

IRAN with Nuclear Weapons

Anticipating the Consequences for U.S. Policy



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Executive Summary

A growing body of evidence leaves less and less doubt that Iran's drive to develop an indigenous, closed nuclear-fuel cycle is tied to the ambitions of its leadership to possess a nuclear weapons capability. Notwithstanding the protestations of Ayatollah Ali Khamenei, Iran's Supreme Leader, Iran appears to be embarked on a clear path to cross the nuclear threshold and become a nuclear weapons power. By one estimate, Iran is 80 percent on the way to developing a functioning nuclear weapon. Up until now, and as reflected in the 2007 National Intelligence Estimate (NIE) on Iran's nuclear programs, Western analysts, with the exception of the Israelis, had been saying that Iran was not likely to have in hand the knowledge base and capabilities to cross the nuclear threshold until sometime in the mid-to-later years of the next decade. Since the release of the NIE, however, new information has come to light, prompting nuclear experts in the United States, Britain, and France to revise their earlier estimates. Most now conclude that Iran is not only embarked on a weapons path, but is likely to attain enough fissile material for an indigenously produced bomb far sooner than had been anticipated, sometime in the next year and a half to two years. This is more or less consistent with Israeli estimates that suggest late 2009 as the earliest possible date that Iran will be technically capable of producing enough highly enriched uranium for a weapon. The Israelis further contend that once the Iranians produce enough enriched uranium, they could build a nuclear weapon in six to eighteen months.

In and of itself, an operational Iranian nuclear weapons capability is cause for concern in Western security circles because of its implications for cascading, or what used to be called horizontal or onward proliferation. Beyond that, however, an Iranian nuclear weapons capability would have important effects on U.S. strategic and operational planning. Very specifically, an operational nuclear weapons capability at the disposal of Iran could have profound ramifications for Washington's ability to reassure regional friends and coalition partners, to operate militarily in the Persian Gulf region, and to defend vital strategic interests, especially—but not limited to—ensuring America's right of innocent passage in Gulf waters and the safety and security of vital sea-lanes over which much of the world's energy supplies flow. We need only to ponder the problems posed by an Iran *without* nuclear weapons to begin to assess the challenges of an Iran in possession of an operational nuclear weapons capability. Such an Iran could be an even more dangerous adversary, depending on the nature of the regime in Tehran, the precise motivations behind Iran's nuclear weaponization, and the external threat that the Iranians perceive. Moreover, Iranian assumptions about the role of nuclear weapons, their targeting, and the perceived escalatory options such weapons are perceived to confer on Iran may bear little in common with those of the United States, which are still largely an outgrowth of the strategic dynamic (and presumptions about cost/benefit calculations) that prevailed during the Cold War. The focus of this report, therefore, is on how a nuclear Iran might choose

to exploit a nuclear weapons capability to achieve its strategic goals, and on what this, in turn, would mean for U.S. and allied/partner defense and deterrence planning.

In order to understand more precisely just how a nuclear Iran might manifest its power, we have developed three heuristic models to examine the implications of Iran's proliferation: (1) a defensive Iran, (2) an aggressive Iran, and (3) an unstable Iran. In assessing expected characteristics of Iranian behavior in each of these models, we have identified four issue areas, or clusters, upon which our analysis is based: (1) the type of nuclear capability that Iran would likely field; (2) the conditions under which Iran might resort to nuclear weapons use or threatened use; (3) the extent to which Iran's military strategy and declaratory policy relating to nuclear weapons possession might embolden Iran and/or its proxies to pursue more aggressive policies in the region and vis à vis the United States; and, (4) Iran's potential to transfer nuclear materials to others in the region and/or the implications of an Iranian weapon for nuclear cascading. With these three models providing the framework for analysis, we then provide a more in-depth assessment of the strategic, political, and operational planning implications of Iran's emergence as a nuclear weapons state.

