998 crisis with Afghanistan that followed the Taleban victory there, provides perhaps the best proof that Tehran is wary of stumbling into a costly quagmire for which there would be little or no public support. In both cases, it failed to intervene on behalf of endangered Shi'i communities. It will sooner compromise its Islamic ideological commitments and abandon endangered Shi'i communities to their enemies, rather than risk Iranian national interests by entering into foreign adventures.

Such pragmatism is consistent with a basic principle of decisionmaking established by Khomeini shortly before his death. In a series of letters to then President 'Ali Khamene'i and the Council

of Guardians in December 1987 and January 1988, he affirmed the Islamic government's authority to destroy a mosque or suspend the observance of the five pillars of faith (the fundamentals of Muslim observance) if Iranian state interests so required. In so doing, he sanctioned the supremacy of state interest over both religion and the doctrine of the Revolution.[9] Ever since then, national interest has been the guiding principle of Iranian decisionmaking, whether with regard to social issues (such as birth control), the economy (foreign investment in the oil sector), or foreign and defense policy (restraint, since the early 1990s, in exporting the revolution).[10]

This basic policy framework is unlikely to be altered by the emergence of a new generation of highly nationalistic politicians in the legislative and executive branches of the Iranian government, who count among their ranks many veterans of the security services, the Revolutionary Guard, and the Iran-Iraq War—as exemplified by Iran's new president, Mahmud Ahmadinejad. This is due, in large part, to the fact that those wielding real power in Iran consist largely of the same old familiar cast of "unelected" leaders: Supreme Leader 'Ali Khamene'i, Expediency Council Head 'Ali Akbar Hashemi Rafsanjani, Guardian Council head Ayatollah Ahmad Jannati, and others. The defiant, confrontational style of this new generation of assertive nationalist leaders (evident in Iran's recent handling of the diplomacy with representatives of the European Union regarding its nuclear program) is, however, liable to further aggravate tensions with the West, and could contribute to an Iranian miscalculation vis-à-vis the United States, Israel, or its more immediate neighbors.[11]

Challenges for Deterrence.

The main problem in deterring a nuclear Iran is not the putative "irrationality" of the regime or its high threshold for pain. Rather, it is: 1) the impact of political factionalism on the regime's behavior; 2) the possibility that a nuclear Iran might be more likely to engage in terrorism or military aggression, or seek an "eliminationist" solution to the Arab-Israeli conflict, and; 3) the effect of domestic instability on the security of Iran's nuclear stockpile and on the officials that control its nuclear arsenal. Each of these could complicate efforts to create a stable deterrent relationship with a nuclear Iran.

Political Factionalism. Political factionalism has sometimes led to dramatic zig-zags in Iranian policy, as different personalities, factions or branches of the government worked at cross purposes, sought to subvert their rivals, or pressed the government to take actions inconsistent with its general policy line. Accordingly, Iranian policy has often been inconsistent and unpredictable. Such behavior would seriously complicate efforts to establish a stable deterrent relationship with a nuclear Iran.

Recent examples of this tendency can be seen in Iranian policy toward Afghanistan and Iraq. According to U.S. officials, while Iranian diplomats played a constructive role at the Bonn Conference in December 2001 and the subsequent creation of an Afghan Interim Authority, members of the Revolutionary Guard *Qods* Force were working to undermine the authority of the nascent central government by arming and training the Afghan Shiite Sepah-e-Mohammad militia and cultivating the warlord Ismail Khan in Herat.[12] Likewise, in the wake of the U.S. invasion of Iraq, the Iranian government apparently encouraged Shi'i parties such as the Supreme Council for the Islamic Revolution in Iraq to cooperate with coalition forces and to participate in the U.S.-backed Iraq government, while supporting and arming groups engaged in attacks on Iraqi and coalition forces.[13]

This tendency has even expressed itself in the economic domain. Revolutionary Guards shut down a new Tehran airport operated by a Turkish-Austrian consortium only one day after it opened in May 2004—claiming that the Turkish firm did business in Israel (a charge it denied). In September 2004, the Majlis froze a $2.5 billion deal with a Turkish consortium to create a privately-owned cell phone network, only days after the contract was signed. Finally, a $390 million deal with the French company Renault to build cars in Iran came under attack by critical legislators in October 2004, though the Majlis has not blocked this contract. This ongoing struggle between advocates and opponents of foreign investment in Iran—part of the broader political struggle among factions of the dominant conservative bloc—is likely to continue.[14]

Propensity for Risk-Taking. There are two schools of thought regarding how nuclear weapons affect the behavior of states. One argues that the acquisition of nuclear weapons induces greater prudence and caution among possessor states, and adduces U.S. and

Soviet behavior during the Cold War as proof. However, post-Cold War revelations about the 1962 Cuban Missile Crisis and other Cold War crises have shown how close the superpowers came to nuclear war on several occasions, thereby diminishing the appeal of this model.

The other school of thought argues that the acquisition of weapons of mass destruction (WMD) in general and nuclear weapons in particular can lead to an increased propensity for risk-taking. Iraq's maturing chemical and biological weapons programs may have emboldened Saddam Hussein to pursue a more aggressive regional policy in 1989-90, and ultimately to invade Kuwait. Similarly, the confidence that Pakistan's leadership drew from its May 1998 nuclear weapons test may have emboldened it to attempt to seize a portion of Kashmir from India, in the mistaken belief that India would be deterred from responding militarily, leading to the Kargil Crisis of May-July 1999.

Thus, Iranian decisionmakers might convince themselves that the possession of nuclear weapons could provide them with greater latitude to pursue more aggressive policies against their neighbors, the United States, or Israel. Iran is unlikely to engage in outright military aggression against any of its neighbors; its conventional military forces are weak, and there are few scenarios in which a conventional military move would make sense—at least under current conditions (although a civil war in Iraq might generate pressure for Iran to intervene, particularly if coalition forces were to leave Iraq). For now, however, surrounded by potential enemies and U.S. forces on all sides, Tehran seems more interested in preserving the political and territorial status quo in the Gulf, than in altering it.

A nuclear Iran might, however, increase support for anti-American or anti-Israeli terrorist groups, or be tempted to resume efforts to export the revolution to places where there are large Shi'i communities. Iran's past successes in obscuring its involvement in terrorism or avoiding retribution (e.g., the 1983 Beirut Marine barracks bombing, the 1996 Khobar Towers bombing), might lead some Iranian decisionmakers to believe that they could encourage or sponsor terrorist attacks on U.S. personnel or interests with impunity—and that their possession of "the bomb" would protect

them from retaliation. Such reasoning could lead to miscalculations and imprudent risk-taking. Such a scenario is not far-fetched: an attack by Pakistani-based extremists on the Indian Parliament in December 2001 sparked a prolonged crisis and nearly led to war between the two countries.

A nuclear Iran might also be more inclined to take risks vis-à-vis Israel, in the belief that its nuclear capability would deter retaliation. This may have been the assumption underpinning the assertion in a December 2001 Friday prayer sermon by 'Ali Akbar Hashemi-Rafsanjani, Expediency Council chairman, that "If one day, the Islamic world is also equipped with weapons like those that Israel possesses now, then the imperialists' strategy will reach a standstill because the use of even one nuclear bomb inside Israel will destroy everything. However, it will only harm the Islamic world. It is not irrational to contemplate such an eventuality." [15]

While Rafsanjani's sermon lends itself to alternative readings—as either a matter-of-fact description of strategic reality in a Middle East in which more than one country has nuclear weapons or, more ominously, as a statement of intent—it raises the disquieting possibility that some Iranians may see nuclear weapons as a means of pursuing an eliminationist solution to the Arab-Israeli conflict. This would not be surprising in light of the prevalence of anti-Semitic attitudes and anti-Israel vitriol in the public political discourse of both reformers and conservative hard-liners.

A discussion about terrorism and a nuclear Iran necessarily raises the issue of nuclear terrorism. The fact that Iran or its agents have not yet used chemical and/or biological agents in terrorist attacks may indicate the existence of a normative threshold against WMD terror, or it may indicate that, having achieved significant successes by means of conventional terrorism, Tehran and its surrogates perceive no need to incur the risk that use of nonconventional weapons would entail.

Nonetheless, because of the importance that Tehran traditionally has attached to preserving deniability, Iran is likely to seek, when acting against more powerful adversaries, the ability to deliver covertly nonconventional arms by nontraditional means (for instance, terrorists, boats, or remotely piloted aircraft). Because such methods offer the possibility of deniability, they are likely to become important

adjuncts to more traditional delivery means such as missiles, and in situations in which deniability is a critical consideration, they are likely to be the delivery means of choice—either by members of Iran's security services, or by operatives of Hizballah's security apparatus, which has cooperated with their Iranian counterparts on some of the most sensitive and risky operations Iran has undertaken. The possibility of deniable, covert delivery of nuclear weapons by Iran could pose a major challenge for deterrence—particularly if the country's leadership believed that the regime's survival was at stake. For this reason, convincing Tehran that U.S. forensic capabilities (e.g., the ability to determine the origin of a nuclear device or weapon by analyzing the isotopic signature of its fission products) preclude the possibility of deniable delivery would be of vital importance for efforts to deter a nuclear Iran.

Instability in Iran. Finally, there are the implications of political instability and domestic unrest in a nuclear Iran. Should anti-regime violence escalate to the point that it were to threaten the existence of the Islamic Republic (unlikely in the near-term, but possible in the future, should Iran's conservative leadership prove unable to better the population's living standards, and continue to ignore calls for political change), diehard supporters of the old order might lash out at the perceived external enemies of the regime with all means at their disposal, as the regime teeters on the brink. In such a scenario, the apocalyptic possibility of nuclear terrorism by the Islamic Republic in its death throes must be treated seriously.

There is not a lot that the United States can do to alter those aspects of Iranian politics that make establishing a stable deterrence relationship with Tehran potentially problematic. What it can do, is to understand Iran's "red lines," the crossing of which could lead to crisis or conflict, while clearly communicating its own "red lines" to Tehran, in order to reduce the risk of miscalculation, and to introduce an element of predictability into relations between the two countries. And it can continue to encourage those Iranians working for political change in their country in the hope that, through these efforts, a more moderate leadership may come to power; a leadership not wedded to the use of terrorism or to the acquisition of nuclear weapons, or at least more likely to act responsibly should Iran nonetheless acquire nuclear weapons.

OPERATIONALIZING DETERRENCE

U.S. efforts to influence a potentially hostile nuclear Iran must incorporate measures to deter by denial as well as by punishment.[16] Raising doubts in the minds of Iranian decisionmakers about the country's ability to reliably deliver its nuclear weapons, and stoking fears that the attempted use of such weapons could threaten their personal survival and that of the regime, could make the use of nuclear weapons prohibitively risky for Tehran in all but the most dire of circumstances.

Deterrence by Denial: Countering Iran's Ability to Project Influence and Deliver Nuclear Weapons.

By preventing Tehran from using its nuclear potential to intimidate neighbors and enemies and casting doubt on its ability to reliably deliver nuclear weapons, the United States and its allies can strengthen deterrence and undermine the utility of Iran's nuclear arsenal. It is therefore crucial to understand how a nuclear Tehran might project influence or deliver its nuclear weapons.

To bolster deterrence and warfighting, Iran has created a triad of capabilities that leverages the country's geographic location adjacent to the world's main oil supply routes, exploits the regimes' connections to terrorist groups with global reach, and reflects the preference of the clerical regime for ambiguity and opacity in its actions. Iran's deterrent/warfighting triad consists of the ability to: 1) disrupt oil exports from the Persian Gulf; 2) launch terror attacks on several continents in conjunction with the Lebanese Hizballah and other groups, and; 3) deliver nonconventional weapons against targets in the Middle East and beyond, by aircraft, land-based ballistic missiles, and by various nontraditional means such as ship-based ballistic missiles, unmanned aerial vehicles, boats, and terrorists.[17]

As Iran stands up and expands its nuclear arsenal, it might seek to provide a nuclear "punch" to all three legs of its triad. In addition to building nuclear bombs and ballistic missile warheads, it might produce nuclear naval mines and nuclear-tipped anti-ship missiles (for use against U.S. aircraft carriers), and perhaps eventually, man-portable nuclear devices (the so-called, but inaccurately labeled,

"suitcase nukes") for use by Iranian special forces or foreign terrorist groups aligned with Tehran.[18]

Iran may rely on nontraditional delivery means before it can use more traditional delivery systems, such as strike aircraft or missiles. Iran's first nuclear weapon might be too large and/or heavy for delivery by aircraft or missiles, and insufficiently rugged to withstand the rigors of flight. It might therefore put such a device on a vehicle or boat.

To counter Iran's deterrent/warfighting triad, the United States and its allies will need to enhance their ability to:

- Detect and interdict attempts to deliver covertly nuclear devices by sea, air, or land;
- Identify and neutralize terrorist cells affiliated with Tehran;
- Detect and intercept nuclear-armed strike aircraft, cruise, and ballistic missiles;
- Counter Iranian naval mine, small boat, and submarine warfare operations.

Much progress has been made in recent years in developing capabilities to deal with some of these threats. In other areas, much remains to be done. Exactly what can be done will be discussed in greater detail below.

Deterrence by Punishment: Threatening the Survival of the Islamic Republic.

Iran's leaders must understand that should they brandish or use nuclear weapons, the United States (and/or its regional allies) could threaten their personal survival and the stability of the Islamic Republic by conventional military strikes that:

- Target the senior leadership of the Islamic Republic;
- Disrupt the functioning of the security organizations responsible for the survival of the regime, and;
- Target key elements of the country's economic infrastructure.

Would the threat of conventional attack be sufficient, or is the threat of nuclear retaliation necessary for deterring a nuclear Iran? The awesome potential of modern air power—particularly the ability to disable modern industrial and economic infrastructures—was dramatically demonstrated during Operations DESERT STORM (1991) and ALLIED FORCE (1999) and, to a lesser degree, Operation IRAQI FREEDOM (2003).

This capability enables Washington to counter conventional and nuclear threats by Iran (and others) with the credible threat of a devastating conventional riposte that does not necessitate the use of nuclear weapons (although the knowledge that the United States possesses a vast nuclear arsenal would undoubtedly enter into the calculations of Iranian decisionmakers).

The bottom line is that the United States does not necessarily have to respond to the emergence of a nuclear Iran by extending a nuclear deterrent umbrella to its regional partners (which would undermine those elements of U.S. nonproliferation policy that seek to devalue nuclear weapons); its conventional capabilities might be sufficient to deter Iran in all but the most extreme circumstances. And at any rate, the United States ultimately retains the ability to use nuclear weapons, if the threat of a conventional response is deemed insufficient in some circumstances to deter the use of nuclear weapons by Iran.

Targeting Iran's Leadership. Iran's leaders must understand that if the Islamic Republic uses nuclear weapons, they will be held accountable for the consequences, and will become legitimate military targets. There are, however, practical obstacles to operationalizing such an approach.

Political authority in the Islamic Republic is widely diffused.[19] Though the Supreme Leader is the paramount authority, many other individuals play important roles in the regime. Moreover, the dualistic power structure of the Islamic Republic, in which revolutionary Islamic institutions counterbalance the traditional institutions of the Iranian state (the Supreme Leader counterbalances the President, the Guardian Council counterbalances the Parliament, and the Revolutionary Guard counterbalances the regular army) provides the system of clerical rule with great resilience, and would complicate efforts to destabilize the Islamic Republic by decapitation strikes.

Though Iran's leadership is drawn from geographically diverse origins, many senior officials now live in Tehran (including some of the posher neighborhoods in north Tehran).[20] Many residents of the city know the location of the villas of senior clerics and regime personalities, making decapitation strikes possible—at least in principle. The difficulties of striking leadership targets from the air, however, should not be underestimated. During recent wars in Yugoslavia, Afghanistan, and Iraq, numerous attempted strikes on "high value targets" (key individuals) failed. In Iraq alone, some 50 attempted decapitation strikes involving manned aircraft failed to kill even one of the intended leadership targets, while inadvertently killing scores, if not hundreds, of innocent civilians.[21] Success here will await U.S. development of better human intelligence, and more flexible and responsive precision-strike capabilities and tactics, techniques, and procedures (TTPs). With sufficient resources and talent devoted to this effort, it could become a viable future option.

If targeting senior officials offers uncertain prospects for success (at least for now), targeting their finances, business interests, and properties has a certain appeal, given the near-legendary avarice and corruption of Iran's clerical elite. It is, however, hard to conceive of how this might be done in a way that is meaningful for purposes of deterrence. Many officials have made their fortunes in the informal economy or through the *bonyads* (parastatal foundations); as a result, little is known about their finances or their business interests, greatly complicating efforts to target their assets.[22] Moreover, the financial holdings of many *bonyads* and of at least some senior politicians are highly diversified, further complicating efforts to put the squeeze on these individuals. Perhaps most importantly, the track record of recent efforts elsewhere to target the financial assets of senior government officials and their cronies in order to deter or compel, is not encouraging.[23]

Targeting the Regime's Command and Control. In Iran, several organizations have responsibility for ensuring the survival of the regime, including the Islamic Revolutionary Guard Corps (IRGC), the Law Enforcement Forces (LEF), the Basij militia, the security and intelligence organs of the Justice Ministry, and the street thugs of Ansar-e-Hizballah. The IRGC and LEF units are garrisoned

throughout the country, while the Basij is more loosely organized, as is the more informal Ansar-e-Hizballah. The locations of most major IRGC garrisons and LEF facilities are well-known to local residents, though the fact that these organizations are rather lightly armed (relative to similar entities in other countries, such as Syria's Republican Guard and Iraq's Republican Guard and Special Republican Guard units) and are garrisoned in or near populated areas, could make it difficult to strike these organizations in a way that would undermine their effectiveness and loosen the regime's grip on power.

Targeting Iran's Economic Infrastructure. Iran is acutely vulnerable to economic warfare. Its economy is heavily dependent on oil and gas exports, which provide the country with some 80 percent of its foreign exchange earnings. Nearly all of its major oil and gas fields are located in the exposed southwest corner of the country and in the Gulf—where all six of its major oil terminals are also located—and nearly all of its oil and gas exports pass through the Strait of Hormuz. Four of Iran's six main ports are located on the Persian Gulf; these handle about 90 percent of all imports by tonnage, while Iran's sea lines of communication in the Gulf are vulnerable to interdiction along their entire length.[24] Thus, the United States and its allies could halt Iranian oil exports as well as critical imports of refined oil products and other necessities, causing great harm to the economy—which is the regime's Achilles' heel—and perhaps leading to popular unrest and political instability in the Islamic Republic.

During the Iran-Iraq War (1980-88), both belligerents targeted each others' oil industry in the hope that economic warfare might bring their adversary to its knees. Oil facilities, tankers, and tanker terminals were hit, and though these attacks succeeded in reducing overall oil exports of both sides, these attacks were not pressed home in a sustained fashion, and therefore did not have a decisive impact on the outcome of the war.[25] There can be little doubt that the United States has the means to succeed where both failed in the past, and effectively shut down Iranian oil exports through action in the air and on the sea. The main challenge would be to deter or disrupt Iranian retaliatory moves, which might not be limited to the Gulf region, and could take the form of an attempt to close the Strait of

Hormuz, attacks on oil and gas installations on the other side of the Gulf, attacks on shipping in the Gulf, and/or a terror campaign spanning several continents.