Among the salient conclusions of our assessment are the following:

- Nuclear weapons remain an enduring feature of the global security landscape, with more nations, and even al-Qaeda, expressing interest in developing or acquiring precursor technologies and delivery systems. Apart from power and influence, nuclear weapons have variously been identified as the ultimate defense capability (India), an existential deterrent (Israel), an asymmetric weapon (al-Qaeda), and a defense against regime change (North Korea). The danger of nuclear weapons use in regional conflicts may in fact be increasing with the incipient breakdown of the Non-Proliferation Treaty (NPT) regime and the relatively greater availability of nuclear components, materials, and delivery systems that can be bought or sold on the "black" market. Iran's nuclear breakout threatens to affect regional non-nuclear states, including the Gulf Cooperation Council (GCC) states, Egypt, and Turkey, and their deliberations concerning their security alternatives, including in the cases of Egypt, Turkey, and Saudi Arabia, consideration of the nuclear option. The cascading effect of Iran's nuclear proliferation will bring about new deterrence planning challenges, and the safety, security, and custody of nuclear stockpiles will become even more pressing issues than they are today.
- An Iran with nuclear weapons would challenge U.S. military-operational planning assumptions regarding permissive and non-permissive environments, and raise serious questions about "extended deterrence" guarantees to formal allies (including those in NATO), coalition partners (such as the GCC states), and other countries of direct interest to U.S.

security, notably Israel. It would also raise questions about crisis management and escalation dominance, particularly with respect to firmly established taboos regarding the actual use of nuclear weapons for anything less than national survival. In the best case, a nuclear Iran might act within the confines of established Western deterrence thought, or, in a worse case, it might operate under a completely different set of assumptions governing nuclear weapons use. If this is so, the United States could no longer assume that it would control the escalation dynamic in a crisis or war with Iran. A nuclear Iran has the potential to implement “compound escalation,” or the manipulation of seemingly unrelated issues to raise the stakes for an adversary. Iran could, in this context and under any of the three models postulated here, choose to widen a regional war using proxy non-nuclear forces, or it could deliberately escalate a crisis by threatening to use nuclear weapons if its conventional forces risked defeat or if asymmetric attacks failed to achieve their strategic objectives. It is entirely possible that Iran, certainly in the case of an aggressive Iran, would strive to employ Hezbollah forces deployed outside the Middle East, or seek to widen the geographic scope of the conflict by targeting U.S. allies in Europe, or the United States directly.

- With nuclear weapons, Iran might be emboldened to be more aggressive in a crisis, either by deploying nuclear weapons first, or by providing a security umbrella over proxy forces engaged in terrorist or other irregular warfare (IW) attacks either to control the escalation chain or to deter the United States from entering what the Iranians might consider to be a regional conflict. Here, the nature of the regime in Tehran appears to matter, and in our defensive-Iran model, if nuclear weapons were deployed to deter the United States from attempting regime change, they would be considered more or less as “existential” capabilities, or weapons of last resort, never to be used as war-fighting instruments on the battlefield. They might, however, be employed to test enemy intentions or to warn an adversary from pursuing an attack against Iran, but never as part of an integrated strategic-operational military campaign. In fact, under the defensive-Iran model, an Iranian regime might conclude that its best option lies in concealing its nuclear programs for as long as possible, preferring to operate in the twilight as Israel currently does, to create sufficient ambiguity about the existence of Iranian nuclear weapons, to inject an element of uncertainty into the regional power equation. Never being quite certain if Iran had an operational capability, potential adversaries would still have to engage in worse-case planning for contingencies involving Iran.
- The defensive-Iran model assumes a commitment to a minimum deterrence posture. As traditionally understood, a minimum deterrence posture is based on a force that is small but reliable and whose sole objective is the deterrence of a direct attack. Iran’s strategy under this model therefore is likely to be accompanied by a declaratory policy that specifies the conditions under which Iran would use or threaten to use nuclear weapons. Under this model, the Iranian leadership might declare that Iranian nuclear weapons would only

be employed in retaliation against an attack on Iran, be it a conventional or a nuclear attack. Iran could thus be the first to use nuclear weapons in a contingency, but only after Iranian territory had been attacked. Because Iran's nuclear weapons would be used only in extremis, according to the prevailing assumptions of this model, and in response to an enemy attack, the priority of a defensive Iran would be to convey very publicly the defensive nature of its deterrence posture. Declaratory policy would be very important in this regard, especially with respect to making "red-lines" very clear and regarding the intention to use nuclear weapons in the face of any attack on Iran's territory.

- Operationally, a defensive Iran would be likely to develop a nuclear force that was dispersed and concealed so as to enhance its chances of surviving a preemptive (or preventive) attack. It is important to note that the defensive-Iran model, however, would raise for Iran's leadership the need to consider options for launch-on-warning (LOW) or launch-under-attack (LUA), both of which would require a far more sophisticated command and control and intelligence network than Iran presently has in place. To attain a credible LOW and/or LUA capability, Iran would have to enhance its intelligence, surveillance, and reconnaissance (ISR) capabilities to detect an adversary attack and, at the same time, develop and/or acquire more sophisticated defensive technologies to protect high-value aim-points, including nuclear weapons delivery vehicles and storage sites.
- Of the three models posited in this study, an Iran that strives to develop a defensive deterrent force would be the least challenging for the United States technically, but very challenging politically because it assumes that the Iranian leadership would not resort to nuclear weapons use or threats lightly, most probably not unless Iran were the object of an enemy first-strike nuclear or non-nuclear attack. A nuclear posture along these lines would cast a long shadow over Iran's interactions with states in the region and with trading partners in Europe and (possibly) Japan, confronting the United States with the need to reassure jittery allies and to protect them from intimidation and Iranian efforts to shape the political agendas of its Persian Gulf neighbors at a time when allies or coalition partners might not agree about the nature and extent of the threat from a defensive Iran. Unlike the case of an aggressive Iran where political consensus may exist on the nature of the threat that a nuclear Iran poses, a defensive Iran would probably place the onus on the United States for developing a common threat picture, and it would require a vast and tailored diplomatic effort to bring U.S. allies and coalition partners onside with respect to resisting Iranian persuasion.
- Our aggressive-Iran model provides the United States with a worse-case scenario. An aggressive Iran aspiring to leadership in the wider Middle East would have to neutralize the deterrent effect of Israel's conventional and nuclear power, and ensure that it has the

capacity to influence the escalation dynamics in a confrontation with the United States. It might also have to have in hand a deterrent force that would be widely perceived to be at least as effective as that of India and symbolically important to all Muslims, despite it being a Shia bomb. Presumably, the leadership of an aggressive Iran would strive to develop new capabilities to threaten the United States directly, such as an intercontinental ballistic missile (ICBM), the creation of anti-satellite (or ASAT) and/or electro-magnetic pulse (EMP) assets, or through the deployment of nuclear-tipped missiles that can be launched from ships operating off the American coasts. With this model, Iran would also likely reject the “no-first-use” principle, and adopt a declaratory policy that makes clear its intention to use nuclear weapons if vital Iranian interests were at risk. This is a model that also envisages the possible use of small bombs and asymmetric tactics (a “dirty” bomb), including the employment of a nuclear device to disrupt the functioning of U.S. Fifth Fleet Headquarters or other assets, or to inflict damage on allied/coalition partner territories (such as Israel or Saudi Arabia), or economic infrastructure (although a nuclear weapon would not be necessary to destroy offshore oil platforms or natural gas pipelines). Iran, under this model, would likely pursue as well more advanced collateral technologies (satellite guidance or warhead miniaturization, for example) to enhance the trappings of its nuclear power.