CONTAINING A NUCLEAR IRAN

What factors might affect Tehran's ability to derive benefit from its nuclear weapons? And how might Tehran's acquisition of nuclear weapons affect U.S. efforts to organize a "coalition of the willing" to deter and contain a nuclear Iran?

Tehran's ability to derive political benefits from nuclear weapons will depend, to some extent, on whether Iran remains silent about its nuclear capabilities, adopts a policy of ambiguity, or makes known its newly acquired capabilities by means of an announcement or a weapons test.[26] Iran's actual nuclear status, however, is less important than the fact that in the coming years its neighbors increasingly are likely to perceive it as a threshold nuclear state, if not a *de facto* nuclear power, and to act accordingly. The domestic and regional contexts are also important here: Is there domestic calm or unrest in Iran? Is Iran at peace with its neighbors, or embroiled in crises or war? All these factors will affect the intensity with which the threat posed by Iran's nuclear program is felt by its neighbors, and could affect U.S. efforts to enlist foreign support in containing a nuclear Iran.

During the 1990s, Iran's neighbors rebuffed U.S. efforts to politically isolate and economically pressure the Islamic Republic; they generally deemed these measures as unnecessarily provocative and injurious to their own economic interests. Rather, they have generally preferred to keep open channels of communication with Tehran to avoid antagonizing or provoking their large and powerful neighbor, and to preserve access to Iranian markets. For these same reasons, Iran's neighbors likely will avoid participating in future efforts to politically isolate and economically pressure the Islamic Republic. In the international division of labor, it will largely be the job of the United States, Europe, and others to isolate Iran politically and pressure it economically.

Iran's neighbors might, however, be prepared to join the United States and Europe in pointing out to Iran's leaders that the acquisition of nuclear weapons will more likely harm than help their country,

by prompting the formation of a loosely-knit coalition to contain Iran, deepening the U.S. role in the region, and perhaps prompting further proliferation—much of it directed at the Islamic Republic. Hopefully, this message would encourage Iranian decisionmakers to reassess the potential costs of a nuclear breakout. Some of Iran's neighbors might also welcome the opportunity to strengthen their hand vis-à-vis Iran by deepening their relationship with Washington; by expanding access, basing, and overflight rights to U.S. forces in the region; and by strengthening their conventional forces to enable them to better deal with potential Iranian military moves.

Small Steps or Grand Design? The Military-Technical and Political-Military Context of Efforts to Contain a Nuclear Iran.

Operation IRAQI FREEDOM initially inspired hopes that the United States would build on its military success in the war to establish a new regional security architecture capable of generating stability and security in the Persian Gulf.[27] Most of these proposals call for confidence and security-building measures, the establishment of a regional security forum, collective security arrangements, or a mix of the three. Though such ideas merit consideration, conditions are not ripe for the creation of a regional security architecture in the Gulf, where politics are highly personalized, and characterized by distrust and petty rivalries.[28] This militates against the creation of truly effective regional organizations that require state members to cede authority to the collective (this is the experience of the Gulf Cooperation Council (GCC) and its Peninsula Shield force) or to work together to counter a common threat.

Accordingly, the United States should work to improve military-technical cooperation with regional friends and allies, by deepening existing bilateral security relationships where feasible (with Turkey, the GCC states, and the Central Asian Republics), forging new bilateral security relationships where possible (with Iraq and Afghanistan), and pursuing regional cooperative ventures where desirable (augmenting efforts already underway to create shared air- and missile-defense early warning and command, control, communications, computers, and intelligence [C^4I] arrangements).

No doubt, such an approach lacks the appeal of more ambitious proposals to create new regional political and security structures, but it would allow the United States to build on existing bilateral and multilateral efforts and, through incremental steps, lay the foundation for future regional collective security arrangements.

Countering the Iranian Threat.

The principal security threats posed by a nuclear Iran include terror and subversion, limited conventional military operations conducted under the protection of Iran's nuclear umbrella, and the actual use of nuclear weapons. When feasible, it would be desirable for the United States to provide its friends in the region with the means to deal with each of these threats on their own—to include the fielding of an independent conventional retaliatory deterrent by some allies—so that they might have the confidence not to yield to Iranian intimidation, and might not feel compelled to acquire chemical or nuclear weapons to counter Iran's nuclear option. In most cases, however, the burden of responding to these threats will fall to the United States.

Regional Subversion, Global Terror. Iran might support opposition groups or sponsor acts of terrorism in neighboring countries (as it did during the 1980s) in order to intimidate, compel them to deny U.S. access and basing requests, and to undercut U.S. power projection capabilities in the region. Here, intelligence sharing and cooperation with friends and allies, and U.S. efforts to enhance the internal security capabilities of Iran's neighbors, will be key. Also vital will be U.S. efforts to encourage political and economic reform in the region, in order to defuse popular disaffection with the political status quo—particularly in countries where extreme Islamists have in the past shown a willingness to work with Iran's intelligence services (e.g., Turkey, Iraq, Saudi Arabia, Bahrain, and Afghanistan).

Staying the Hand on the World's Oil Jugular. Iran's conventional offensive options are limited. It does not pose a ground threat to any of its neighbors due to the small size and limited capabilities of its ground forces, although it could launch limited air or rocket and missile strikes into neighboring countries (as it did in Iraq on

several occasions during the past decade). The main conventional threat from Iran is in the naval arena, specifically: the threat it poses to the flow of oil from the region, and the ability of the United States to project power in the Gulf.

Iran's force of mines, missiles, small boats, and submarines could temporarily disrupt shipping in the Strait of Hormuz. It could not, however, block the strait (as it claims), which is too wide and too deep to be obstructed. Moreover, although the Gulf is a significant barrier to major acts of aggression against the southern Gulf states, Iran could conduct limited amphibious operations to seize and hold lightly defended islands or offshore oil platforms in the Gulf. Its naval special forces could sabotage harbor facilities, offshore oil platforms and terminals, and attack ships while in ports throughout the lower Gulf, disrupting oil production and maritime traffic there.

Some Iranian decisionmakers might believe that "the bomb" might provide them with a free hand to take such steps with relative impunity, by deterring an effective response by its neighbors or the United States. For this reason, it is critical that the United States help its GCC allies obtain the means to counter Iran's naval mine, special warfare, small boat, submarine, and coastal anti-ship missile forces on their own. Countering these capabilities will also require a significant U.S. military presence in Gulf. As a result, the U.S. Navy will remain susceptible to Iranian attempts to intimidate U.S. allies into denying U.S. forces access and basing. This will remain a potential vulnerability for the foreseeable future.

For this reason, the U.S. Navy's Sea Power 21 "Sea Basing" concept may be particularly useful for contingencies in or near the Gulf. This concept calls for the U.S. Navy to develop an ability to operate independent of shore-based logistical hubs, thereby limiting the impact of enemy anti-access measures and decisions by friendly states to refuse or limit access, basing, and overflight rights during crises or wartime.[29]

The concepts under consideration to free the United States from reliance on shore-based facilities include new Maritime Prepositioning Force (Future) cargo ships, Joint Mobile Offshore Bases (JMOBs), and large, semisubmersible platforms. (The latter two are floating structures derived from offshore oil drilling platforms.) These would deploy to crisis zones, and serve as large afloat logistics

hubs, storage or repair depots, forward operating bases for combat and support personnel, or air bases (the cargo ships may be fitted with flight decks and/or runways, or several JMOBs could be linked together for this purpose). These concepts, if proven viable, could preserve the navy's operational freedom in the Gulf, even if denied access to basing in the region. They are all, however, very expensive, are untried, and suffer from various drawbacks that might preclude their eventual deployment.[30] Moreover, large floating bases would be vulnerable to an Iranian nuclear strike, vitiating their utility in circumstances where the use of nuclear weapons is a plausible Iranian option.

Preventing Nuclear Armageddon. To deal with the possible use of nuclear weapons by Iran, the United States will need to be able to detect the deployment of nuclear weapons and preempt their use, or at least interdict the device or weapon en route to its target.

The United States and its allies will need to establish the ability to detect the transport of nuclear weapons by small boats or merchant ships originating in Iranian ports, motor vehicles exiting Iran at official and/or unofficial border crossing points, and perhaps eventually, by individuals carrying "suitcase nukes."

Given the relatively short distances that penetrating radiation from a nuclear device or weapon may be detected (tens of meters for gamma radiation, scores of meters for neutron radiation emanating from an unshielded device or weapon), the early detection of a nuclear weapon being delivered by nontraditional means (such as a truck or boat) will pose formidable challenges.[31] Nonetheless, the United States should consider (if it is not already doing so) unconventional methods of employing radiation monitors: aboard yachts or other civilian pleasure craft plying the waters of the Persian Gulf; on helicopters patrolling the waters of the Persian Gulf; on unattended floating sensors clandestinely emplaced at the mouth of Iranian harbors, and on unattended ground sensors emplaced along traditional smuggling routes on Iran's border and clandestinely planted adjacent to runways at Iranian military airfields. In addition, portal monitoring for radiation sources should be carried out at official border crossing points and ports of entry in neighboring states.[32]

Preventing the delivery of a nuclear weapon by sea will also require U.S. naval forces to work with local naval forces and coast guards in the Gulf to identify and monitor suspicious vessels plying the waters of the Gulf and passing through the Strait of Hormuz, and interdict them if need be. Detecting the transport of so-called suitcase bombs will require neighboring states to monitor official ports of entry, unofficial border crossing points, and, if feasible, known smuggling routes, though the sheer number of these might render such a task impractical.

The United States and its allies should likewise continue to encourage the networking of regional air- and missile-defense early warning and C^4I networks to enhance the capabilities of regional air- and missile-defenses. Several such initiatives are already underway.

- The so-called "Cooperative Belt" (Hizam al-Ta'awun) program to create a distributed C^4I network for the air defenses of the states of the GCC that will enable them to jointly identify, track, and monitor hostile aircraft and to coordinate a response to airborne threats.[33]
- American *Aegis*-equipped cruisers and destroyers in the Persian Gulf can provide early warning and a first line of defense against air or missile attacks from Iran toward the southern Gulf states and Saudi Arabia, with their *AN/SPY-1* radar and *Standard SM-3* missile—which is just now entering operational service with the U.S. Navy.[34]
- The Cooperative Defense Initiative (CDI), which involves the GCC six, plus two (Egypt and Jordan), and which has promoted cooperation in the area of shared missile defense early warning.[35] More, however, needs to be done to enhance cooperation among GCC members and with non-GCC members in the region.

Currently, cooperation in the area of shared missile defense early warning is limited to the GCC plus two, but future efforts could expand to include other participants. Thus, missile defense early warning radars located in Turkey, Iraq, Kuwait, or Saudi Arabia could provide early warning and detection and tracking data for

missiles launched from western Iran against the states of the lower Persian Gulf (Bahrain, Qatar, the United Arab Emirates [UAE], and Oman), and Israel. Some of the lower Gulf states could provide early warning to Saudi Arabia with regard to missiles coming from south-central or southeastern Iran. The main challenge here will be to convince the Arab Gulf states to increase funding for missile defenses, and to transcend the petty rivalries that have in the past hindered cooperation among the Arab Gulf states in the conventional military arena.

Further afield, Israel, Jordan, and Turkey are also natural candidates for cooperation. Jordan has expressed concern that Israeli missile defenses could knock down incoming missiles from Iraq or Iran over the populated western half of the country, possibly producing casualties on the ground. Contingency deployment of U.S. missile defenses to Jordan might resolve this problem.

In addition, some have argued that boost-phased missile defense systems employing ground-based interceptors located in southeastern Turkey, aboard ships in the Caspian Sea and/or the Sea of Oman, and in Tajikistan, could protect the United States against Iranian intercontinental-range missiles, if and when these are fielded. While a boost-phase missile defense would likely have many advantages over a mid-course national missile defense system, it has a major political drawback: the remnants of intercepted Iranian missiles and their warheads might land in Russia, virtually ensuring that deployment of such a system would meet with strong opposition from Moscow.[36]

Though regional allies may have an important role to play in deterring and defending against military initiatives by a nuclear Iran, they are unlikely to play a role in any preventive strike the United States might undertake against Iran's nuclear program. The need to preserve operational security, and the desire of local allies to avoid being caught in the middle of a U.S.-Iran conflict, would likely preclude their provision of overt support for a preventive strike, which, for this reason, would probably be conducted by heavy bombers (most likely B-2s) based out of the continental United States. They could, however, play a supporting role in preemptive strikes against deployed Iranian nuclear forces (boats or merchant

vessels, missiles, or bombers) during a crisis, by providing access and basing to U.S. Air Force aircraft (F-117s, F-15Es) participating in such a strike.

Iraq as Regional Counterweight to Iran?

Some have argued that as part of its efforts to dissuade Iran from crossing the nuclear threshold, Washington might indicate to Tehran that should it acquire nuclear weapons, the United States would encourage Iraq to build-up its military as a counterbalance to that of Iran—and thereby ensure that Iran's acquisition of "the bomb" harms, rather than enhances, its security.[37]

For now, however, building up the Iraqi military as a counterbalance to Iran is neither practical nor desirable. Rebuilding Iraq's armed forces will be an immensely costly task that will take many years. Current plans call for the Iraqi Army to field between 100,000-150,000 men, organized into some eight divisions by 2006.[38] For the foreseeable future, however, Iraq will lack the funds and the equipment needed to field a larger, more capable army, and the United States is unlikely to provide either. At present, the U.S. priority is to prepare Iraq's internal security forces to assume increased responsibility for dealing with internal threats—particularly the insurgency raging in the so-called "Sunni triangle."

Moreover, it will be up to Iraq to decide on the roles, missions, and force structure of its army (though the United States is likely to retain some influence over Iraqi decisions on these matters for years to come). It is not clear that the expansion of the Iraqi Army will be a priority of a new Iraqi government, that an Iraqi government in which Iraqi Shi'a and Kurds are likely to play a major role will see Iran as its primary threat, or that the Iraqi government will take directions from the United States on such matters.

Nor is it in the U.S. interest that Iraq has a large military. For the coming years, it will be in the U.S. interest to keep the Iraqi Army relatively small, logistically constrained, capable of deterring and/or defending against external meddling and intervention in its external affairs, but incapable of threatening its larger neighbors. This might make it easier to convince Iraq's neighbors to forgive or

defer repayment of its debt and/or reparations burden, and thereby facilitate Iraq's political and economic integration into the region. Finally, it is in the U.S. interest that the Iraqi Army remains small, should efforts to create a stable, democratic Iraq fail, and the country reverts to authoritarian rule and an aggressive posture vis-à-vis its neighbors.

To ensure that a post-Saddam Iraq does not eventually resurrect its WMD programs to counter Iran's own WMD, it would be desirable for the United States to include Iraq in CDI and associated efforts to enhance regional defenses against missiles and WMD, and to provide security guarantees that it will come to Iraq's assistance in the event of Iranian meddling or intervention (should such guarantees be sought from the United States).

Reassure Allies by Enhancing Local Capabilities for Conventional Defense and Deterrence.

The United States will want to ensure that regional friends and allies do not respond to an Iranian nuclear breakout by either accommodating Tehran, or acquiring WMD of their own (Saudi Arabia might try to purchase nuclear weapons, while some of the smaller GCC states might leverage their extensive petrochemical industries to create a modest chemical warfare capability).

To avoid such an outcome, the United States should underscore that nuclear weapons will not stop it from meeting its security commitments to friends and allies in the region, or from retaliating for WMD use against U.S. and allied personnel. Continued U.S. efforts to enhance the ability of CDI participants to defend against and/or mitigate the impact of a WMD incident will be the most tangible expression of this commitment. Such activities should, moreover, be complemented by efforts to enhance the ability of local allies to deal with Iranian subversion, terror, and sea denial capabilities in the Gulf—activities that might someday be conducted under the cover of a nuclear umbrella. However, such capabilities may not be enough to reassure some allies.

The United States should therefore consider helping those allies that feel most threatened by an Iranian "bomb" and that desire to do something about it, to develop a credible independent conventional

deterrent in order to build confidence in their ability to stand up to Iranian intimidation, and to discourage them from acquiring WMD in response to Iran's acquisition of the bomb.

The United States can do this by helping select Gulf allies enhance their naval special warfare and aerial precision-strike capabilities (capabilities that some are already developing) so that if Iran were ever to threaten their ability to produce and export oil, they could threaten to respond in kind by attacking Iranian oil production and export facilities, interrupting Iranian port operations, and interdicting Iran's sea lines of communication. Emphasis should be placed on helping these countries develop relatively short-range precision strike capabilities so that they can hit high-value Iranian targets in the vicinity of the Gulf, but not much beyond that. This is because the most important Iranian economic targets are in the Gulf region, and because the ability to attack leadership or other targets in and around Tehran is of dubious strategic value. And by focusing on only short-range strike capabilities, the United States can ensure that its efforts to build up Arab capabilities in the Gulf do not compromise U.S. efforts to preserve Israel's "qualitative edge." Finally, U.S. assistance in creating such capabilities should be explicitly conditioned on a commitment by these states to eschew the development or acquisition of WMD, and to dramatically clamp down on the smuggling of special materials and dual-use technologies for the WMD programs of third countries (such as Iran) through their territories. This, in particular, is a problem for Dubai in the UAE.[39]

Admittedly, this is a potentially risky course of action, and it is not altogether clear that enhancing the ability of allies to disrupt the flow of Iranian oil from the region is desirable, or is an acceptable tradeoff for a halt to, or more likely a slowdown in the proliferation of WMD in the Gulf region. For this reason, continued high-level U.S. engagement with its allies will be essential, in order to keep tensions among the GCC states in check, and to restrain them in times of crisis, so that they do not use these capabilities against each other, or Iran, except *in extremis*.

Such efforts should, whenever possible, leverage assets and weapons currently in the inventories of these countries to avoid the appearance that the United States is stoking a regional arms race, to avert tensions among GCC states (who may fear that such capabilities

will more likely be used against their fellow GCC members, rather than Iran), and to avoid provoking Iran. Emphasis should be put on qualitative, over quantitative enhancements, and the creation of small, highly capable units that will constitute the mainstay of regional efforts to deter a nuclear Iran. Most of the smaller countries in the region simply lack the manpower to create large, highly capable forces anyhow. This approach is appropriate, considering their resource base and needs.

This is not an unrealistic goal; several Arab militaries have succeeded in creating small elite units or organizations that performed well in combat, even if the performance of their sister services left much to be desired. Examples of such units or organizations include the special forces of Syria and Jordan, the Republican Guard of Iraq, and Iraq's F-1 and Saudi Arabia's F-15 fighter squadrons.[40] There are already signs that some of the GCC states may be heading down this path: the UAE's interest in commercial satellite imagery, computerized mission planning support software, advanced simulators, and its efforts to build a potent conventional strike capability around its force of advanced precision munition-equipped *Mirage 2000-9*s (30) and F-16 *Block 60*s (80), show what even a small state can do in this regard.[41]

CONCLUSIONS

Efforts to deter and contain a nuclear Iran would likely encounter significant challenges. The nature of the Islamic Republic, regional politics, and Iran's involvement in terrorism make establishing a stable deterrent relationship with a nuclear Iran risky and uncertain. The experience of the United States and the Soviet Union during the Cold War, and of India and Pakistan since then, demonstrate that both preventive diplomacy and luck may be necessary to avert some kind of nuclear crisis involving Israel or the United States on the one hand, and Iran on the other hand, should Iran become a nuclear power in the coming years. Managing the instability and uncertainty created by a nuclear Iran is likely to pose major challenges for U.S. policymakers.

Iran may likewise emerge as the driving force behind efforts to create a new regional security architecture in the Persian Gulf and southwest Asia. While it is in the long-term U.S. interest to create

a free-standing balance of power in the Gulf that obviates the need for a permanent forward U.S. presence, for the foreseeable future, the stabilization of Iraq, the Global War on Terrorism, and ongoing efforts to counter the nuclear ambitions of Iran will draw the United States deeper into the affairs of the region. Enhancing the military capabilities of regional allies threatened by Iran, deepening bilateral cooperation with these countries, and encouraging multilateral cooperation in the areas of air- and missile-defense and beyond may be the best way to lay the basis for regional collective security. For the near term, however, the United States will remain the "indispensable nation" when it comes to formulating a response to the possible emergence of a nuclear Iran, and to achieving security and stability in a proliferated region.

ENDNOTES - CHAPTER 10

1. For the most comprehensive and up-to-date account of what is known about Iran's nuclear program, see Report by the Director General to the IAEA Board of Governors, *Implementation of the NPT Safeguards Agreement in the Islamic Republic of Iran*, GOV/2005/67, September 2, 2005.

2. For instance, David Albright and Corey Hinderstein, "Iran: Countdown to Showdown," *Bulletin of the Atomic Scientists*, November/December 2004, pp. 67-72.

3. For instance, Victor Gilinsky, Marvin Miller, and Harmon Hubbard, "A Fresh Examination of the Proliferation Dangers of Light Water Reactors," The Nonproliferation Policy Education Center, October 22, 2004, at *http://www.npec-web.org/projects/NPECLWRREPORTFINALII10-22-2004.pdf*.

4. According to public Israeli intelligence estimates, Iran could have a nuclear weapon as early as 2008, but more likely by 2012. Orly Halpern, "Iranian Nukes: New Estimates for the Bomb," *The Jerusalem Post*, August 1, 2005, p. 3. Likewise, in a recently completed National Intelligence Estimate, the U.S. intelligence community reportedly concluded that Iran could have a nuclear weapon by "early to mid-next decade." Dafna Linzer, "Iran is Judged 10 Years from Nuclear Bomb," *The Washington Post*, August 2, 2005, p. A1; and Steven R. Weisman and Douglas Jehl, "Estimate Revised on When Iran Could Make Nuclear Bomb," *The New York Times*, August 3, 2005, p. A8. See also, Vice Admiral Lowell E. Jacoby, U.S. Navy, Director, Defense Intelligence Agency, Statement for the Record, Senate Select Committee on Intelligence, February 16, 2005, at *http://www.dia.mil/Public/Testimonies/DIA_DR_WWT_20050216U.pdf*.

5. Parts of this section are based on Michael Eisenstadt, "Living with a Nuclear Iran?" *Survival*, Vol. 41, No. 3, Autumn 1999, pp. 124-148; and Michael Eisenstadt, "Delay, Deter and Contain, Roll Back: Toward a Strategy for Dealing with Iran's Nuclear Ambitions," in Geoffrey Kemp, ed., *Iran's Bomb: American and Iranian Perspectives*, Washington, DC: The Nixon Center, 2004, pp. 13-31.

6. *Ettela'at*, September 24, 1995, p. 3, in *Foreign Broadcast Information System* (FBIS)-NES, October 3, 1995, p. 75. See also the quote of 'Ali Akbar Hashemi Rafsanjani cited in endnote 15.

7. Interview with Defense Minister Admiral 'Ali Shamkhani on Tehran IRIB Television Second Program, July 30, 1998, translated in FBIS-NES-98-217, August 5, 1998.

8. Shaul Bakhash, *The Reign of the Ayatollahs: Iran and the Islamic Revolution*, New York: Basic Books, 1990, p. 273.

9. David Menashri, *Revolution at a Crossroads: Iran's Domestic Politics and Regional Ambitions*, Washington, DC: The Washington Institute for Near East Policy, 1997, p. 8. Former President 'Ali Akbar Hashemi-Rafsanjani recently reaffirmed the enduring relevance of Khomeini's dispensation allowing for the violation of religious duties when they conflicted with *raison d'etat*, in an interview in which he stated that "to put the country in jeopardy on the ground that we are acting on an Islamic basis is not at all Islamic." IRNA, April 12, 2003, at *http://www.irna.ir/en/tnews/030413151207.etn02.shtml*.

10. The fact that Iranian decisionmaking on critical policy issues has, during the past decade and a half, generally been based on *raison d'etat* and the national interest—and not religious doctrine or ideology, has interesting implications for Tehran's claim that Islam prevents it from acquiring or using nuclear weapons.

11. For more on this new generation of politicians, see Bill Samii, "Iran: A New Generation and the Drift to the Right," Radio Free Europe/Radio Liberty, June 21, 2005, at *http://www.rferl.org/featuresarticle/2005/6/6840A374-8025-444E-8760-29904337784F.html*; and Patrick Clawson, "Next Generation," *New Republic Online*, June 30, 2005, at *http://www.washingtoninstitute.org/templateC06.php?CID=845*.

12. See the comments by Special Presidential Envoy to Afghanistan Zalmay Khalilzad to The Washington Institute for Near East Policy, August 2, 2002, at *http://www.washingtoninstitute.org/templateC07.php?CID=168*.

13. Toby Harnden, "Iran 'Supplies Infra-Red Bombs' that Kill British Troops in Iraq," *Sunday Telegraph*, London, August 21, 2005, p. 27; Bill Gertz, "Rumsfeld Says Iran is Arming Iraqi Insurgents," *Washington Times*, August 20, 2005, p. A4; Eric Schmitt, "Some Bombs Used in Iraq are Made in Iran, U.S. Says," *The New York Times*, August 6, 2005, p. A5; Patrick Bishop, "U.S. Troops Killed as Bremer Accuses Iran," *The Telegraph*, September 19, 2003, at *http://www.telegraph.co.uk/news/main.jhtml?xml=/news/2003/09/19/wirq19.xml.*

14. Vali Nasr and Ali Gheissari, "Foxes in Iran's Henhouse," *The New York Times*, December 13, 2004, p. A27; Marc Champion, "Iran, Flush with Oil Cash, Seems to Cool to Foreign Investments," *Wall Street Journal*, February 8, 2005, p. 1.

15. Rafsanjani, as quoted by *Voice of the Islamic Republic of Iran*, December 14, 2001, and translated by BBC Worldwide Monitoring, December 15, 2001.

16. See Paula A. DeSutter, *Denial and Jeopardy: Deterring Iranian Use of NBC Weapons*, Washington, DC: National Defense University Press, 1997.

17. Iran reportedly test-launched a short-range ballistic missile from a barge in the Caspian Sea in early 1998. Basing short-range ballistic missiles on merchant ships could allow Iran to hit targets currently out of missile range (such as the United States) while maintaining deniability, since a merchant vessel launch platform might be able to disappear into the great expanses of the open seas after launch and thereby escape detection. See K. Scott McMahon, "Ship-Based Missiles Surface as Potential Terror Weapon," *Defense News*, March 15, 1999, p. 27.

18. For more on "suitcase nukes," see David Smigielski, "A Review of the Suitcase Nuclear Bomb Controversy," *RANSAC Policy Update*, September 2003, at *http://www.ransac.org/Documents/suitcasenukes090103.pdf*.

19. By contrast, in Hafez al-Asad's Syria and Saddam Hussein's Iraq, absolute power was concentrated in the hands of the President making decapitation (e.g., as attempted at the outset of Operation IRAQI FREEDOM) a viable strategy—at least in theory.

20. Thus, the half-dozen top members of Iran's ruling elite hail from different towns and cities from around the country: Supreme Leader 'Ali Khamene'i is from Mashhad in Khorasan province; Expediency Committee head 'Ali Akbar Hashemi Rafsanjani is from Bahraman, near Rafsanjan in Kerman province; President Mahmud Ahmadinejad is from Garmsar in Markazi province; Defense Minister Mostafa Mohammad Najjar is from Tehran, which is in Tehran province; while Minister of Intelligence Qolam Hossein Mohseni-Ejei was born in Ejei in Esfahan province. By contrast, in Hafez al-Asad's Syria and Saddam Hussein's Iraq, a disproportionate number of senior officials came from the president's home village or its environs (Qardaha in Latiqiyah governorate, and Tikrit in Salahuddin governorate, respectively), making it possible, at least in theory, to target the family and tribal networks that underpinned the power structures of these regimes.

21. *Off Target: The Conduct of the War and Civilian Casualties in Iraq*, Washington, DC: Human Rights Watch, 2003, pp. 22-23.

22. Jahangir Amuzegar, "Iran's Underground Economy," *Middle East Economic Survey* (MEES), Vol. XLVI, No. 36, September 8, 2003, at *http://66.34.243.131/iran/html/article1161.html*. For more on the corruption of many senior clerics and the resentment this has engendered, see Paul Klebnikov, "Millionaire Mullahs," *Forbes*, July 21, 2003, at *http://www.forbes.com/global/2003/0721/024.html*.

23. During Operation ALLIED FORCE (March-June 1999), NATO airpower engaged in "crony targeting"—bombing the financial assets (factories in particular) of cronies of Yugoslav President Slobodan Milosevic—in order to generate pressure on him to accept NATO's terms for an end to the bombing. It remains unclear what impact the bombing had on the war's outcome, although it seems that it was not of decisive importance. For assessments of "crony targeting" during

Operation ALLIED FORCE, see Stephen T. Hosmer, *The Conflict Over Kosovo: Why Milosevic Decided to Settle When He Did*, RAND Publication MR-1351-AF, 2001, pp. 73-76; Benjamin S. Lambeth, *NATO's Air War for Kosovo: A Strategic and Operational Assessment*, RAND Publication MR-1365-AF, 2001, pp. 71-72.

24. For more on Iran's oil industry, see U.S. Department of Energy, "Iran Country Analysis Brief," November 2003, at *http://www.eia.doe.gov/emeu/cabs/iran.html*. For information on Iran's commercial ports, see Farjam Behnam, Karan Behrooz, and Dr. Farhad Shahabi, eds., *Iran Almanac 2003*, Tehran, at *http://www.iranalmanac.com*, 2003, pp. 372-373.

25. Anthony H. Cordesman and Abraham R. Wagner, *The Lessons of Modern War: The Iran-Iraq War*, Boulder, CO: Westview Press, 1990, pp. 485-489.

26. Iran might initially remain silent to avoid censure for violating its nonproliferation treaty obligations, or to avoid compromising ongoing clandestine efforts to procure fissile material or nuclear technology from abroad. In the long-run, however, Iran's leadership might eventually be tempted to test a nuclear weapon, to demonstrate its nuclear capabilities to its domestic supporters and adversaries, and to the world.

27. For more on post-Saddam security architectures for the Gulf, see James A. Russell, "Searching for a Post-Saddam Regional Security Architecture," *Middle East Review of International Affairs*, Vol. 7, No. 1, March 2003; Andrew Rathmell, Theodore Karasik, and David Gompert, "A New Persian Gulf Security System," RAND Issue Paper No. 248, 2003; Kenneth M. Pollack, "Securing the Gulf," *Foreign Affairs*, July/August 2003, pp. 2-16; and Joseph McMillan, Richard Sokolsky, and Andrew C. Winner, "Toward a New Regional Security Architecture?," *The Washington Quarterly*, Vol. 26, No. 3, pp. 161-175.

28. Michael Knights, "Troubled Waters: U.S. Security Assistance to the Gulf States," The Washington Institute for Near East Policy, forthcoming.

29. Admiral Vern Clark, "The U.S. Navy: Sea Power 21" *U.S. Naval Institute Proceedings*, October 2002, at *http://www.chinfo.navy.mil/navpalib/cno/proceedings.html*.

30. For more on this, see Jason Sherman, "A Cargo Ship with a JSF Runway?" *Defense News*, March 15. 2004, pp. 1, 8; Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics, *Defense Science Board Task Force on Sea Basing*, August 2003, pp. 73-77, at *http://www.acq.osd.mil/dsb/seabasing.pdf*.

31. For more on the challenges of detecting nuclear devices or weapons, see Steve Fetter, Valery A. Frolov, Marvin Miller, Robert Mozley, Oleg F. Prilutsky, Stanislav N. Rodionov, and Roald Z. Sagdeev, "Detecting Nuclear Warheads," *Science & Global Security*, 1990, Vol. 1, pp. 225-302; Steve Fetter and Frank von Hippel, "The Black Sea Experiment: Measurements of Radiation from a Soviet Warhead," *Science & Global Security*, 1990, Vol. 1, pp. 323-327; S. T. Belyaev, V. I. Lebedev, B. A. Obinyakov, M. V. Zemlyakov, V. A. Ryazantsev, V. M. Armashov, and S. A. Voshchinin, "The Use of Helicopter-borne Neutron Detectors to Detect

Nuclear Warheads in the USSR-US Black Sea Experiment," *Science & Global Security*, 1990, Vol. 1, pp. 328-333.

32. During the Cold War, the U.S. Navy ran a clandestine program in which yachts and pleasure craft were fitted with sensors that could detect radiation emitted by nuclear weapons aboard Soviet warships transiting the Bosphorus in Turkey. The boats, manned by foreign crews in civilian clothes, would draw alongside the Soviet warships as they passed through the strait to allow the sensors to take a reading. See Jeffrey T. Richelson, "Task Force 157: The US Navy's Secret Intelligence Service, 1966-77," *Intelligence and National Security*, Vol. 11, No. 1, January 1996, pp. 116-119. Such a capability would be useful for dealing with the possibility of the covert delivery by Iran (or other proliferators) of a nuclear device by sea. Likewise during the Cold War, U.S. agents in East Germany planted clandestine radiation monitors along railway lines leading to the Soviet Union, to verify the withdrawal of nuclear-tipped missiles from East Germany, in accordance with the Intermediate-Range Nuclear Forces (INF) treaty signed in December 1987. Milt Bearden and James Risen, *The Main Enemy: The Inside Story of the CIA's Final Showdown with the CIA*, New York: Random House, 2003, p. 387.

33. Ed Blanche, "Gulf States Take Major Step Toward C3I Update," *Jane's Defence Weekly*, December 3, 1997, p. 5; Michael Sirak, "GCC Commissions Joint Aircraft Tracking System," *Jane's Defence Weekly*, March 7, 2001, p. 41.

34. Beginning in September 2004, the U.S. Navy commenced the continuous deployment of an *Aegis*-equipped destroyer to the Sea of Japan, as a long-range surveillance and tracking platform capable of sharing cueing and targeting data with ground based missile defenses; in 2005, it expects to field its first ballistic missile defense capable warship, and by 2006, the Navy expects to have 15 destroyers and 3 cruisers configured to conduct ballistic missile defense operations worldwide. Christopher P. Cavas, "U.S. Ships to Begin Detect-and-Track Duties," *Defense News*, August 30, 2004, p. 14.

35. CDI has five pillars which include: 1) shared early warning of missile strikes/C^4I interoperability to permit a coordinated response to these threats; 2) active defense against theater air and missile threats; 3) passive defense against chemical and biological weapons; 4) medical countermeasures against chemical and biological weapons, and; 5) consequence management to deal with the aftermath of WMD use. For more, see *Cooperative Defense Initiative Against Weapons of Mass Destruction in Southwest Asia*, U.S. Central Command pamphlet, 2002.

36. Richard L. Garwin, "Boost-Phase Intercept: A Better Alternative," *Arms Control Today*, September 2000, at *http://www.armscontrol.org/act/2000_09/bpisept00.asp?print*.

37. Patrick Clawson, in Washington Institute Special Policy Forum Report No. 743, *A View From Tehran: War and Challenges in the Post-Saddam Middle East*, April 7, 2003.

38. John J. Lumpkin, "Buildup of Iraqi Security Forces Slowed as Policies Changed and Insurgency Grew," January 31, 2005, at *http://www.wtnh.com/Global/*

story.asp?S=2878113; Special Defense Department Briefing on Iraq Security Forces by Lieutenant General David Petraeus, Commander, Multinational Security Transition Command-Iraq, February 4, 2005, at *http://www.defenselink.mil/transcripts/2005/tr20050204-2083.html*.

39. Gary Milhollin and Kelly Motz, "Nukes 'R' Us," *New York Times*, March 4, 2004, p. A29.

40. Kenneth M. Pollack, *Arabs at War: Military Effectiveness, 1948-1991*, Lincoln NE: University of Nebraska Press, 2002, p. 560.

41. For more on efforts by the UAE to create a long-range precision-strike capability, see Michael Knights, *The Unfriendly Skies: Procurement and Employment Trends in GCC Air Forces*, Hastings: Cross-Border Information, 2002, pp. 81, 86.

CHAPTER 11

MANAGING THE IRANIAN THREAT TO SEA COMMERCE DIPLOMATICALLY

Douglas E. Streusand

Between the completion of this chapter and its appearance in print, new developments doubtless will have occurred in the continuing saga of Iran's nuclear program and the global response to it. In all probability, these changes will take the form of evolution, not resolution. The Iranian nuclear program will remain a matter of international contention for years, as North Korea's has, rather than ending with a bang like Iraq's weapons of mass destruction (WMD) programs, or in a whimper like, apparently, Libya's. Despite all the rhetoric about the possible use of force against Iran, whether to overthrow the regime or to destroy nuclear facilities, there are substantial reasons for the Bush administration to avoid the use of force and choose to manage the threat of a nuclear Iran. If it becomes a lasting problem, it requires management.

In Richard Haass's words,

> Management is not a solution, which implies the end of conflict through a meeting of the minds, engendered by compromise, but something very different . . . [When a solution is not possible] the best that can reasonably expected . . . is . . . to bring about some modest degree of progress, or, failing that, at least keep things from getting worse.[1]

This chapter presents and evaluates a series of diplomatic options for coping with a nuclear Iran with particular reference to the Strait of Hormuz and the Persian Gulf. The vital role of the Strait in the world energy market, admirably explained by Dagobert Brito and Amy Jaffe in their chapter,[2] and Iran's status as a major producer of petroleum and natural gas, make the management of any Iranian crisis a matter of vital global interest. Iran's international economic importance, pivotal geopolitical position, and large population make it a far different proposition than North Korea. This chapter argues

that the importance of the Strait of Hormuz as the world's jugular vein implies opportunity as well as vulnerability. The chapter has four sections: (1) an exposition of the problem to be managed, (2) a discussion of three historical management regimes which offer precedents for the current problem: the Lausanne Convention, which governed the use of the Turkish Strait from 1923 to 1936, the Montreux Convention, which replaced the Lausanne Convention and remains in force, and the Prevention of Incidents at Sea Agreement between the United States and Soviet navies; (3) an examination of possible methods of managing tensions; and, (4) a conclusion. The chapter presents only modest proposals, in the literal sense of the term. Despite their modesty, they may well fail to win international approval. But even suggesting them might give the United States additional leverage.