- Motivated by pretensions to regional power leadership, an aggressive Iran is unlikely to relinquish control over its nuclear weapons by transferring weapons, components, or know-how to an ally (i.e., Syria) or proxy forces (e.g., Hezbollah). In this regard, an unstable Iran (our third model) poses the greater proliferation threat/challenge to U.S. planners. However, with our second model, an aggressive Iran, it is reasonable to contend that Iran might consider extending a deterrence umbrella over selected partners, Syria, for example, or perhaps even Hezbollah, as a means of empowering their actions in situations where Iranian interests might be served. In either instance, however, operational control of Iranian weapons would reside with Iran’s leadership in this state-centric model. The only possible exception might be the provision to proxy forces of radioactive materials for use in the manufacture of a dirty bomb, but this would only likely occur if an Iranian leadership were confident that its role would be undiscovered or, at best, not readily subject to forensic attribution. The same may not necessarily be true for our unstable-Iran model, where under a fractured regime ultra-nationalist or Islamist elements and/or rogue military commanders assert control over Iran’s nuclear weapons and decide to transfer them or their components to proxy forces outside of Iran.
- In an unstable Iran, command and control of Iran’s nuclear weapons and related delivery systems would emerge as a central concern. For example, rogue elements of Iran’s Revolutionary Guards Corps (IRGC) and its Qods Force element could, in a state collapse

scenario, seek to empower one faction over another by wresting control over Iran's nuclear weapons. They might also seek to use Iran's nuclear weapons to support the radical Islamist agenda and transfer nuclear materials and/or know-how outright to Hezbollah, or even to al-Qaeda, using the Qods Force network (for terrorist training and support) that is already in place. Or, leadership elements might, with IRGC support, use Iran's nuclear weapons to divert popular attention away from Iran's domestic ills, by brandishing them over long-standing adversaries—Saudi Arabia comes to mind—to create the fiction of Shia dominance in the region and to undermine Saudi security, especially in the Kingdom's eastern provinces with Shia majorities.

- If developments inside Iran do destabilize the regime in coming years, the need for cutting-edge U.S. “hedging” policies and strategies will grow. Deterring regime elements or non-state actors requires a different set of capabilities than those necessary to deter a state-centric actor. It also necessitates an Interagency, “whole-of-government” approach, using non-military, as well as military tools. In this context, a dedicated intelligence effort, aimed at identifying Iranian elites and future leaders is key, as are enhanced and focused activities to trace and plan to disrupt Iranian networks that support Qods Force operations. Leveraging human-terrain mapping techniques and empowering the Joint Special Operations Command's efforts to create intelligence fusion cells and to tie into NATO's new Special Operations Coordination Center (NSCC) will be crucial in this regard. Likewise, because proliferation is a grave concern in the unstable-Iran model, activities under the Proliferation Security Initiative (PSI) and the Global Initiative to Combat Nuclear Terrorism (GI) should be increased and perhaps even formalized in the G-8, assuming that in the aftermath of Russia's invasion of Georgia, U.S.-Russian collaboration on nuclear trafficking and with respect to Nunn-Lugar activities can be continued, despite apparent differences on NATO enlargement and Russia's support for the independence of Abkhazia and South Ossetia. Within the United States, greater attention and resources should be devoted to nuclear forensics to ensure that nuclear weapons use can be traced and source attribution made (to facilitate retaliatory action). Regional security initiatives should likewise be expanded and broader investment placed on intensifying the U.S. Gulf Security Dialogue.
- A nuclear-armed Iran would pose three distinct types of operational planning challenges: terrorism and subversion, limited conventional options (under the protection of Iran's nuclear umbrella), and the actual use of nuclear weapons against U.S. forces operating in the Persian Gulf region, against the territories of U.S. allies in Europe, Israel, and coalition partners in the GCC countries, and eventually perhaps against the continental United States. To deal with these operational challenges, the United States must now factor in the nuclear dimension much more systematically than has been done to date in its efforts to

counter nuclear terrorism, defend forward-deployed forces and assets (such as sea-bases), enhance coalition partner defenses and consequence-management (CM) capabilities (through an expanded and augmented U.S. Gulf Security Dialogue), and protect energy flows, infrastructure, and shipping in the Strait of Hormuz and the Persian Gulf region. Contingency planning for Persian Gulf-related operations must also consider unconventional methods of using radiation monitors and detection sensors to address, among other possibilities, the suitcase-bomb scenario. Obviously, all of the planning challenges discussed above will require even tighter coordination between the United States and its principal alliance and coalition partners.