STATING THE PROBLEM

The nature of the Iranian regime, not the power of nuclear weapons, makes a nuclear Iran a threat to the United States. Though we profess to frown upon nuclear proliferation in principle, in practice the context matters more than the fact. Iran's Islamic totalitarian ideology and record of supporting international terrorism distinguish it from all other nuclear powers; North Korea is the only other state with a similar record which has or shortly may have nuclear capability. The United States has not taken preemptive action against North Korea, primarily because of North Korea's conventional deterrent. North Korea's conventional capabilities, especially tube and rocket artillery capable of hitting Seoul, give North Korea the ability to massively retaliate to an attack without WMD.[3] Iran's ability to block passage through the Strait of Hormuz, albeit temporarily, constitutes a comparable conventional deterrent. If, however, Iran does obtain a nuclear deterrent, it would have greater freedom to use its other capabilities.

Iran might use nuclear weapons against Israel, against U.S. or allied interests abroad, or even against the United States or supply them to a terrorist proxy. It has tested medium range ballistic missiles; Central Intelligence Agency (CIA) analysis in 1999 suggested that Iran could test an intercontinental ballistic missile capable of

reaching the continental United States within 10 years.[4] This threat adds to the justifications for global ballistic missile defense, but Iran, despite its Islamic totalitarian ideology, is not necessarily more likely to use nuclear weapons than any other state. The regime, despite its confidence about the next world, wishes to survive in this one and thus to avoid suffering nuclear retaliation. Even supplying nuclear weapons to terrorists would be extremely risky; Iran hardly could expect to avoid being held responsible. Iran is far more likely to use nuclear weapons the way nuclear powers have used them since 1945, as a deterrent, however aggressive its intentions are. The oft repeated, if not confirmed, statement of a senior Iranian officer to an Indian counterpart that Operation DESERT STORM taught one great lesson: never confront the United States without nuclear weapons, is consistent with this position.[5] It suggests that with a nuclear deterrent the Islamic Republic might perceive itself free to take provocative actions with conventional or irregular forces. The possible range of such actions extends far beyond the Gulf and Strait, but Iran would have the most leverage in that critical region. Diplomatic management of a nuclear Iran must thus include preventing Iran from taking provocative military action in the Gulf under the cover of its nuclear deterrent.

Iran's military programs reflect its identity and foreign policy. Beyond survival, it has two competing yet complementary agendas, the national and the revolutionary. Inevitably, if ironically, the Islamic Republic shares much of the vision of the late Shah: Iran as the dominant power in the Persian Gulf by virtue of location, population, wealth, and history.[6] Like the Pahlavi regime, the Islamic Republic fears a superpower; unlike the Pahlavi regime, it cannot rely on another superpower for protection. The Islamic Republic also faces three regional nuclear powers, India, Pakistan, and Israel. The national aspect of Iran's agenda includes a compelling argument for nuclear weapons.[7] The acquisition of nuclear weapons also offers Iran a cheaper way of improving its military position than modernizing its conventional forces.[8] Thus far, there is no indication that international efforts to dissuade Iran from acquiring nuclear weapons will work, and little reason to believe that even a more representative Iranian government would relinquish nuclear

ambitions.[9] If Iran's conventional deterrent, and other considerations make preemption too dangerous or costly, management is the only alternative. It must begin with deterrence and containment.[10] A diplomatic approach would be a complement to military capability and entirely dependent upon it.

U.S. interest in the Strait of Hormuz has not changed since 1971, when Great Britain relinquished responsibility for keeping order in the Persian Gulf, or perhaps since the first oil shock of 1973: to prevent interference with free and safe passage through the Strait from disrupting the global petroleum market. This concern goes far beyond preventing an actual halt to passage through the Strait; concrete threats and even vague fears raise tension and prices. This interest, of course, goes beyond the Strait themselves; any disruption in the production and distribution of Persian Gulf petroleum harms the global economy and might harm global order. The Strait draws special attention because more petroleum is more vulnerable there than anywhere else. Although the Iranian military lacks the ability to sustain a blockade of the Strait against a sustained U.S. effort to open them, it certainly has the ability to close them temporarily. A leading expert on Iran's military forces has concluded that Iran has the ability to interfere significantly with Gulf traffic and perhaps to block the Strait of Hormuz temporarily with anti-ship missiles and mines.[11] Any form of naval engagement in the Strait might leave wrecks which would interfere with navigation until they were cleared, not to mention the potential for environmental damage if loaded tankers were sunk or petroleum facilities damaged. Insofar as the issue may be limited to the Strait themselves, the preservation of free and secure navigation matters the most.

The dependence on petroleum traffic, of course, runs both ways; the exporters depend on it as much as the importers do. A closure of the Strait would harm all concerned. Does that mutual dependence create a mutual deterrence on which all concerned may rely, making the vulnerability of the Strait a nonissue? Unfortunately, it does not. Faced with what it considered an existential threat to the regime, the leadership of the Islamic Republic of Iran certainly would be willing to close the Strait, however destructive the effects would be on their own economy.[12] Two generations ago, the Mossadeq government deprived itself of oil revenue when it nationalized the oil industry.[13]

Iran's economy is far more dependent on oil and gas export revenues today than in 1952, but the regime could survive a short blockage. Since a far larger proportion of world energy supplies comes from the Persian Gulf now than in the past, Iran has greater leverage now than it did under Mossadeq.

The U.S. interest in the security of Gulf petroleum goes far beyond the Strait. Since 1973, the United States has employed a variety of strategies to secure our interests in the Gulf, from the "twin pillars" policy—reliance on Iran and Saudi Arabia as U.S. proxies to keep order—of the 1970s to the dual containment policy of the 1990s. Until 2003 at least, two themes have remained consistent through all the changes in policy and administrations: protection of the production and distribution of petroleum from external attack, whether from the Soviet Union, the Islamic Republic of Iran, or Saddam's Iraq; and support of stable regimes against internal subversion, whether from the Communist left or the Islamist right. Operation IRAQI FREEDOM and the George W. Bush administration's new emphasis on the promotion of democracy in the Middle East have altered these themes, though encouragement for the Gulf regimes to develop more representative institutions (especially the smaller members of the Gulf Cooperation Council [GCC]) is hardly new and produced palpable results in the 1990s.[14] The destruction of the Ba`ath regime in Iraq eliminated any possible counter to Iran from within the region for years to come. The GCC countries still lack the ability to counterbalance Iranian power. It will take years for Iraq to regain the ability even to defend itself. There is no power capable of preventing Iran from dominating the Gulf except for the United States.[15]

These realities fix the parameters of the international issue requiring management: the conflict between Iran's national objective of regional dominance and revolutionary objective of spreading Islamic totalitarianism and the Western objective of security for the production and transportation of oil and natural gas from the Gulf region. Any reduction in tension and uncertainty in the Gulf and Strait would affect global oil and natural gas prices directly by reducing insurance premiums on shipments without reducing the income of the producers. It thus would serve the interests of both producers and consumers. For this reason at least, the competition between the United States and Iran is not a zero sum game, creating opportunities

for mutually beneficial management. The lack of diplomatic relations and persistent hostility between the United States and Iran does not make the establishment of a management regime impossible, though it certainly makes it more difficult. The United States has negotiated with and entered into agreements with North Korea, though the results hardly have been encouraging. But a management regime would not necessarily involve direct negotiations; it might consist merely of an exchange of public statements. It also might involve the creation of a multilateral organization specifically to deal with the Strait of Hormuz or the Gulf as a whole; it might or might not have a regional disarmament component.

Any such diplomatic initiative would have to be fail-safe, meaning it would need to meet three criteria. First, the presentation of the initiative would need to strengthen the standing and credibility of the United States, globally and regionally, even if Iran rejected it. Second, if Iran accepted the initiative and then violated it after it went into effect, the stigma or penalty Iran would need to suffer by doing so would need to outweigh substantially any disadvantage to the United States. Concretely, the United States must retain the ability to blockade Iranian shipping outside the Persian Gulf, as well as to take effective military action against Iranian territory. Third, if Iran accepted the arrangement and abided by it, the result would need to make disruption of traffic through the Strait of Hormuz, and, preferably, of the supply of hydrocarbons from the Gulf in general, less likely. Any diplomatic initiative which did meet these criteria would warrant serious investigation. It, of course, would not deal with Iran's nuclear program directly and would, in fact, constitute an entirely separate diplomatic track.

THE PRECEDENTS

A different set of Straits preoccupied global statesmen for most of the 19th and 20th centuries. The "Straits Question," the question of control over access to the Black Sea through the Bosporus and Dardanelles, was the core of the Eastern Question, the unknown prognosis of the Ottoman Empire, the "Sick Man of Europe". It attracted enough attention to add the word "jingoism" to the English

language; the Russo-Turkish War of 1877-78 inspired a popular song in Britain with the refrain:

> We don't want to fight, but, by jingo if we do
> We've got the ships, we've got the men, we've got the money too.
> We've fought the Bear before, and while Britons shall be true,
> The Russians shall not have Constantinople![16]

The European powers addressed the Straits Question in a series of treaties, beginning with the London Protocol of 1830 and ending with the Montreux Convention. Evaluation of the terms and functioning of the Montreux Convention and the preceding Lausanne Convention thus requires review of the history behind them.

Geopolitics, not geography or the routine functioning of international law, made the Straits Question a question. The Dardanelles is no more than four miles wide, and the Bosporus even narrower. As long as a single state controlled both shores, the Straits ordinarily would be the territorial waters of that state, and the Sea of Marmara between them an enclosed sea. When the Ottoman Empire was a great power, there could be no Straits Question. The Treaty of Kucuk Kaynarca of 1774 ended that era. It established the Russian presence on the Black Sea littoral and awarded Russian ships free navigation through the Straits. The other major European powers gained similar rights by individual treaties; the Black Sea, for centuries an Ottoman lake, became an international waterway. Access to the sea for commerce, however, did not make the Straits a matter of high politics. The Russian desire to dominate the Black Sea and to gain unfettered access to the Mediterranean Sea through the acquisition of Constantinople did so. Britain, the chief maritime power of the time, regarded Russian control of the Straits an unacceptable threat to her interests. It would have created a fundamental asymmetry, with the Russian fleet able to penetrate the Mediterranean and the Black Sea closed to outside forces. The British determination to deny the Straits to Russia kept the Sick Man of Europe alive. The Anglo-Russian rivalry over the Straits formed the complement of the "Great Game," the competition between the two powers in Central Asia.[17]

In its broader form, then, the Straits question concerned control of Constantinople and the Straits littoral; the more narrow form,

which the diplomatic instruments generally addressed, concerned the passage of shipping, especially naval forces, through the Straits. The Anglo-Turkish Treaty of 1809 stated that the prohibition of the passage of foreign warships through the Straits was an "ancient rule" of the Ottoman Empire. Britain sought to transform the ban from an Ottoman policy to international law. Russia sought to replace the ban with an exclusive privilege to use the Straits for naval purposes. The procession of treaties governing the use of the Straits during the 19th century reflected the ebb and flow of British and Russian fortunes and interests. The 1841 London Convention prohibited all foreign naval shipping, with some minor exceptions, from passing through the Straits; subsequent treaties in the 19th century continued this arrangement. This compromise satisfied Russia because it kept the superior Royal Navy out of the Black Sea, and Britain because it kept the Russian fleet from threatening the Mediterranean lifeline to India. In essence, this situation remained stable so long as no outside force altered the policies of Britain and Russia. In the 20th century, Germany twice became that outside force.[18]

When the Ottoman Empire entered World War I by permitting the German battlecruiser *Goeben* and cruiser *Breslau* to enter the Dardanelles and closing the Straits to pursuing British warships, it ended, temporarily, the conflict between Britain and Russia over the Straits. Turkish control of the Straits blocked the best route for British supplies to reach Russia; the British leadership considered the Russian alliance essential for the defeat of Germany. Although the Allied efforts to force the Straits failed, British opposition to Russian control of the Straits ended. Russia demanded possession of Constantinople and the entire western shore of the Straits and the Sea of Marmara; Britain agreed. That commitment later became part of what is generally known as the Sykes-Picot Agreement, although Russian foreign minister Sergei Sazanov also signed it, and it was negotiated in Petrograd in 1916.[19]

When the war ended, the Russian Empire had ceased to exist, and the Soviet regime had renounced the Russian claims on Ottoman territory. The Armistice of Mudros, which ended hostilities with the Ottoman empire on October 31, 1918, opened the Straits to Allied shipping and permitted the Allies to occupy Constantinople and the Bosporus fortifications. The Allies addressed the future of the

Ottoman Empire in the Treaty of Sevres, signed August 10, 1920. The Treaty called for the partition of the Ottoman Empire. It assigned the western shore of the Straits except Constantinople to Greece; an Ottoman rump would retain control of Constantinople and the eastern shore. Those states, however, would delegate sovereignty over both shores of the Straits, designated as the Straits Zone, to a Straits Commission, consisting of representatives of the Allied powers. Under the Commission, all ships and aircraft would have virtually unfettered freedom of navigation in the Straits, in peace and war.[20]

TREATIES GOVERNING USE OF TURKISH STRAIT

The Lausanne Convention.

The emergence of the new Turkey under Mustafa Kemal, later Kemal Ataturk, rendered the Treaty of Sevres moot. When Kemal's forces, already in control of Anatolia, approached the Allied garrison at Constantinople in October 1922, Britain and Greece agreed to an armistice and revision of the Treaty of Sevres. During the course of the negotiations which produced the Treaty of Lausanne, signed July 24, 1923, Ataturk put a formal end to the Ottoman Empire and established Turkey as a republic. The Soviet Union, now firmly established, participated in the Lausanne negotiations. The Lausanne Treaty gave the new republic full sovereignty over Anatolia and a small enclave in Europe, including the important city of Edirne, but not control over the Straits. The old polarity between Britain and Russia over the Straits had reappeared. The Soviet delegation at Lausanne supported Turkish sovereignty over the Straits with commercial traffic entirely unrestricted and naval passage entirely prohibited, a return to the status quo ante bellum. Britain and the other Western powers, however, wanted to retain the Sevres arrangements for the Straits. Prolonged and difficult negotiations produced the Convention of Lausanne, signed August 14, 1923, which was separate from the broader Treaty of Lausanne and dealt only with the Straits Question.[21]

The Lausanne Convention had four main provisions: freedom of navigation through the Straits, demilitarization of the Straits,

an international guarantee for the security of the Straits, and the establishment of a Straits Commission to execute the provisions of the Convention. This arrangement satisfied neither Turkey, which did not gain sovereignty over the Straits, nor the Soviet Union, which confronted the possibility of facing hostile naval forces in the Black Sea. But the Convention protected Soviet interests to a degree. It distinguished between riparian states, states on the shores of the Black Sea, and nonriparian outside powers. No outside power could send into the Black Sea a naval force larger than the most powerful riparian fleet, inevitably but not explicitly that of the Soviet Union, but outside powers had the unconditional right to send flotillas of up to three ships, with the largest not to exceed ten thousands tons. This provision tacitly prohibited outside capital ships—battleships and aircraft carriers—from entering the Black Sea. In time of war, these arrangements did not change if Turkey was neutral; if Turkey was a belligerent, neutral warships retained the right to pass through the Straits but enemy ships and aircraft were prohibited. The Straits Commission, not Turkey, had the right and the responsibility to enforce these provisions. This arrangement reassured the Soviets about a possible threat from the Black Sea, but permitted the nonriparian states to operate naval forces there and assured international control of the Straits. Although Turkey was deprived of control over the Straits and sovereignty over the Straits littoral, Ataturk had every reason for satisfaction with the broader settlement of the Treaty of Lausanne and priorities beyond the Straits.[22]

The growth of German power in the 1930s reduced the importance of British and Soviet differences over the Straits and increased the value of Turkey as a potential ally. This situation gave Turkey the opportunity to obtain a revision of the Lausanne Convention. The revision of other components of the postwar settlement provided the Turks with a pretext for requesting revision of the Convention in 1933, though the conference to do so did not meet until 1936.[23]

The Montreux Convention.

During the complex series of negotiations which produced the Montreux Convention, Britain took the position that the Straits were

an "international waterway connecting two international seas."[24] The Soviets sought to differentiate between the Mediterranean as an international sea and the Black Sea as a closed one. To the Turks, the issue of Black Sea access mattered less than that of sovereignty over the Straits and the Straits littoral. Turkey's ability to occupy the Straits Zone unilaterally, as Germany had the Rhineland, gave the Turks considerable leverage, as the terms of the Convention indicate. It gave each of the major participants in the negotiations enough of their objectives to make the arrangement acceptable. For Britain, the principle of freedom of navigation in the Straits became a matter of international law, and nonriparian states gained the right to operate substantial but limited naval forces in the Black Sea. For the Soviet Union, the restrictions on nonriparian naval forces in the Black Sea and the privilege of passing large naval units through the Straits mitigated failure to gain closed status for the Black Sea. Turkey got full sovereignty, including the right to fortify the Straits, but not sovereign control of navigation.

The provisions of the Convention restrict commercial navigation in the Straits only if Turkey is at war, or regards war as imminent. In that circumstance, nonbelligerent vessels may pass the Straits as long as their passage does not assist Turkey's enemies, which implies Turkey's right to inspect passing vessels. The Convention does not distinguish between the riparian and nonriparian states with regard to commercial navigation. In peacetime, small warships and naval auxiliaries of both riparian and nonriparian states may pass the Straits without restriction in daylight. Submarines of Black Sea navies may pass through the Straits on the surface, but only if constructed outside the Black Sea for use within it or for repair at outside yards and return from them, not for routine deployment. Nonriparian states may send no more than 15,000 tons of naval shipping through the Straits at one time; riparian states may exceed that tonnage—and thus send capital ships through the Straits—if their large units have no more than two accompanying destroyers. Nonriparian states may not maintain a total of more than 30,000 tons in the Black Sea at any given time, but this provision is subject to change. If the strongest riparian fleet—meaning the Soviet fleet—expanded by 10,000 tons from its size at the time of the signature

of the Convention, the permissible size of nonriparian fleets was to grow to 45,000 tons. Nonriparian naval forces may not remain in the Black Sea longer than 21 days. If Turkey is at war or, significantly, regards itself in imminent danger of war, the passage of combatant ships, of any power, becomes subject to its sole discretion. The wording of the Convention makes it effectively perpetual unless one of the signatories gives notice of intent to denounce.[25]

The Montreux Convention remains in force to this day. It has survived through 7 decades of geopolitical turbulence not because the conflict of interests over the Straits ended, but because it managed the situation well enough that none of the parties had sufficient motivation to raise tensions enough to change it. It has been a classic example of successful management as Haass describes it. The Soviet Union sought to alter the terms of the Convention, before, during, and after World War II. It proposed to transfer responsibility for the security of the Straits from Turkey to a Turkish-Soviet condominium which would have given the Soviets military bases at the Straits. This return to the historical Russian desire to control the Straits inevitably elicited firm opposition from Turkey, Great Britain, and the United States. Soviet pressure on Turkey in the postwar years impelled the United States to become involved in the eastern Mediterranean, thus helping to establish the pattern of the Cold War. [26] Even today, Turkey chafes under the Montreux provisions which deprive it of the right to restrict commercial traffic through the Straits.[27] Successful management regimes chafe, but rarely raise blisters.