- Iran's crossing of the nuclear threshold is destined to create a new set of deterrence dynamics with its nuclear neighbors, including India, Pakistan, Russia, China, and Israel (which might, under these circumstances formally, declare that it is a nuclear power). A nuclear Iran or an Iran on the brink of nuclear status also presents the potential for "catalytic warfare." This imposes the need to recognize that U.S. deterrence planning has moved beyond bilateral constructs to embrace a more complex dynamic, comprising several nuclear actors in place of Cold War bipolarity. Thinking about a deterrence relationship based on several nuclear weapons possessors is quite different from the bipolar deterrence-planning paradigm that preoccupied U.S. strategic thinking during the Cold War.
- All of the above suggests that twenty-first century deterrence planning will be far more complex, time consuming, and situation specific than deterrence in the Cold War era. If Iran is on the brink of becoming the world's tenth nuclear power, and we believe that it is, then that suggests the need to understand, to a much greater degree than we do today, Iran's human terrain. Deterring a nuclear Iran will require extensive knowledge of key leaders and institutions and the relationships between them, as well as an intimate understanding of Iranian values, interests, and generational issues. It will also require the capacity to project convincing evidence of the will to act if deterrence fails and the acquisition of capabilities to inflict proportionate, but decisive (i.e., "unacceptable"), damage against Iran, its people, and its cultural and religious icons. In each of the three models posited in this study, missile defenses play a crucial role, and it is our contention that their development should be vigorously pursued within a U.S. deterrence construct that emphasizes a spectrum of capabilities from space-oriented to theater ground-based missile defense technologies, and especially the Navy's *Aegis* system. Also of great importance in the context of a nuclear Iran will be new considerations affecting homeland defense, ranging from the need to protect the United States from enemy ballistic and cruise missiles to the new and urgent task of considering defenses against dirty bombs, improvised nuclear devices (INDs), and suitcase bombs smuggled into the country. Because of the potentially devastating consequences of such attacks against the homeland and in key theaters overseas, it will also be important

to ramp up U.S. and allied/coalition partner consequence management capabilities, and to leverage in new and different ways general purpose forces (GPFs) for “event mitigation” and “render-safe” missions.

- Improving U.S. offensive strike capabilities is central to twenty-first century deterrence planning, and this is true with respect to both nuclear and non-nuclear capabilities, as proposed in the development of the New Strategic Triad and in U.S. Strategic Command’s Global Strike construct. On the nuclear side, the Reliable Replacement Warhead (RRW) program is important in this regard, as is the streamlining and modernization of the U.S. nuclear weapons (development and production) infrastructure. To argue that the Reliable RRW will send a hypocritical message to other world powers is disingenuous, as the United States remains the only nuclear power that is not modernizing its nuclear arsenal, even as it is reducing its numbers unilaterally. For safety and security arguments alone, RRW makes sense, more so as we consider the requirements for “tailorable” deterrence in the post-NPT age (in which proliferators, breaking out of the NPT, open the door to broader cascading). Conventional *Trident* should also be pursued to shore up the U.S. prompt-response capacity. Both steps are needed to demonstrate U.S. resolve and to communicate Washington’s intention to retaliate convincingly in response to an Iranian nuclear attack on the continental United States, U.S. forces operating in regional theaters, or against allies and friends, especially Israel.
- In this context, too, U.S. deterrence posture would be significantly enhanced were the United States to improve its capacity for nuclear forensics and attribution. While America already supports significant capabilities in this regard, more attention needs to be given to this mission area in funding debates on Capitol Hill, in the context of how such a capability reinforces and strengthens U.S. deterrence planning. This would be particularly important in the case of an unstable-Iran model, where attribution for nuclear weapons use, or a dirty bomb detonation would be necessary to shape the appropriate U.S. response. Indeed, consistent with the Iranian preference for strategic deniability (a policy that has been usefully adopted in the past, one notable example is the case of Iran’s collusion with al-Qaeda in the 1996 bombing of the Khobar towers in Riyadh, Saudi Arabia), Iranian sponsorship of a nuclear attack would need to be established before the United States crafted a meaningful retaliatory response. Attribution of origin, therefore, facilitated by the maturation of nuclear forensics technologies, would be extremely useful and an important tool to help dissuade nuclear technology transfers. At this point, however, the database that is necessary for comparative purposes may need to be augmented.
- Finally, in the face of a nuclear Iran, the United States needs to re-consider its capacity to extend a deterrence umbrella over states of vital importance to U.S. security interests. This