The Prevention of Incidents at Sea Agreement.

The Agreement Between the Government of the United States of America and the Government of the Union of Soviet Socialist Republics on the Prevention of Incidents On and Over the High Seas (INCSEA), signed on May 25, 1972, by Secretary of the Navy John Warner and Admiral of the Fleet Sergei Gorshkov, differs from the Lausanne and Montreux Conventions in many dimensions. A bilateral executive agreement between the U.S. and Soviet Navies rather than a formal treaty, it remained in effect for only 16 years before it was replaced by the Prevention of Dangerous Military

Activities Agreement of 1988. It did not address a long-standing major international issue. It encompassed only a narrow aspect of the rivalry between the United States and the Soviet Union. Within these limits, INCSEA achieved its objectives.

The expanding presence and increasing assertiveness of the Soviet Navy created the need for INCSEA. Soviet ships and aircraft often interfered with U.S. naval operations. Because the Soviets were deploying an array of new ships, aircraft, and weapons systems, U.S. ships often approached Soviet units closely to gather intelligence visually. Near misses and collisions, some of which caused the loss of aircraft and casualties, had become frequent. The United States raised the possibility of an agreement to reduce incidents in 1968. The final agreement was straightforward. It required the two navies to obey the standard nautical Rules of the Road, to avoid provocative behaviors, such as simulating attacks on or aiming weapons at each other, to use navigation lights properly, to use signals to warn each other of danger, and to meet annually to review the implementation of the agreement.[28]

INCSEA established a new pattern of professional interaction among American and Soviet naval officers. It reduced the number of incidents and proved particularly useful during the October 1973 Arab-Israeli War, when both navies had large forces in the eastern Mediterranean and international tension compelled the commanders to jockey for tactical advantages. The two navies came to value the unique service-to-service relationship and to resent outside interference in it. During the tense period of the early 1980s, U.S. warships repeatedly entered what the Soviets considered internal waters in order to demonstrate the principle of freedom of navigation. These incursions led to a number of naval confrontations which the INCSEA annual reviews helped to resolve. When Soviet units interfered with U.S. salvage operations in international waters after the destruction of Korean Air Lines Flight 007, the United States invoked INCSEA to demand that the Soviets end their harassment, and they complied. When the United States temporarily terminated official contacts with the Soviet armed forces after the murder of Major Arthur Nicholson in 1985, the decision deeply disturbed Soviet naval officers.[29] INCSEA became a model for a bilateral agreement

between the German and Polish navies in 1990, and the United States proposed a multilateral equivalent as part of a comprehensive Middle East settlement in 1992. The U.S. and Chinese navies signed a similar agreement in 1998.[30]

David Winkler, the leading authority on INCSEA, gives six reasons for its success. Both navies wanted to avoid damage to their ships and aircraft and the possibility of an escalation of tensions or even hostilities as result of accident or imprudence. Because the rapid growth of the Soviet Navy put many inexperienced officers in command positions, this danger concerned the Soviets particularly. The simplicity of INCSEA's terms, the professionalism of those charged with enforcing it, and the practice of discussing violations in advance of the annual review made the review process effective. The social norms established for the review sessions created a positive atmosphere. The low profile of the agreement—which did not require congressional approval and concerned professional military officers primarily—facilitated its success. The provision for direct communications between the navies and the annual reviews made verification far easier than in more elaborate arms control agreements.[31] INCSEA gave the navies of both countries, especially the insurgent Soviet Union, a growing vested interest in keeping tensions low. This interest certainly would not have prevented them from going to war at the behest of their political masters. It did, however, function as a confidence-building measure, which gradually impressed observers outside of the two navies.

Precedent Conclusions.

The precedents offer a variety of models for the Persian Gulf and Strait of Hormuz, though, of course, none fits precisely. The Lausanne Convention offers the most applicable model for a comprehensive agreement. The primary objection to Lausanne, Turkey's lack of sovereignty over the Straits, would not apply to the Strait of Hormuz because neither Iran nor any other state has claim to sovereignty; the Strait is inherently an international waterway. Demilitarization and international control exercised by an intergovernmental organization devoted to the maintenance of free and secure navigation could

benefit all concerned. A more modest and less visible agreement on the model of INCSEA, reducing local tensions and the probability of provocative incidents, would have similar advantages on a smaller scale. Many possibilities exist between the two extremes.

MANAGEMENT IN THE PERSIAN GULF AND STRAIT OF HORMUZ

Several different variables define the matrix of possible management regimes. In addition to the diversity in the scope and diplomatic formality suggested by the precedents, the geographic compass of an agreement could vary from the Strait of Hormuz alone to the entire Gulf and its littoral. The United States thus has a wide range options from which to select a management regime to meet the fail-safe criteria. In proposing and, perhaps, implementing the regime, the United States would have the initiative and significant strategic advantages. The establishment of a management arrangement for the Gulf or Strait, properly done, would be an opportunity to turn military capability into diplomatic advantage, not an offer of concessions for returns which may prove ephemeral.

The strategic advantages are inherent in the power relationship between a global maritime power and an insular regional power. The military leverage of the United States comes, most importantly, from the ability to interdict Iranian shipping outside the Strait of Hormuz, in the Gulf of Oman or Arabian Sea, and to conduct effective strikes against Iran from outside the region. No agreement restricted to the Gulf and its littoral would affect those capabilities. Though Iran's military capabilities threaten U.S. interests, there is little doubt that U.S. capabilities pose a greater threat to the Islamic Republic. This fact makes it possible for a management regime to meet the fail-safe criteria because it creates the possibility of a quid pro quo with the Iranian regime which does not harm U.S. interests.

In the context of the Gulf, the United States has a narrow agenda: the protection of the production and export of petroleum and natural gas, and the reduction of the protection costs paid for them.[32] We are free to pursue those objectives as long as we do not compromise other broader objectives, as would happen, for example, if a management

regime restricted the U.S. ability to take whatever actions deemed necessary to deal with the Iranian nuclear program. A pledge not to attack Iranian nuclear facilities in exchange for an Iranian pledge not to block the Strait, for example, would not be acceptable; it would guarantee the success of Iran's conventional deterrent. The United States could, however, promise not to interfere with Iranian shipping within the Gulf and Strait or attack Iranian oil and natural gas facilities, onshore and offshore, in return for an Iranian pledge not to attack shipping or the oil and gas facilities of other Gulf states. By reducing the probability of attack, this type of agreement would have a direct impact on prices by reducing insurance premiums, even it had no other effect. Such an agreement would prohibit attack on Iran's most important economic assets, but it appears so unlikely that the United State would choose to do so under any circumstances that the prohibition appears acceptable.

U.S. military action against Iran might have one of four general purposes: preemption, punishment, rollback of aggression or provocation, or regime change. Preemptive or small scale punitive operations probably would consist either of precision guided munitions, or possibly, the insertion and extraction of special operations forces to destroy specific military or paramilitary targets. The Israeli attacks on the Osiraq reactor in 1981 and the Palestinian Liberation Organization (PLO) headquarters in Tunis in 1985; Operation EL DORADO CANYON against Libya in 1986; the 1998 cruise missile strikes against targets in Afghanistan and the Sudan; and commando operations like the Israeli, German, and French hostage rescue operations at Entebbe, Uganda in 1976; Mogadishu, Somalia in 1977; and Kolwezi, Zaire in 1978, exemplify this type of mission. Only if the Islamic Republic used oil and gas facilities to shield other activities, which the large number of non-Iranians involved in the petroleum industry makes unlikely, would a prohibition on attacking them interfere with this type of operation.

Iran's conventional military weakness makes the type of aggression or intervention which would require a punitive response comparable to Operation DESERT STORM highly unlikely. Without considering either the probability or the desirability of a military intervention to change the Iranian regime, such an operation would

not target the energy facilities. Energy resources and facilities form an important component of national power, as Ray Cline's methodology for assessing national power indicates.[33] But regime change operations, after all, seek to overthrow governments, not conquer nations. Iraqi oil facilities were not, and Iranian facilities are not, the centers of gravity of the regime. Clausewitz presents the concept of center of gravity thus: "One must keep the dominant characteristics of both belligerents in mind. Out of the characteristics, a certain center of gravity develops, the hub of all power and movement, on which everything depends. That is the point against which all our energies must be directed."[34] John Warden relies on this concept as the organizing principle of his analysis of air warfare.[35] The Islamic Republic's center of gravity consists of the mechanisms of political coercion which keep it in power, not the economic resources of the country in general. Attacking oil facilities also has inherent environmental risks. The United States thus could surrender the option of attacking Iranian oil facilities without violating the fail-safe criteria.

To Iran, the proposition would appear less favorable, because the ability to interfere with traffic in the Strait is not only the keystone of Iran's conventional deterrence but also a major source of Iran's regional leverage. Iran might well reject such a proposal, whatever diplomatic form it took. It would, however, do so at the cost of appearing of intransigent, globally and regionally. An Iranian rejection would imply that Iran considered blocking the Strait and attacking its neighbors' shipping and energy facilities an option, which the other Gulf countries would hardly welcome.[36]

This discussion of a no-attack pledge suggests ways in which even the proposal of a management regime could serve American interests. Other initiatives could have similar effects. Narrowing the geographic range of the proposed regime to the Strait and drawing on the Lausanne precedent raises the possibility of a local demilitarization. There would be some advantage, however, in an agreement which simply moved Iranian forces away from the Strait. Iranian control of the disputed islands of Abu Musa, the Great Tunbs, and the Lesser Tunbs, some 50 kilometers west of the Strait, and undisputed Sirri Island further west, offer it a definite advantage in

closing the Strait, though not a militarily decisive one.[37] Given the short distances involved, Iran could fire antishipping missiles or conduct special operations with small craft from bases on the mainland.[38] A territorial arms control agreement or demilitarized zone would have to extend well beyond the Strait to deny Iran the ability to interdict traffic in the Strait. If it did so, it would encompass the major Iranian naval base at Bandar Abbas and the entire territory of several of the emirates of the United Arab Emirates (UAE). But the elimination of military forces from the Strait and their immediate environs, even if only the islands and the tip of the Musandam Peninsula—part of Oman, which the United States could probably prevail upon to cooperate—would make it harder for Iran to interfere with Strait traffic without preparation, and easier for the United States to detect and respond to Iranian actions. But the demilitarization of Omani territory would hardly be an incentive for Iran and, from the Iranian perspective hardly a concession for the United States. The most relevant form of concession would resemble some of the restrictions on passage through the Turkish Straits.

The United States could accept restrictions as long as they did not interfere significantly with military operations in the Gulf. Restrictions on the total number or size of vessels inside the Gulf would not be acceptable; a requirement for formal notice of passage would be. A requirement that submarines pass through the Strait only on the surface would interfere with U.S. submarine operations there. The United States began operating submarines inside the Gulf only when Iran acquired advanced conventional submarines from Russia, suggesting that submarines may have an important force protection role.[39] Even so, the passage restriction might be acceptable. Iranian naval power in the region depends far more on its small submarine forces than the United States does on submarines. Restrictions on passage also could include the prohibition of ships and aircraft carrying mines through the demilitarized zone.

Whether included in a broader demilitarization agreement or not, a prohibition of mines in the Strait area or in the entire Gulf would be a useful management instrument. As the damage to the *Bridgeton* and USS *Samuel B. Roberts* during the 1987-88 tanker war demonstrates, mines pose a significant hazard to Gulf shipping, especially if laid

clandestinely. The removal of this threat would reduce uncertainty about navigation substantially.[40] Since Iran is the only Gulf state likely to employ mines, it would probably not be difficult to get the remainder of the Gulf states and outside navies operating in the Gulf to agree to a comprehensive regional ban on naval mines.

The disputed islands present another option, but unfortunately not a desirable one. The islands have small populations and no intrinsic worth beyond their location. Under the territorial arrangements established when Britain withdrew from the Gulf in 1971, Iran was to share sovereignty over Abu Musa and the Tunbs with the UAE. Just before the British withdrew; Iranian forces occupied all three islands. Iran and the UAE reached an agreement for joint administration just before the Iranian occupation; there was no such agreement with the UAE. The joint administration of Abu Musa has led to friction, notably since 1992 when Iran began to assert unilateral control over the island. There have been a number of incidents since that time; in June 2004, for example, a UAE patrol boat fired on an Iranian fishing boat. The UAE, backed by the other members of the GCC, have sought international arbitration to resolve the situation; Iran has refused.[41] Iranian overtures to the Gulf countries have not altered their position.[42] Even the mention of the most basic agreement regarding the islands, presumably exchanging recognition of Iranian sovereignty for demilitarization, would deeply offend the Gulf Arabs and encourage Iranian territorial claims elsewhere in the Gulf. Iran asserted a historical claim to Bahrain, originally in 1927, but officially relinquished that claim in 1970. Recognition of the Iranian claims to the Tunbs and Abu Musa might encourage Iran to revive the claim to Bahrain.[43] Since Iran has controlled the Tunbs for 30 years and apparently has obtained what it wants in Abu Musa, the island situation appears to offer little leverage for obtaining concessions from Iran. For Iran, the islands are a national issue, not related to the revolutionary agenda.[44]

The INCSEA precedent suggests a different management approach, focused on freedom of navigation and avoidance of provocation. Like INCSEA, an "INCGULF" could involve only actual armed forces (air and naval) operating in the Gulf and Strait and would regulate only behavior. It could begin with a promise

to observe the maritime rules of the road and their equivalents in the air and continue by circumscribing provocative behaviors, such as the loading of mines aboard ships or aircraft or the use of missile guidance radars, and might extend to notice of naval and air exercises. The lack of diplomatic relations between the United States and the Islamic Republic would be an obstacle to the negotiation of such an agreement, particularly if it involved the creation of a review body. But the United States and Iran already cooperate in a program for the monitoring of wrecks and other hazards to navigation in the Strait, managed by the U.S. Coast Guard; anecdotal reports suggest that formal and respectful contacts frequently take place between U.S. and Iranian naval officers in the Strait area. A Prevention of Incidents structure simply would place those contacts on an ongoing basis without involving interaction at the diplomatic level. It would improve the security of traffic through Strait and thus appeal not only to the other Gulf states and the United States, but to all major importers of oil from the Gulf, including India and China. The Iranian Revolutionary Guard, essentially the armed forces of the revolutionary agenda, probably would reject an INCGULF out of hand. The rejection would both isolate Iran and contribute to friction between the regular Iranian armed forces and the Revolutionary Guard.

The idea of a Gulf commission, modeled up to a point on the Strait Commission established in the Lausanne Convention, offers an intriguing prospect. (The Strait Commission could not be an exact model, since it was imposed by the victorious Allies and actually controlled its own territory, the Strait Zone.) A Gulf Commission would address the question of secure and orderly navigation in the international waters of the Strait and Gulf. It would be established by an international convention and have responsibility for enforcing the terms of that convention. A Gulf convention could include any of the possible agreements mentioned above—local demilitarization, a mine ban, an INCGULF, for example—as well as such matters as maintenance of aids to navigation and wrecks, on which anecdotal evidence suggests that there is already a good deal of informal cooperation. It also could serve as a clearing house for information on the passage of ships and aircraft. More formal and intrusive

mechanisms of management could include requiring that an official of the Commission be aboard all nonriparian vessels and all warships operating in international waters in the Gulf, or even that ships passing through the waters administered by the Commission fly a Commission flag in addition to their national colors. The expenses of the Commission would be considerable; it could be funded either by fees paid by the users of the Gulf or contributions from the members of the Commission.

Since it is impossible to bring surface ships into the Gulf surreptitiously, the functioning of a Commission would not limit U.S. military options significantly. If a situation justified military action, it would also justify violating the rules of the commission. The convention which created the commission would have to have an escape clause to deal with this circumstance. It also might declare certain violations of the convention as acts of war against the signatories. Such a structure would give the United States a legal role in maintaining the security of Gulf. The establishment of a commission thus would defeat Iran's longstanding goal of establishing a collective security structure in the Gulf which would the exclude the United States. An Iranian rejection of an agreement would imply that Iran valued its national interest above order and security in the Gulf, and thus isolate Iran.[45]

Even if these initiatives turned out to be no more than diplomatic theater, the United States still would benefit. Thus far, the United States has dealt with Iran's nuclear program primarily with sanctions and harsh rhetoric, unlike the European Union (EU), which has offered positive incentives.[46] The proposal of management instruments or regimes for the Gulf would show flexibility without altering policy on the nuclear issue. Even if the flexibility is not sufficient to impress the Islamic Republic, it would impress the global community and might facilitate cooperation with the European powers on nuclear issues and continuing security cooperation with the GCC countries. If, of course, Iran accepted one of the proposals and then violated it, it would weaken Iran's position, even if it were not so gross a provocation as Saddam's invasion of Kuwait. In either of these cases, the United States would benefit as long our adherence to whatever instrument or regime Iran had violated did not compromise our ability to act in the Gulf.

Showing flexibility to the Islamic Republic would have some risks. Iran might take plasticity as weakness and take more aggressive actions as a result. But in doing so, the Islamic Republic would weaken its international position. Iranian adherence to an agreement might well pose the greatest challenge. Iranian acceptance of a management instrument for the Gulf would be as much a strategic choice as offering it would be for the United States. If the GCC countries, Iran's other neighbors, and the world community (not to mention the United States) perceived Iranian acceptance of a management as a sign of a new and more benign approach to the world, and acted accordingly, the situation would become far more dangerous. A reduction in tensions in the Gulf cannot and must not serve as the basis for a redefinition of the U.S. relationship with the Islamic Republic. It could not replace, only complement the sanctions regime and a vigorous military policy in the region. Whatever confidence these measures might build could not become the basis of a new Gulf policy.[47]

CONCLUSION

No management instrument or regime could either dissuade the Islamic Republic of Iran from its pursuit of nuclear weapons or eliminate the threat to global and regional order which a nuclear Iran would pose. The most comprehensive and formal concept would offer no more than a marginal improvement in the overall situation. But in such a serious situation, even the prospect of marginal improvement is worth careful investigation. An approach to Iran, whether through secret diplomacy or open declaration, would create a new arena in which the United States could employ its power to reduce Iran's international support and freedom of action and, perhaps, capability. A management regime can be, and must be, an instrument of statecraft, not a substitute for it.

ENDNOTES - CHAPTER 11

1. Richard N. Haass, *Conflicts Unending: the United States and Regional Disputes,* New Haven: Yale University Press, 1990, pp. 1-2.

2. Dagobert Brito and Amy Jaffe, "Reducing Vulnerability of the Strait of Hormuz," chap. 9, this volume.

3. On this point, see, for example, Philip C. Saunders, "Military Options for Dealing with North Korea's Nuclear Program," Monterey Institute of International Studies, January 27, 2003, available at *http://cns.miis.edu/research/korea/dprkmil.htm*.

4. Anthony H. Cordesman, *Iran's Evolving Military Forces,* Washington, DC: Center for Strategic and International Studies, 2004, p. 42; *idem*., *Iran's Military Forces in Transition,* Westport, CT: Praeger, 1999, covers the Inanian military forces at greater length.

5. Numerous authors on nuclear issues have quoted Sundarji's words, but I have been unable to locate the original source in which they appeared. For wording, see Keith B. Payne, *Deterrence in the Second Nuclear Age*, Lexington, KY: University Press of Kentucky, 1996, p.20.

6. On the continuity of Iranian foreign policy, see Graham E. Fuller, *The "Center of the Universe": The Geopolitics of Iran,* Boulder, CO: Westview Press, 1991, esp. pp. 8-33.

7. On Iran's nuclear ambitions in regional context, see *ibid*., p. 237.

8. Mihael Eisenstadt, "Living with a Nuclear Iran," in *Crises in the Contemporary Persian Gulf,* Barry Rubin, ed., London and Portland, OR: Frank Cass, 2002, p. 227.

9. On these issues, see Fuller, *ibid*.; Christin Marschall, *Iran's Persian Gulf Policy: From Khomeini to Khatami,* New York: Routledge Curzon, 2003, pp. 3-62; Anthony H. Cordesman, *Iran's Military Forces in Transition,* Westport, CT: Praeger, 1999, pp. 20-30, 265-270. Robin Wright, "Desire for Nuclear Empowerment a Uniting Factor in Iran," *Washington Post*, November 14, 2004, demonstrates the Iranian desire for nuclear capability.

10. The reference to containment does not imply an acceptance of the Iranian regime as permanent or desirable, but to containment as a prerequisite for any other policy to deal with the Iranian regime.

11. Cordesman, *Iran's Evolving Military Forces*, *http://csis.org/features/0407_IranMilForces.pdf*, p. 18. Cordesman summarizes reports on Iranian nuclear programs on pp. 49-60.

12. Iran's ability to close the Strait might be said to constitute a Samson option, comparable to Israeli nuclear capability as described in Seymour Hersh, *The Samson Option: Israel's Nuclear Arsenal and American Foreign Policy,* New York: Random House, 1991.

13. On the Mossadeq era, see Sepehr Zabih, *The Mossadeq Era: Roots of Iranian Revolution,* Chicago: Lake View Press, 1986; Mostafa Elm, *Iran's Oil Nationalization and Its Aftermath*, Syracuse, NY: Syracuse University Press, 1992, among others. With the exception of Zabih, nearly all the literature on Mossadeq and his time overestimates the degree of popular support for Mossadeq, the stability of his government, and his commitment to free and representative government, and underestimates the Communist threat to and within Iran.

14. For a recent survey of political patterns in the GCC countries other than Saudi Arabia, see Malcolm C. Peck, "Eastern Arabian States; Kuwait, Bahrain, Qatar, United Arab Emirates, and Oman," David E. Long and Bernard Reich, *The Government and Politics of the Middle East and North Africa*, 4th. Ed., Boulder, CO: Westview Press, 2002, pp. 128-173. Political liberalization in Qatar led to the establishment of al-Jazeera.

15. James H. Noyes, *The Clouded Lens: Persian Gulf Security and US Policy*, Stanford, CA: Hoover Institution Press, 1982, covers the early years of U.S. Gulf policy. Anthony Cordesman has continued the story in a series of volumes, including *The Gulf and the Search for Strategic Stability,* Boulder, CO: Westview, 1984; *The Gulf and the West: Strategic Relations and Military Realities,* Boulder, CO: Westview, 1988; and *After the Storm: the Changing Military Balance in the Middle East,* Boulder, CO: Westvew, 1993. There is also M. E. Ahrari and James H. Noyes, eds., *The Persian Gulf After the Cold War,* Westport, CT: Praeger, 1993, and Michael A. Palmer, *Guardians of the Gulf: A History of America's Expanding Role in the Persian Gulf, 1833-1992*, New York: Free Press, 1992.

16. *The Oxford Dictionary of Quotations,* 3rd. ed., New York Oxford University Press, 1979, attributes this verse to G. W. Hunt, and describes it as the lyrics of a "Music Hall Song."

17. Any mention of the "Great Game" justifies citing Peter Hopkirk's superb *The Great Game: the Struggle for Empire in Central Asia,* New York: Kondansha International, 1994.

18. On the Straits question in the 19th century, see Harry N. Howard, *Turkey, the Straits and U.S. Policy,* Baltimore: The Johns Hopkins University Press, 1974, pp. 1-27; Christos L. Rozakis and Petros N. Stagos, *The Turkish Straits,* Dordrecht, Holland: Maritnus Nijhoff, 1987, pp. 1-24, 80-89; Ferenc A. Vali, *The Turkish Straits and NATO,* Stanford, CA: Hoover Institution Press, 1972, pp. 3-25; William Hale, *Turkish Foreign Policy, 1174-2000,* London: Frank Cass, 2000, pp. 13-37. This list, and subsequent lists of sources on the Straits question, is hardly exhaustive.

19. On the Straits question during World War I, see Howard, *Turkey*, pp. 27-45; Rozakis and Stagos, *Turkish Straits*, pp. 25-31; Vali, *Turkish Straits,* pp. 26-29; Hale, *Foreign Policy*, pp. 37-44; David Fromkin, *A Peace to End All Peace: The Fall of the Ottoman Empire and the Creation of the Modern Midde East,* New York: Avon, 1990, especially pp. 137-145, 189-199. These references are hardly comprehensive and do not deal with the Dardanelles expedition at all.

20. On Sevres and Lausanne, see Howard, *Turkey,* pp. 51-129; Vali, *Turkish Straits*, pp. 26-34; Rozakis and Stagos, *Turkish Straits*, pp. 26-39, 89-100, Anthony R. DeLuca, *Great Power Rivalry in the Turkish Straits,* Boulder, CO: East European Monographs, 1981, pp. 1-14; Fromkin, *A Peace to End All Peace,* pp. 427-434, 465-568.

21. *Ibid*.

22. On the terms of the Convention of Lausanne, see Petros and Rozakis, *Turkish Straits,* pp. 89-100; Howard, *Turkey*, pp. 83-129, 300-313.

23. Howard, *Turkey*, pp. 126-147; Rozakis and Stagos, *Turkish Straits,* pp. 36-42; DeLuca, *Rivalry,* pp. 14-50.

24. Lord Stanhope, the leader of the British delegation at the beginning of the conference, used this phrase. *Actes de la Conference de Montreux: 22-Juin-20 Juillet: Compte Rendu des Seances Plenieres et Proces-Verbal Des Debats du Comite Technique,* with an introduction by Thanassis Aghnides, Paris: 1936, p. 43, quoted in DeLuca, *Rivalry*, p. 56.

25. On the negotiations and general framework of the Montreux Convention, see Howard, *Straits*, pp. 147-156; Rozakis and Stagos, pp. 102-104; Vali, *Straits,* pp. 36-40; DeLuca, *Rivalry*, pp. 25-135. On the specific provisions, see Howard, *Straits,* pp. 292-315; Rozakis and Stagos, *Straits,* pp. 104-136. The Convention's provisions regarding aircraft carriers are not clear. Because the text of the Convention makes no reference to aircraft carriers but refers only to capital ships and Annex II specifically excludes aircraft carriers from the category of capital ships, it appears that aircraft carriers are subject to the 15,000 ton limit, which effectively prohibits them from passing through the Strait. At least partially, if not entirely, because of this issue, the Soviet Union designated all of its aircraft carriers, which were constructed at Nikolayev in the Ukraine for use outside the Black Sea, as cruisers, which qualified as capital ships under the Convention, rather than aircraft carriers. Article 15 states "Vessels of war in transit through the Strait shall in no circumstances make use of any aircraft which they may be carrying," thus prohibiting the use of aircraft during transit but not their carriage. On these issues, see Rozakis and Stagos, *ibid*., pp. 50-55, 132-133.

26. Bruce R. Kuniholm, *The Origins of the Cold War in the Near East: Great Power Conflict and Diplomacy in Iran, Turkey and Greece*, Princeton, NJ: Princeton University Press, 1980, provides an excellent overview of this topic; Harry N. Howard, *Turkey, the Straits and U.S. Policy,* Baltimore: The Johns Hopkins University Press, 1974, pp. 210-280, covers the issue of the Strait in detail.

27. On this issue, see, for example, Christopher Slaney, "Turkish Concern for Bosporus Complicates Oil Transport Scenarios," *Washington Report on Middle East Affairs*, Vol. XXII, No. 4, May 2004.

28. David F. Winkler, *Cold War at Sea: High-Seas Confrontation between the United States and the Soviet Union,* Annapolis, MD: U.S. Naval Institute, 2000, discusses the historical background of INCSEA and the negotiation which led up to it on pp. 1-107, and summarizes the terms on pp. 106-107. Significantly, INCSEA did not address collisions or other incidents involving submerged submarines.

29. *Ibid*., pp. 108-176, esp. pp. 129-130, 146-147, 150-151.

30. *Ibid*., pp. 170-171.

31. *Ibid*., pp. 172-175.

32. Frederick C. Lane developed the concept of protection costs. For a collection of his articles on this point, see *Profits from Power: Readings in Protection Rent and Violence Controlling Enterprises,* Albany: State University of New York Press, 1979.

33. Ray S. Cline, *The Power of Nations in the 1990s: A Strategic Assessment,* Lanham, MD: University Press of America, 1994, pp. 29-30, 54-55.

34. Carl von Clausewitz, *On War,* Michael Howard and Peter Paret, ed. and trans., Princeton, NJ: Princeton University Press, 1976, pp. 595-596.

35. Colonel John A. Warden, USAF, *The Air Campaign,* San Jose, CA: To Excel Press, 2000, pp. 7-10.

36. For a recent report of Iran's continuing efforts to improve relations with the GCC countries, see "Iran's Gulf Inroads," *Eurasia Security Watch*, Vol. 67, January 14, 2005, *www.afpc.org/esw67.shtml*.

37. I deal with the boundary dispute below.

38. Anthony H. Cordesman, "Iranian Military Capabilities and Dual Containment," in *The Persian Gulf at the Millennium: Essay in Politics, Economy, Society, and Religion,* Gary G. Sick and Lawrence Potter, ed., New York: St. Martin's, 1997, pp. 205-206.

39. Michael Collins Dunn, "The Iranian Submarines: A New Naval Arm," *Washington Report on Middle East Affairs*, December 1992/January 1993, *http://www.washington-report.org/backissues/1292/9212040.html*.

40. On the tanker war, see Palmer, *Guardians,* pp. 128-149.

41. On the diplomatic history of the dispute over the islands, see Pirouz, Mojtahed-Zadeh, "Iran's Maritime Boundaries in the Persian Gulf: the Case of Abu Musa Island," in *the Boundaries of Modern Iran*, Keith McLachlan, ed., New York: St. Martin's, 1994, pp. 101-127; Richard N. Schofield, "Border Disputes in the Gulf: Past, Present and Future," in *ibid*., pp. 142-156; *idem*., "Gulshan Dietl, "Iran in the Emerging Greater Middle East," in *Oil and Water: Cooperative Security in the Persian Gulf*, Bjorn Moller, ed., New York: I. B. Tauris, 2001, pp. 74-75. On the June 2004 incident, see Simon Henderson, *Incident in the Shatt al-Arab Waterway: Iran's Border Sensitivities,"* Washington Incident for Near East Policy *Policywatch*, Vol. 879, June 28, 2004, available at *www.washingtoninstitute.org/watch/policywatch/policywatch2004/879.htm*. Although the Abu Musa incident is not Henderson's actual topic, he provides an admirable summary of it.

42. See the archive of news stories on the islands issue maintained by the UAE Ministry of Information and Culture, at *http://www.uaeinteract.com/news/default.asp?ID=147*.

43. On the Iranian claim to Bahrain, see George Lenczowski, *The Middle East in World Affairs*, 4th ed., Ithaca, NY: Cornell University Press, 1980, p. 671.

44. On this point, see "Always and Forever the Persian Gulf," at *www.marzeporgohar.org/index.php?l=1&cat=17&scat=31&artid=370*. The web site is maintained by Iranians for a Secular Republic.

45. The possibility exists that the regime would actually welcome a strike to strengthen its domestic position, but there is no evidence to support such speculation.

46. Eisenstadt, "Living With a Nuclear Iran," pp. 244-45; this observation remains valid despite the 5 years since Eisenstadt made it. The overtures to Khatami which he mentions have produced nothing.

47. Lawrence G. Potter, "Confidence Building Measures in the Persian Gulf," in *The Persian Gulf at the Millennium*, Gary G. Sick, ed.; and *idem*., New York: St. Martin's Press, 1997, pp. 231-248, discuss possible continental ballistic missiles among the Persian Gulf littoral states, but do not propose any arrangement similar to the Convention proposed here.

CHAPTER 12

WHAT TRANSATLANTIC STRATEGY ON IRAN?

Thérèse Delpech

Unlike the situation prevailing on Iraq, where Europe and America have been arguing for years over international inspections, war tactics, and overall policy, there is no serious transatlantic dispute concerning Iran. There may be differences of emphasis on the two sides of the Atlantic, but on what really matters, the positions are pretty close. Europe and America share a common objective vis-à-vis Tehran. They share a common analysis of the Iranian nuclear program,[1] and they even shared a common caution concerning the success of the negotiations that finally failed in August 2005. Yet, this does not amount to a transatlantic strategy on Iran. Far from it. Regular exchange of information, lack of alternative policy, and absence of confrontation would be a better description of the situation.

On the European side, a first round of negotiations collapsed in June 2004, when some of the suspended nuclear activities were resumed by the Iranians. The international community was abruptly set back to square one at the International Atomic Energy Agency (IAEA) September Board meeting. The second agreement with the three European capitals (London, Berlin, and Paris) came into existence 2 months later—on November 15, 2004—under these difficult circumstances. The substance of the negotiations was now broader. There were three issues at stake (nuclear, trade, and security), and the nature of the Iranian commitments was more precise—leaving very little room, if any, for interpretation of what the suspension actually covers. In August 2005, this second agreement was terminated by Iran, which decided to resume suspended conversion activities. Iranian intentions are now clearer. According to the main negotiator, Hassan Rohani, Iran has used the talks with the Europeans to gain time.

On the other side of the Atlantic, America has been watching on the sidelines, without a strategy of its own, waiting to see what happens.

The Americans have not endorsed the European initiative explicitly, nor have they condemned it. Instead they have displayed a benign scepticism. But at the end of 2004, President Bush himself made it clear that a diplomatic solution to the Iranian conundrum was preferable to any other—assuming, naturally, that such a solution was possible. After his trip to Europe in February 2005, Europeans and Americans came even closer.[2] What will happen now that the talks have failed is still open to question.[3] Tehran had threatened repeatedly to agree only to a "short" suspension, which was terminated shortly after the new president took office. A transatlantic cooperation now appears indispensable for the next steps to take.

Finally, beyond transatlantic relations, it is important to understand how crucial the Russian factor is as well. Moscow, where anxieties over Iran's nuclear program are growing, should be on board for transmission of the Iranian dossier to the United Nations (UN) Security Council. In August 2005, during the IAEA Board meeting, the Russian delegation appeared worried about the prospect of any decisive step concerning Tehran. There apparently is much less reason than in the 1990s to suspect that Moscow will help an Iranian nuclear program, at least directly. But the prospect of losing the contracts associated with Bushier because of an international crisis does constitute an important factor in Russian calculations.[4]

Eventually, a common strategy among these three actors—Europe, America, and Russia—is key to any satisfactory solution to the potential nuclear threat posed by Iran, since China, as usual, will not like to appear isolated. But the first indispensable step is a transatlantic agreement.[5]

UNDERSTANDING THE PLAYERS

Iran.

A good understanding of what the Iranian government *wants* to achieve with its nuclear program is essential; a second question being what it *can* actually achieve, both politically and technically. The first question may be answered in different ways.

Iran wishes to create an indigenous civilian nuclear fuel. Such has been the most frequent claim in Tehran: the program is entirely

peaceful, and there is no reason to deprive Iran of its inalienable right to benefit from the peaceful nuclear uses that the Nonproliferation Treaty (NPT) guarantees in a solemn fashion in its Article IV. Leaving aside the fact that the "right" guaranteed by the NPT is conditional to fulfillment by member states of their nonproliferation commitments, the problem with this hypothesis is not so much that Iran's energy resources (oil and gas) are so abundant that nuclear energy does not make economic sense. After all, Tehran has the right to prepare for the future with some further diversification of its energy policy. The problem lies elsewhere: in the long (20-year) secrecy surrounding such "peaceful" nuclear expansion and in the size and variety of its nuclear fuel cycle. The 50,000 P1 centrifuges planned in Natanz appear grossly disproportionate to Iran's only reactor under construction (Bushier), which will receive Russian fuel for the next 10 years. (Those first generation centrifuges are, in addition, uneconomical).

The kinds of imports that Iran has been engaged in also often make little sense in a civilian program. Finally, the production of materials such as uranium metal points in the direction of military ambitions as well. But if Iran actually wants a nuclear energy program after raising so many suspicions, then the solution is easy to find. The fuel cycle activities should again be suspended permanently, the facilities dismantled, and the necessary fuel will be provided by Russia, with a European guarantee, should Russia be unable to implement its pledge. This guarantee was explicitly offered to Tehran by the three European nations in August 2005 and rejected.

Iran wishes to use its nuclear program as a bargaining chip. Parallels with North Korea may be suggestive. For years, Washington has favored such an analysis concerning Pyongyang's nuclear activities. Eventually, a good deal will lead Kim Jong Il to drop his nuclear ambitions because the real objective was to get America's attention and security guarantees for the regime. There is very little evidence to support this view in the North Korean case, particularly since it appears that the enrichment route was investigated shortly after the plutonium route was closed down by the Agreed Framework in 1994. (The Joint Declaraction adopted on September 19, 2005, and challenged less than 24 hours later by Pyongyang, does not alter this analysis.) In the case of Iran, the regime may have reasons to be

fearful after the insistence by the Bush administration on "regime change" in "rogue states," and even more after having witnessed the short time needed for the American troops to overthrow Saddam Hussein in March 2003. The Iranian regime indeed may wish to get a guarantee that it can get only from America. But this cannot be the purpose of nuclear activities started in 1985! At that time, the enemy was Iraq, and the chemical attacks on Iranian troops already were 2 years old. The main problem with the West was not only its silence on the proscribed use of chemical weapons (CW) (under the 1925 Geneva Convention), but its open support of Baghdad. Yet, the fact that the Iranian nuclear program was not conceived as a bargaining chip—a pretty obvious fact—does not mean that it could not have become such a chip under different circumstances. But the choice of the new regime apparently was to close this door.