is not to suggest the politically controversial notion of providing a NATO Article 5-like (collective defense) commitment to U.S. partners in the wider Gulf region. Rather, it suggests the need to consider updating both the Nixon and Carter Doctrines, as they pertain to Gulf security planning, while intensifying efforts to build partner capacities in the areas of intelligence-sharing, missile defenses, and consequence management. It also implies a need to increase U.S. efforts in the areas of proliferation security, for example, via the Proliferation Security Initiative and the Global Initiative to Combat Nuclear Terrorism. It also raises the need to develop a new approach for dealing with and engaging Russia on critical global issues, such as Iran's proliferation, in the wake of its incursion into Georgia. "Exquisite diplomacy" will be needed within the construct of a new strategic framework that considers a "whole-of-government" and an allied/coalition partner approach to confronting a nuclear Iran.

Introduction

A growing body of evidence leaves less and less doubt that Iran's drive to develop an indigenous, closed nuclear-fuel cycle is tied to the ambitions of its leadership to possess a nuclear weapons capability. Notwithstanding the protestations of Ayatollah Ali Khamenei, Iran's Supreme Leader, Iran appears to be embarked on a clear path to cross the nuclear threshold and become a nuclear weapons power. As recently as June 4, 2008, Iran's Supreme Leader stated that Iran had no interest in developing nuclear weapons and vowed that it would pursue a peaceful atomic energy program. However, as characterized by former weapons inspector and nuclear expert Dr. David Kay, Iran is 80 percent on the way to developing a functioning nuclear weapon.¹ On this point most knowledgeable experts agree, although there is no consensus on whether the regime in Tehran actually has taken a strategic decision to operationalize a nuclear weapon, and there is acerbic debate between those who believe that Iran can still be influenced to stop at the nuclear threshold and those who contend that weaponization is not only inevitable, but a key element of the regime's military modernization. Until quite recently, the permanent members of the United Nations Security Council (UNSC)—the P-5 nations—did not agree among themselves on Iran's intentions in this regard, much less with Germany, the other country that has been deeply involved in efforts to curtail Iran's uranium enrichment programs.

Up until now, and as reflected in the 2007 National Intelligence Estimate (NIE) on Iran's nuclear programs, Western analysts, with the exception of the Israelis, had been saying that Iran was not likely to have in hand the knowledge base and capabilities to cross the nuclear threshold until sometime in the mid-to-later years of the next decade. Since the release of the NIE, however, discussions with the International Atomic Energy Agency (IAEA) over further on-site inspections have stalled and Iranian officials continue to obstruct IAEA efforts to clarify previous suspicious activities surrounding Iran's nuclear programs. Moreover, over the past six months or so, new information has come to light, based on Iran's unveiling of new IR-2 centrifuges, which have trebled the country's uranium enrichment capacity. This, together with information about Iran's development of even more powerful, indigenously-developed centrifuges, the so-called IR-3s, will provide, according to the boasts of Iranian officials, the means to produce even larger quantities of enriched uranium, prompting nuclear experts in the United States, Britain, and France to revise their earlier estimates. Some now conclude that Iran is not only embarked on a weapons path, but is likely to attain enough fissile material for a bomb far earlier than had been anticipated, sometime in the next year and a half to two years. This is more or less consistent with Israeli estimates that suggest late 2009 as the earliest possible date that Iran will be technically capable of producing enough highly enriched uranium for a weapon. The Israelis further contend that once the Iranians produce enough enriched uranium, they could be between six to eighteen months away from building a nuclear weapon if they decide to do so.

Without a doubt, Iran aspires to become the predominant power in the Middle East, and its policies, including and especially those relating to nuclear technologies, are emblematic of regime efforts to create a new global order in which Iran is recognized as an important leader not only in the region, but across the Muslim world, and on the global stage. Iran's quest for international status unites Iranians

1 See David Kay, "The Iranian Fallout," *The National Interest*, September/October 2008, 1–9.

across the political and ideological spectrum. It reflects a resurgence of Persian nationalism, which has always been a feature of the Iranian policy landscape, as well as a sense of Iran's "manifest destiny." Together, these sentiments are influencing Iranian policy decisions and Iran's interactions with its neighbors and with the countries of the industrialized world, most particularly, with the United States. Since the Iranian Revolution, Iran has regarded the United States as "the great Satan," while the United States has viewed the Islamic Republic of Iran as a "rogue" state, whose fiery president, Mahmoud Ahmadinejad, has made inflammatory statements about "wiping Israel off of the map," and denying that the Holocaust ever took place.

Iran under Ahmadinejad has been far more assertive in promoting Iran's interests and in rectifying what he perceives to be the injustices inflicted on Iran by the more powerful Western "imperial" nations. One of the perceived injustices that Ahmadinejad claims to be rectifying relates to alleged efforts of "powerful nations" to keep Iran from advancing technologically and on the world's stage. In 2005, Ahmadinejad, speaking before the United Nations General Assembly, coined the phrase "nuclear apartheid" to describe this phenomenon. As viewed in Tehran, Iran's mastering of nuclear energy technologies is a key imperative for resolving Iran's economic ills, and a right conferred by the Non-Proliferation Treaty (NPT). As discussed elsewhere in this report, the provisions of the NPT do allow access by non-nuclear signatories to civilian nuclear power generation technologies, but they also make clear that such access is conditioned on the promise not to exploit these technologies for military purposes. Iran, like North Korea before it withdrew from the NPT, had been a member in "good standing," until its eight-year war with Iraq apparently helped convince its revolutionary leadership to reconsider the value of nuclear weapons to support and uphold the country's independence and to deter attacks on the country. The nuclear debate in Iran is, according to noted Iranian analyst, Shahram Chubin, a "surrogate for the country's future."² While publicly stating its intention to pursue peaceful nuclear technologies for energy and medical purposes, behind this facade Iran's leadership apparently has every intention to develop nuclear weapons to promote and safeguard the nation's foreign policy and security objectives.

In and of itself, an operational Iranian nuclear weapons capability is cause for concern in Western security circles because of its implications for cascading, or what used to be called horizontal or onward proliferation. Beyond that, however, an Iranian nuclear weapons capability would have important effects on U.S. strategic and operational planning. Very specifically, an operational nuclear weapons capability at the disposal of the Iranians could have profound ramifications for Washington's ability to reassure regional friends and coalition partners, to operate militarily with impunity in the Persian Gulf region, and to defend vital strategic interests, especially—but not limited to—ensuring America's right of innocent passage in Gulf waters and the safety and security of vital sea-lanes over which much of the world's energy supplies flow.