Iran wants the bomb, period. All the main indicators are pointing in this direction. If there was one major benefit of the two deals with the Europeans in October 2003 and November 2004, it was undoubtedly the extensive knowledge acquired on the Iranian program during the years 2003, 2004, and 2005. Iran was soon in no position to delay further intrusive inspections on its soil, even though the very first inspection, planned for October 2003, only took place in February 2004. After Natanz and Arak, many other sites were subject to international inspections, including Isfahan, Lashkar Abad, and the Kalaye Electric factory (Tehran), which was supposed to be a watch factory and appeared to be a pilot plant for P1 centrifuges.[6] The first explanations provided by Iran on a number of issues had to be changed and complemented at different times in order to make them consistent with findings or outside revelations. Actually, not all the information came through the IAEA inspections. The Libyan revelations and the discovery of A.Q. Khan network, for instance, were crucial in uncovering in 2004 the P2 centrifuges deal with Pakistan in 1995. But the reading of the different IAEA reports to the Board show how much came out of the hundreds of inspections performed on Iranian territory, far beyond what Iran was willing to acknowledge at the beginning of the process. In addition, it appears that Iran discussed acquiring technologies central to making nuclear arms as soon as 1986 and 1987 with members of the network run by A. Q. Khan.[7] If the bomb is the only credible objective of so much

secrecy, so many purchases,[8] and so many lies, then the main question was *when* the tactical decision to agree to the suspension would be revised. The answer was provided in August 2005.

What can Iran achieve technically? This question is difficult to discuss for a simple reason. While much knowledge has been acquired since February 2003, there is no certainty whatsoever that the entire range of Iranian nuclear activity is known. The possible existence of a clandestine nuclear program located in military facilities or in undisclosed places also has to be taken into account. By definition, what has been, is, and still may be done there is unknown. And the relationship between the civilian open fuel cycle and hidden nuclear military activities is unknown as well. What part of the civilian fuel cycle is necessary for the clandestine program? The answers to these questions are essential for assessing the current stage of development of the Iranian nuclear program. One can note, however, that the pace of conversion during the summer and fall of 2004 demonstrated a good mastery of the process, and also that the advancement of conversion activities looked urgent on the fall. This is probably why, instead of suspending conversion on November 15 as promised to the Europeans, activities went on until the adoption of the IAEA resolution—and apparently until February 18 for conversion into UF4!—in order to make the best possible use of time. This does not mean that Iran does not face some technical difficulties, for instance, when dealing with P2 centrifuges. Some technical incompetence should not be ruled out. But progress is most probably steady as well, as claimed by the Iranians themselves with or without assistance from abroad.

What can Iran achieve politically? Iran's political game is pretty transparent. First, to get overwhelming support of the nonaligned nations by insisting on the right to benefit from peaceful uses of nuclear energy. Second, to neutralize Arab countries by emphasizing Israel's nuclear capability and by promoting a "nuclear weapon free zone" in the Middle East, an objective that is particularly dear to Egypt. Third, to question available intelligence on Iran by making frequent references to intelligence failures regarding Iraq. Fourth, to "cheat and retreat," delay access, remove evidence. And fifth, to engage in discussions with as many interlocutors as possible in order to divide them. Iran has been obliged to deal with the IAEA

since its ratification of the NPT, and at the beginning of the crisis in September 2002, its relations with that agency were tense. The resolution adopted by the IAEA Board of Governors in September 2003 was rejected by Iran. The Europeans entered the stage then, and Iran quickly understood that some room for maneuver was available. The demands presented by Berlin, London, and Paris were characterized as going beyond Iran's obligations under the IAEA statute, and confusion was created concerning the perimeter of the suspension agreed on in October 2003. Fortunately, thus far the three European powers have displayed good coordination—but there may still be some differences between them that can be exploited.[9]

Then there is the commercial relationship with Russia. The Iranian hope was that Moscow would focus its attention solely on trade, and that Europe would compete with Russia. Neither of these beliefs proved exactly right, but even though Iran feels that it has been let down by the Russians, it will continue to attempt to play the Russian card. And this card still is far from being fully transparent to the rest of the world.

Finally, there is the Transatlantic relationship. Tehran first wanted to secure from the Europeans a number of commitments that would have directly opposed them to Washington. In increasing order of importance, they were: no additional discussion of the Iranian issue at the IAEA Board of Governors;[10] no transfer of the dossier to the Security Council; no sanctions whatsoever; a rejection of any threat or use of force, and of any European participation should a military operation eventually take place. No such commitments could be made by any responsible player, but the Iranian strategy seemed to be that it did not cost much to at least try!

The Europeans.

Initially, the Europeans came together for three different reasons: they wanted to show that diplomatic means could succeed in stopping proliferating nations; they were anxious to find some unity after the dispute over Iraq in 2003; and, last but not least, they felt threatened by Iranian nuclear and ballistic missile programs. The deadlock that the IAEA found itself in when Tehran rejected the September 2003 resolution was therefore the occasion for the European initiative.

Effective Multilateralism. The European Union (EU) published a common strategy on weapons of mass destruction (WMD) nonproliferation in June 2003. That document covers nuclear, biological, and CW and their delivery vehicles. One of its main objectives was to present "multilateralism" as a means not to delay action or postpone crises, as Washington was inclined to see it, but to achieve concrete results. The leading role played by the United Kingdom (UK), Germany, and France in trying to stop Iran's nuclear program is an essential part of this policy. Another important illustration of "effective multilateralism" is the Proliferation Security Initiative (PSI), launched in Cracow but signed in Paris, which was designed to interdict the passage of cargoes intended for use in WMD programs. The PSI deserves special mention, since it was the interdiction of a German ship in October 2003 that led to the discovery of the P2 centrifuges deal between Pakistan and Iran that had been made in 1995. Both cases are supposed to demonstrate "effective multilateralism" not only on paper, but also in action. Therefore, success or failure of current negotiations will be seen in the wider context of the "European way." This way is not limited to diplomacy: the European pressure on Iran has been backed by a threat to send the matter to the Security Council, which would be asked to make a decision about any further measures imposed on Iran. As a result of this pressure, in November 2004 Iran retracted its decision to resume uranium enrichment. The threat is still valid, particularly after Iran's resumption of conversion activities in August 2005, and in this context no action is excluded in principle. But the clear preference of the European nations was to obtain a permanent suspension of enrichment and reprocessing activities in Iran, as well as access and verification without sanctions, coercion, or use of force.

Solidarity of the three European Powers. Although differences between London, Berlin, and Paris exist concerning their respective situations and approaches, they have maintained close cooperation at all stages of the Iranian saga, from October 2003 onwards. The British have to take into account their military presence in Iraq, which is unpopular in the UK, and where Iranian agents or operatives are in a position to cause a great deal of trouble. This is particularly relevant since the UK is operating in Shia-dominated areas. Paris and Berlin are not burdened by this handicap. The Germans have

a Green Foreign Minister, whose party is famous for its hostility not only to nuclear weapons—a matter of contention with France—but also to military action, whatever the circumstances. This last characteristic was again very much present during the German electoral campaign in 2005. The French have a tendency—particularly difficult to swallow in London—of defining their policy in opposition to Washington. Still, the Europeans' common resolve to stop Iran's nuclear ambition by leading international pressure on Tehran took precedence over misunderstanding or disagreement on other issues. Regular meetings have been held in the three capitals and in Vienna before any discussion with the Iranians, and so far the differences between them have been more cosmetic than real. This being said, it was always clear that should diplomatic pressure eventually fail, the situation may change. The United States has dropped hints about taking military action in order to halt Iranian ambitions.[11] If such steps were taken in the future, who would be most reluctant to follow suit? The answer to this question is not easy. In fact, the greatest surprise has come first from London, not from Germany, when Jack Straw declared in November 2004 that there was no military solution to the Iranian problem. This statement came at the worst possible time, just before a crucial meeting with the Iranian delegation.[12]

The Iranian Threat to Europe. Most observers have understood the European initiative as a way of preventing some unspecified American action against Iran.[13] This interpretation misses completely what is probably the most important point: Europe, like Russia, sees Iran's ambitions as threatening. Granted, the threat is, first and foremost, internal to the Middle East. A nuclear capability would radicalize the region, may justify additional nuclear programs in Arab nations (Egypt, Saudi Arabia, or Syria), and constitute a threat to the security of Israel—whose very existence is not recognized by Tehran.[14] But the Middle East is one of the regions where Europe wants to play an increasing political role. This is true in today's world, and will become even more so in the future. If and when Turkey is admitted into the EU, Europe will have a border *within* the Middle East. This geo-strategic situation will entail additional responsibilities regarding the stability of the whole region. In this context, it is difficult to overemphasize the security turmoil that an Iranian nuclear bomb would create. Moreover, such a capability

could pose a direct threat to European territory, taking into account the range of the Iranian ballistic missiles.

Ballistic missile programs in Iran are making steady progress. When Tehran tested its *Shehab* 3 in 1998, it came as an unpleasant surprise not only to the region, but also to Europe.[15] Cooperation between Tehran and Pyongyang is well-established, ranges are increasing, and the prospect of seeing these delivery vehicles equipped with unconventional warheads is quite real. Iran's basic motive for acquiring nuclear weapons may be defensive in nature, but it may also be coercive, part of a much more dangerous doctrinal posture. Finally, Iran's involvement in terrorism is well-documented, and one cannot completely rule out threats of WMD terrorism supported by Tehran.

America.

The United States faces difficult choices in Iran, and it remains unclear whether those choices already have been made. No clear policy can be discerned from public statements made so far. The preference for Security Council intervention expressed by Washington since November 2003—which would indeed be well-founded[16]—does not mesh with a more forward-looking strategy. What exactly would the Security Council do? A clearer and more determined U.S. policy is essential to any favorable outcome.

The Burden of the Past. In 1979 when the collapse of Reza Shah Pahlavi took place, the event was seen in Washington as a political and strategic disaster. It also came as a surprise: when President Carter took office in 1977, he had a number of foreign policy priorities, among which Iran was not expected to be a problem. But on November 4, 1979, the U.S. embassy in Tehran was overrun, and the hostage crisis began—one of the worst international situations Washington has faced in the last 3 decades. Over the next 6 months, the Iranian issue was given priority at the daily cabinet-level meetings, and eventually Iran so dominated the last years of the Carter presidency that it contributed to its defeat.

Then followed the Iran-Iraq war where Washington sided with Baghdad, which further angered Tehran. More recently, the bombing of the U.S. military barracks at Khobar Towers in Saudi

Arabia in 1996 was identified as being instigated by Iran. Finally, Iran funds the Hezbollah and harbors al Qaida operatives. Since 1979 the United States has imposed sanctions on Iran that are regularly reconfirmed. Diplomatic relations remain broken, and attempts to engage even informal talks with Tehran have never succeeded. The Iranian rhetoric with regard to "The Great Satan" may now be less inflammatory than it was, but it is still harsh. Deep distrust remains present on both sides. The recent election in Tehran is unlikely to alleviate it.

The Iraqi Conundrum. Observers may be too quick to suspect secret deals between Washington and Tehran, but the paramount importance of the Iraqi dossier for the Bush administration is hard to forget. It must be integrated into any U.S. strategy over Iran. This being said, it probably would be a mistake to conclude that Washington will be soft on Iran because of Iraq. The stakes in the region are simply too high to be ignored. When former President Khatami declared that "America is not in a position to take a lunatic action of attacking Iran" because "the United States is deeply engaged in Iraq," the statement was misleading for this very reason. But Iraq does remain the primary concern. Those who believe that the Europeans are in a better position to negotiate, because they do not have to take into account the Iraq dimension as much as America does, are also wrong.

First, the UK has a problem similar to that of America, with the presence of significant British troops in the southern part of Iraq.[17] Second, Iraq is a much more complex issue in Tehran than are the results of the 2003 war. The Iranians have never forgotten that the West in general, not only the United States, supported Iraq in the bloody 1980-88 war. Nor have they forgotten the absence of international response when Iraq employed CW against Iranian troops. Although this period is now more than 20 years in the past—the first use of CW was in 1983—it is still very much present in the Iranian psyche.[18] As recently as October 2003, at the very moment when the first deal was concluded with the three European powers, an article appeared in the Iranian press with the following sentence: "One can still see the wounds on our war veterans that were inflicted by poison gas as used by Saddam Hussein that was made in Germany and France."[19]

American Deterrence. The Iranian regime may be fundamentalist, but it has not so far shown tendencies towards adventurous moves.[20] Tehran is not North Korea, at least until now. And there is no doubt in Iran that its military strength is dwarfed by that of America. Washington may have good reason to think twice before deciding on any use of force against Tehran, but the last thing the mullahs or new president want is a military confrontation with Washington.[21] If one were to take bets on who is more afraid of a military scenario, the answer is clear. It also is obvious that any attack against Israel by Tehran, particularly a nuclear attack, would trigger a massive American response. What is at stake for the Iranians is both the security of their country and the survival of the current regime. Authoritarian regimes tend to be conservative by nature: they know how the famous Clausewitzian concept of "friction" could change even the most firmly established political situation during a war. And if the current regime has succeeded in eliminating any meaningful opposition, the fact is that it also appears inexperienced and far from firm.

Russia.

In a recent article, an American official with direct knowledge of the subject stated that "Stopping Russian assistance to Iran's nuclear program was a high priority for the United States throughout much of the 1990s."[22] Moscow long has been an ambiguous player with regard to Iran and may have changed in recent years—the coming months will tell. In the past, Minatom has had confidential agreements with Tehran, related in particular to the training of experts and the export of equipment—both of which could have helped the Iranian military program. Russia may still fear that the full extent of its deals with Tehran will surface. Moscow also still has important economic interests in the country. But the acquisition of a nuclear capacity may be increasingly frightening to the Russian leadership as well. And rightly so, since Iran is far from being an ally to Moscow. Conflicting interests are therefore shaping Russia's position.

A more serious partner than in the past? Taking into account the experience of the 1990s, Russia has long been considered an ambiguous partner on Iran. The situation seemed to change in

the fall of 2003, probably because some new elements about the Iranian nuclear program became known in Moscow. The question is whether the leadership in Moscow has given precise instructions—to Minatom/Rosatom in particular—to exert utmost prudence. The decision to withhold the contract concerning the fuel destined for the light water reactor at Bushier up to the moment where sufficient guarantees were acquired by the Russians has been seen as an indication that Moscow not only actively supported the European talks, but even wanted to contribute to them in kind. The contract concerning the return of the spent fuel was signed on February 27, 2005, and the Bushier reactor may start operating in December 2006, with the fuel delivered at the beginning of the year. Granted, IAEA inspectors are supposed to "monitor closely the use of the fuel and where it goes," according to the IAEA's spokeswoman Melissa Fleming, but the Russian move has raised some concern related to a possible crisis just during or after the delivery. The crucial question is what will happen to the fuel if Iran decides to put an end to all international inspections. Under the current circumstances a wise decision would be to delay the date of delivery.

There is no doubt in Moscow about Iran's intentions. At the highest levels of the Russian leadership, the judgement concerning Iran's intentions is no longer an enigma for the outside world: Moscow strongly believes that Iran has nuclear weapons ambitions. Apart from the indications that can be found in the IAEA reports, which are already strong enough, Russia undoubtedly has intelligence of its own on the subject. It may even know more than the West does about people involved in the program, about sensitive imports, and even about additional locations. After all, since so many people from Minatom/Rosatom—and other agencies—have been in Iran over the years, it is difficult to believe that such is not the case. And the Russians are no amateurs in the area of intelligence. Sharing this information would add confidence to the Moscow/West dialogue on Iran, but is unlikely. An opposite result would occur if influential officials in Moscow were to continue making ambiguous statements about the nature of the program. Such was the case in January 2005, when Russian Foreign Minister Serguei Lavrov declared: "I have no basis to believe that the situation is diverging from a normal course and that the peaceful character of Iran's nuclear program

will be changed";[23] and again in February, just before the signature of the spent fuel contract, when President Vladimir Putin, himself, contrary to his own beliefs, declared that there was no indication that Iran was pursuing a military nuclear program. In August 2005, similar statements were again made, raising doubts about Moscow's commitments.

Moscow recognizes the security threat, but not openly. Lavrov's and Putin's statements notwithstanding, there are indications that, in the context of instability at the Russian southern border, this additional and most serious development is actually worrying Moscow. The question is whether consistent diplomatic positions based on this awareness will be adopted, particularly at a time when new tension is rising with Washington over the "democracy" issue, Ukraine and the Baltic states. An important question in Moscow is whether Iran has reached the point of self-sufficiency, and whether the empowerment of those seeking a nuclear breakout is generating an unstoppable proliferation momentum. Iran is fully aware of some change of mood in Russia and is somewhat concerned by it, trying to keep Russian statements as ambiguous as possible. As long as Moscow does not openly recognize the military nature of the program, it will be difficult to know what will happen should the dossier be transferred to the UN Security Council. Russian support may be difficult to get, as Chinese support is, for energy reasons.

For all the above reasons, Russia should be at the same time reassured and asked to provide more clarity in its position. Europe and America can duly consider Russia's security fears. Russia, in return, should coordinate its actions and support transmission to the Security Council if talks run into a dead end. But will it?

The IAEA.

The Only Multilateral Player. The IAEA is in unique position: what the inspectors report to the Secretariat, and what the Secretariat reports to the Board[24] are widely seen as unbiased by any national position. Whether this is entirely true in the case of Iran remains to be seen. Within the hierarchy of the Agency, there seemed to be different viewpoints concerning the Iranian dossier, highlighted by an interview Pierre Goldschmidt gave to the French newspaper,

Le Figaro, when he left office in June. The differences of views are sometimes palpable in the reports. And there is also some obvious reluctance at the IAEA to do anything that could result in a transmission to the Security Council, whatever the findings on the ground. In addition, there is no real expertise within the IAEA on weaponization, with the exception of the Head of the Action Team dedicated to Iraq who took another position in the Agency. Finally, there have also been factual mistakes, for instance when an IAEA report in February 2004 identified P1[25] and L1[26] as G1.[27] This has raised useless suspicions about the Agency's competence. More serious is the fear, expressed by George Perkovich in an open letter to the IAEA's Director General, that "Many capitals are so resistant to the current administration bullying that they urge you to cook the books to produce reports that will forestall another Iraq-style showdown."[28] Such a belief would call into question the neutrality of the Agency and its ability to report facts, or rather *all* the facts, to the Board of Governors. In this context, it is interesting to note that at the February 2005 Board, for the first time, Mohammed El Baradei issued no formal written report on Iran (the same occurred again in June). This shift was decided at a time when significant new elements had surfaced (to mention just two of them: the—undeclared—existence of a tunnel just north of the uranium conversion facility at Isfahan, and the new evidence concerning an extensive offer by the A. Q. Khan network in 1987). One can also wonder why the IAEA asked for an entire month in August to produce its report on the implementation of safeguards in Iran, losing precious time at a moment when Iran was resuming conversion activities at full speed.

The IAEA has an uneasy relationship with Iran. The story of the Iran/IAEA relationship is one of concealment and constant efforts to hinder inspection,[29] and of constant reluctance on the part of the IAEA to recognize clear violations or make full use of its powers. In January 2005, while a EU3/Iran meeting was in progress, UN nuclear experts were allowed to take environmental samples from some green spaces in the complex of Parchin.[30] For months, the Agency had been pressing Tehran for permission to inspect the military complex which was used to produce high explosives and missiles. If the intent was to assess proscribed Iranian research concerning

explosives related to the bomb, environmental samples will be insufficient.[31] And in addition, access was only very partial. But, as a result, Iran is now in a position to pretend that access to Parchin has been granted—and that no nuclear activity had been detected. Why has the IAEA agreed to such bizarre modalities of inspections?[32] Consequently, the IAEA did ask Iran to allow a second inspection on the same site, which has not been accepted so far.[33] The modalities of inspection should include "complementary access" to the site and its facilities, in conformity with the Additional Protocol signed by Iran, rather than just environmental samples in a limited area.

The IAEA is an ambiguous partner for the Europeans. In October 2003, the IAEA, then engaged in a standoff with Iran, was somewhat irritated by the first European deal. The Agency narrowed the perimeter of the suspension agreed among the three European powers with the argument that it was too comprehensive to be acceptable under the IAEA statute. A significant problem has also surfaced because the IAEA will never pass judgement on the implementation of the "suspension" agreed with Iran by the EU/3, while the Agency is recognized as the ultimate authority to decide compliance or violation with commitments undertaken by Iran and has a November 2004 Board resolution supporting the EU/Iran agreement. When quality tests were undertaken by Iran on pieces of centrifuges in January 2005, for instance, they were thought to be inconsistent with the November 15 deal, but the IAEA did not consider them a breach, having in mind the statute more than the EU/Iran agreement. In general terms, there is no doubt in IAEA minds that the way the Iranian program was carried out was unjustifiable economically and points to a military program, but there is no clear statement of this kind from the Agency. IAEA reports do not even always permit obtaining a clear view of what is going on in Iran:[34] in the November 2004 report to the Board, for instance, where a long list of breaches from Iran had been listed (see paragraph 86 of the report), a sentence inconsistent with the report had been inserted: "To date, there is no evidence that the previously undeclared nuclear material and activities referred to above are related to a nuclear weapons program." To what else could all the concealment, conversion activities in uranium metal, multiple attempts to acquire beryllium, and contradictory statements be related? Such a sentence

having been written, the IAEA should at least show the international community that it indeed has done everything possible to justify the assertion. "Complementary access" to additional sites, including military sites, will be necessary for that purpose, but the Agency appears unwilling to make full use of its rights. Only in February 2005 was there a clear backing by the IAEA for a comprehensive deal with the Europeans that would address nuclear power, regional security, and trade, but this was at a time when such a deal already was considered highly unlikely in European capitals because the main objective of the talks—cessation of enrichment and reprocessing activities—was already simply rejected by Tehran at that stage, without any alternative solution presented by Iran to the Europeans.

SOME TRANSATLANTIC SCENARIOS

As Robert Einhorn has put it: "The Iran nuclear issue poses two critical tests for the United States and Europe. The first is whether, after the deep divisions over Iraq, Americans and Europeans can work together effectively on an issue of major importance to each other as well as the world at large. The second is whether dissuading a resourceful, determined country from acquiring nuclear weapons is possible through means short of military force. The two tests are, of course, closely related."[35] It is with this in mind that the following scenarios should be appreciated.

America Joins European Negotiations.

Good arguments, which are unlikely to be effected at this stage, could be presented in favor of this move, if Iran returns to suspension. A transatlantic deal with Iran would be the best scenario for all players concerned: Iran would shut down its fuel cycle activities and keep proliferation-resistant nuclear reactors; the nuclear fuel would be provided by Russia with European guarantee and returned to the supplier. The abandonment of Iran's military nuclear ambitions would be accomplished in return for economic and security benefits. Whether such a bargain can be realized with Iran is open to question. It appears very unlikely with the new government and the new

negotiator, who never accepted contemplation of a permanent suspension. But such was also the position of the previous team, and the price to pay for continuing fuel cycle activities useless for a civilian program may focus minds at some point. If this scenario would become more realistic than it is in September 2005, Washington should be on board to help achieve it: the main benefits cannot come from Europe alone. The only meaningful security guarantees are American, and trade with Iran is also meaningless without American sanctions being lifted.[36] In any case, negotiations should in no case be bilateral, as some Iranian officials have sometimes suggested, because this would only add confusion and room for maneuver in Tehran. The benefit of an American involvement can result only from good coordination with the Europeans. Should the talks succeed, Washington would be part of the success. And success could mean either reaching an agreement or buying time in order for the Iranian leadership to evolve. Should negotiations fail, the Bush administration would be in a position to maintain that it has tried to help the diplomatic process to no avail. As a precaution though, Washington could present three conditions to the Europeans. First, it would be prepared to help the process only if the suspension could be considered permanent in an *explicit*—not only implicit—manner, with an endorsement from the Security Council now that Iran has breached a second agreement with Europe. Second, the UF6 produced in Iran since August 2005 should leave the territory of Iran. Third, any significant finding would lead the Europeans and the Americans to work together to transfer the Iranian nuclear dossier to the Security Council for harsher measures as soon as November 2005. There the United States, Europe, and Russia would be able jointly to choose a range of measures *that should be determined between them in advance*.

Last but not least, America—along with the European powers—could mobilize Arab states that are also worried about nuclear developments in Iran. As George Perkovitch notes, they currently are much too passive. Egypt, for instance, sees it very much as Israel does: as a threat to its very existence, but its diplomacy at the NPT review conference in May 2005 has, in fact, shielded Iran. Why? Gulf nations have no doubt about Iran's hypocrisy when Tehran tries to neutralize them.[37] Nuclear weapons in Iran are seen as an indication

of Iran's will to exert dominance over the region, particularly over the Gulf, and to reshape the Middle East.

This first scenario had gained some ground at the beginning of the second Bush administration. After returning from Europe in February 2005, President Bush reportedly asked his advisors to think about a list of incentives to offer Tehran as part of European talks with Iran. But events on the Iranian political scene since have again put it on the back burner.

Europe Joins America in the Security Council.

This is an outcome that the Europeans have never ruled out. Again on January 19, French Minister of Foreign Affairs Michel Barnier stated that, "In case the negotiations fail, the dossier will be brought to the Security Council where a resolution will define what the international community should do." And in August 2005, Jacques Chirac repeated the same threat: "If Iran does not reestablish confidence, the Security Council will have no other choice than to take up the dossier." In the first half of 2005, the Europeans have been delaying the Iranian program but not solving the problem.[38] What was lacking in the European negotiations was a clear threat of precise punitive measures to back the talks. Without such a threat, the talks were actually doomed.[39] The Security Council was not seen by Iran as a realistic scenario because the kind of action that could be adopted in New York remained unclear. Beyond a clear endorsement of the European demands, the UN Security Council could ask for more intrusive powers for the inspectors who currently have no sufficient access to sites, documents and personnel; adopt sanctions related to investments on oil and gas infrastructures, very much needed in Iran; decide on an arms embargo; and at the end of the process, if nothing else has worked, an oil embargo and even a threat of further action. The only condition to fulfill is to take into consideration the importance of time : if action is not quick enough, the international community may find itself with another North Korea, able to blackmail the world with capabilities that are not fully known.

The second round of negotiations has been presented all along as the "last chance" for Iran. The deal was to suspend any transfer

to the Security Council while the suspension of fuel cycle activities were themselves suspended. At the present stage, no option should be withdrawn from the table,[40] and such is the IAEA message of the September resolution. But it is fair to acknowledge that a transfer to the UN Security Council would have been easier in November 2003,[41] when a long list of violations was acknowledged, than now, when additional problems have surfaced without any major new violation being identified. By major violation, one can understand either further discovery related to nuclear materials or Iranian activities on weaponization. So far, the strongest evidence of a nuclear weapons program is the 1987 A.Q. Khan offer, and, if confirmed, the thousands pages of Farsi-language computer files that were revealed by *The Wall Street Journal* in March and July, documenting Iran's efforts to adapt its *Shehab 3* missile for delivering a nuclear warhead. The paper gives specifications for size, weight and even height of detonation. This highly classified information was reportedly shared with the three Europeans and with the IAEA. However, short of using intelligence, transfer to the UN Security Council can still use past violations, that, according to the IAEA statute, *shall* be reported to the Council, without any specification of date. In addition, the IAEA has recognized in its reports to the Board that it was not in a position to verify in detail the chronologies and descriptions of the experiments which took place in Iran, and that the lack of records with regard to the amount of uranium rendered impossible a precise material accounting in the country. This is also a ground, according to the IAEA statute for referring the matter to the UN Security Council.

The Two Sides of the Atlantic Break Apart.

This is Iran's preferred scenario, and the most dangerous outcome. It could happen in a number of ways: the Americans continuing to remain inactive on Iran, insisting on regime-change;[42] the British giving priority to the fear of Iranian interference in Iraq, and downplaying the Iranian nuclear threat;[43] the Germans remaining reluctant to use any means of coercion, particularly during an electoral campaign; the French—along with the British and the Germans—refusing to condone any U.S. threat to use force,

whatever the circumstances.[44] In addition, taking into account that the only meaningful sanction would concern investments on oil and gas infrastructures and Iranian oil sales, there may be reluctance in the three capitals to go that far for a number of reasons. One is the Iraqi precedent;, another is the effect on oil prices, already very high; and a third is China's already stated position that Beijing would veto such measures at the Security Council. But whether this European reluctance would amount to a transatlantic divide is unclear. After all, America also might worry about the international consequences of such a move. But all the players would be well-advised not to forget that this particular dimension of the Iranian nuclear issue is far more complex. If Iran continues its military program, a number of regional players will be tempted to follow suit—including Saudi Arabia. Since this is the major oil producing nation in the world, what will be the effect on oil prices and how would this new problem be dealt with?

CONCLUSION

Time is running out in September 2005 and stakes are high for both America and Europe. A multipolar nuclear Middle East is the last thing both partners wish to see develop.[45] For that reason, even an Iranian advanced nuclear capability that has not yet built a bomb is unacceptable. Such a situation would give rise to similar ambitions in the region and encourage the same kinds of military developments. As North Korea has taught us in East Asia, where Japan increasingly is nervous, ambiguity is dangerous.

ENDNOTES - CHAPTER 12

1. As Robert Einhorn puts it, "Prospects for forging an agreed transatlantic approach toward Iran depend to a significant extent on whether the United States and Europe share a common understanding of Iran's nuclear intentions." "A Transatlantic Strategy on Iran's Nuclear Program," *The Washington Quarterly*, Autumn 2004. They did not in the 1990s. They now do.

2. On March 11, 2005, the U.S. Secretary of State issued a statement supporting the EU/3 efforts, underlining that "The Europeans have been very clear with the Iranians that there will have to be certain objective guarantees that Iran is not trying to use a civilian nuclear program to provide cover for a weapons program."

3. But for the first time on March 10, 2005, the three European powers have made clear that they "will have no choice but to support referring Iran's nuclear program to the UN Security Council," if Iran does not maintain the suspension of all its nuclear enrichment related and reprocessing activities and does not fulfill all its international agreements.

4. The agreement signed on February 27, 2005, between Russia and Iran concerning the fuel necessary for the Bushier reactor was consistent with the European negotiation in that it showed that Iran does not need fuel cycle activities of its own. But the fear of losing this contract may now have undesirable consequences.

5. The Euro-American talks at the end of January in Washington may well have had this purpose, in preparation for the visit to Brussels of President Bush in February. And the need for closer contacts was felt in August as well, when resumption of conversion activities took place in Iran.

6. Among the other inspected facilities were Bushier Nuclear Power Plant, Esfahan Nuclear Technology Centre, Laser Separation Laboratory, Lashkar Ab'ad, Tehran Nuclear Research Centre, and Karaj Nuclear Research Center.

7. The evidence relunctantly was turned over by Iran to the IAEA in February 2005. Mr Khan's representatives offered in particular the technology necessary to cast uranium metal.

8. Or even attempts of purchases. For instance, there is evidence that Iran has attempted to purchase significant quantities of the substance. Five countries were involved in the attempts: Russia, China, Germany, Kazakhstan, and the United Kingdom. According to *Reuters*, January 21, "The only successful import of beryllium by Iran was a few grams purchased in Britain." There is no evidence that the other attempts succeeded.

9. The common letter signed on March 10 by the EU/3 is the best show of unity so far. It states clear readiness to refer Iran's nuclear program to the UN Secuirity Council under certain circumstances, namely if full suspension is not maintained. Germany apparently had forgotten it in August.

10. When Iran renewed its enrichment activities in June 2004, the pretext was already that the Europeans had not honored their "promise" to remove the Iranian nuclear issue from the IAEA agenda. No such promise had ever been made.

11. At the beginning of the second Bush mandate, though, a number of statements were made in Washington concerning the absence of any military plans against Iran in the near future.

12. Probably to show that he did not do it by mistake, Jack Straw repeated the same position on January 19, saying that there was no alternative to Europe's approach of using diplomacy to try to persuade Iran to give up technology that could be used to make nuclear weapons.

13. This interpretation was revived in January 2005 when media reported that the United States had been flying drones over Iran to locate hidden nuclear sites.

On February 15, Iranian state TV even reported that a missile had been fired from an unknown fighter not far from the Bushier nuclear reactor.

14. It would be more accurate to say that the regime in Tehran calls explicitly for the destruction of the State of Israel.

15. Since then, progress has been made in Iran. In October, Tehran announced successful trials of its *Shehab* 3 ballistic missile with a range of 2000km, putting parts of Europe, as well as Israel and U.S. bases in the Gulf, within reach.

16. Because of the many violations Iran has already committed in the last 20 years!

17. In June 2004, eight servicemen were abducted by the Iranian Pasdaran to remind London, if need be, of their nuisance capability.

18. Rafsanjani himself noted: "The war taught us that international laws were only scraps of papers." See IRNA, 19 October 1988.

19. To my knowledge, the real issue on the French side at the time of Iraqi chemical attacks on Iranian troops was the use of French aircraft for the delivery of the gas.

20. In January 2005, the ISNA Student news agency quoted President Rafsanjani as saying, "The Islamic Republic is not a place for adventurism."

21. On January 18, there was a cryptic statement in Tehran: "We are able to say that we have strength such that no country can attack us because they do not have precise information about our military capabilities due to our ability to implement flexible strategies. We can claim that we have rapidly produced equipment that has resulted in the greatest deterrent." The IAEA should ask for an explanation concerning the meaning of what appears to be a nuclear threat. But it remembers Saddam's statements and Kim Jong Il's statements more than an actual threat that would lead Iran to the Security Council.

22. Robert Einhorn.

23. Interfax News Agency, January 18, 2005. Serguei Lavrov was in Petrozavodsk when he made this statement. The worst part of the statement is actually what follows: "The Iranian leadership assures us that the peaceful character of the nuclear program is precisely the aim of Tehran." An expert in leadership like Serguei Lavrov certainly knows what confidence can be attached to such empty claims.

24. There have been seven written reports to the IAEA Board so far: GOV/2003/40, dated June 6, 2003; GOV/2003/63, dated August 26, 2003; GOV/2003/75, dated November 10, 2003; GOV/2004/11, dated February 24, 2004; GOV/2004/34, dated June 1, 2004; GOV/2004/60, dated September 1, 2004; and GOV/2004/83, dated November 15, 2004.

25. Iranian centrifuges in Natanz, Iran.

26. Iranian centrifuges found in Libya in 2004. The Iranian and the Libyan models are based on design information stolen in the Netherlands by A. Q. Khan.

27. The G1 is a subcritical, single tube German model from the 1960s far simpler than the supercritical Dutch centrifuges. This mistake has correctly been denounced by *Nuclear Fuel* in January 2005, and the IAEA consequently should make a corrigendum in its next report.

28. George Perkovich, "Memorandum to Mohammed El Baradei," *Foreign Policy*, January-February 2005, pp. 60-64.

29. A flavor of the uneasy IAEA/Iran relationship can be provided by the last IAEA report, GOV/2004/83, where one can read on the first page—in the inimitable IAEA style—that the September Board of Governors,

> strongly urged that Iran respond positively to the Director General's findings on the provision of access and information by taking such steps as are required by the Agency and/or requested by the Board in relation to the implementation of Iran's Safeguards Agreement, including the provision of prompt access to locations and personnel, and by providing further information and explanations when required by the Agency and proactively to assist the Agency to understand the full extent and nature of Iran's enrichment program and to take all steps within its power to clarify the outstanding issues before the Board's 25 November 2004 meeting, specifically including the sources and reasons for enriched uranium contamination and the import, manufacture and use of *centrifuges.*

30. Out of four areas identified by the Agency to be of political interest, the Agency was permitted to select one area. In addition, in that area the Agency was requested to minimize the number of buildings to be visited.

31. Unless some radioactive (other than fissile) material has been used in the process.

32. There was probably an internal debate on this subject within the IAEA since some days after the useless inspection, the agency was expressing the wish to come back to the Iranian military complex.

33. See "IAEA wants to conduct second Parchin inspection," *Nuclear Threat Initiative*, Global Security Newswire, January 19, 2005. Tehran considers that there is no justification for any additional visit.

34. What can be made for instance of the following sentence: "The Director General noted an increased degree of cooperation by Iran, while noting that some of the information and access were at times slow in coming and incremental, and that some of the information was in contrast to that previously provided by Iran." GOV/2003/75, November 10, 2003.

35. Einhorn.

36. This being said, contrary to the security basket, where the United States is the only serious player, the Europeans have a list of possible exports and investments that present a real interest for the Iranians.

37. The First International Institute for Strategic Studies (IISS) Gulf Dialogue in Bahrain (December 3-5, 2004) made this point abundantly clear. See also George

Perkovitch, "Iran is not an Island: A Strategy to Mobilize the Neighbours," forthcoming Carnegie Endowment for International Peace Policy Brief.

38. In order to have a clearer view on this point, it would be necessary to know how the overt program, which is suspended, is connected with the covert program.

39. See Gary Samore to AFP January 20: "In a way, the American threat to bomb Iran is also indirect pressure on Europe to do its very best to achieve a diplomatic solution."

40. The *New Yorker* has carried a detailed and only partially denied report that U.S. forces are carrying out missions inside Iran, pinpointing sites that could be hit by air-strikes. If such is the case, it may be part of a deterrence policy more than the indication that a choice has already be made.

41. This has long been the position in Washington, and the Americans have a point here.

42. A more moderate regime might bring some positive development, but it should be kept in mind that any threat of regime change would have the effect of strengthening the more conservative Iranians and that the Iranian youth are apparently supporting the nuclear option. See Ray Takeyh, "Iran Builds the Bomb," *Survival*, Vol 6, No. 4, Winter 2004-05, p. 59. In addition, reformers have lost ground during the last years.

43. How the British elections in the spring will influence the negotiating process is an open question.

44. In January 2004, a number of European leaders have indicated that talks with Iran were excluding any threat to use force. Geermany repeated this position in August, when talks failed.

45. This is why, as a group of eminent experts gathered in November 2004 in Washington put it: "Just as the Europeans must be prepared to punish Iran should it fail to uphold the latest agreement, the United States must be willing to engage in a security dialogue with Tehran." See Iran Watch Roundtables (with the following panelists: Rolf Ekeus, Stanley K. Fraley, John Sigler, Terence Taylor, and Marcus Winsley).

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