We need only to ponder the problems posed by an Iran *without* nuclear weapons to begin to assess the challenges of an Iran in possession of an operational nuclear weapons capability. Such an Iran

2 Shahram Chubin, *Iran's Nuclear Ambitions* (Washington D.C.: Carnegie Endowment for International Peace, 2006), 28.

could be an even more dangerous adversary, depending on the nature of the regime in Tehran, the precise motivations behind Iran's nuclear weaponization, and the threat that the Iranians perceive. Moreover, Iranian assumptions about the role of nuclear weapons, their targeting, and the escalatory options they are perceived to confer on Iran may bear little in common with those of the United States, which are still largely an outgrowth of the strategic dynamic (and presumptions about cost/benefit calculations) that prevailed between Washington and Moscow during the Cold War. Potentially even more worrying, an Iran that possesses nuclear weapons would be of concern because its leadership or leadership elements could decide that it is in Tehran's best interests to transfer nuclear weapons components, fissile materials, or scientific know-how to other states (read Syria) or non-state actors, with Hezbollah an especially worrisome potential beneficiary. One could even imagine such a transfer, under specific circumstances, to a Sunni terrorist organization like al-Qaeda, which is operating with a fatwa that justifies using weapons of mass destruction (WMD) as a means of striking the infidels at home and generating mass casualties. Notwithstanding new Sunni-Shia tensions, resulting in part from al-Qaeda's miscalculations in Iraq juxtaposed to Iran's growing influence there, this is a contingency that remains plausible, as Tehran's current support for the Taliban makes clear.³

Short of transferring nuclear materials or know-how to rogue actors, the regime in Tehran could decide to extend a deterrence umbrella over Hezbollah and/or Syria, an act that would in effect empower them against Israel, a common foe. A nuclear umbrella could similarly support Iranian interests elsewhere in the Middle East, including Iraq, where Iran's long-term objectives, measured in years and decades, not in weeks and months, are still on a collision course with those of the United States. Thus, while Iran has been credited by some with supporting an "operational pause" in Iraq, over the longer term its objectives remain the withdrawal—by forceful means if necessary—of the U.S. military and American influence as a whole from the region, the codification of Iran's dominant power status, and control of the market forces pertaining to oil and gas exports to the West. As characterized by Army General David Petraeus, the commander of U.S. Central Command (CENTCOM), "Iran continues to be a destabilizing influence in the region. Its activities have been particularly harmful in Iraq, Lebanon, the Palestinian territories, and Afghanistan. In each location, Tehran has, to varying degrees, fueled proxy wars and pursued regional ambitions."⁴ With nuclear weapons, Iran is likely to be even more assertive in its pursuit of these goals, and a danger exists that the Iranian leadership may feel empowered to overreach in a crisis, with the result being a full-blown region-wide war.

Stopping Iran's covert march to attain nuclear weapons is not the subject of this assessment. Many reports have been written and published in the recent past on ways to strengthen the NPT and/or to compel compliance with the non-proliferation objectives enshrined in that treaty, including the need to strengthen existing frameworks such as the Nuclear Suppliers Group (NSG) or to establish a new, post-Cold War-equivalent framework like the Coordinating Committee for Multilateral Export Controls, or

3 On the seventh anniversary of the September 11th attacks in the United States, al-Qaeda's second-in-command, Ayman al-Zawahiri released a video attacking Iran's Supreme Leader and accusing Iran of collaborating with the West in the "crusader's" war, demonstrating once again, that alliances tend not to be permanent; only interests are.

4 Testimony before the Senate Armed Services Committee, May 22, 2008.

COCOM, for assessing technology transfers between and among states. Much less has been written about the actual consequences of a decision by Tehran to cross the nuclear threshold and to field (and possibly deploy) nuclear forces of one kind or another. The focus of this report, therefore, is on how a nuclear Iran might choose to exploit a nuclear weapons capability to achieve its strategic goals, and on what this, in turn, would mean for U.S. and allied/partner state defense and deterrence requirements.

Accordingly, this assessment looks forward and assesses the political, strategic, and practical implications of Iran's attainment of a nuclear weapons capability. This is premised on the assumption that absent strong, unified, multilateral action to impose a strict sanctions regime, an UNSC-approved embargo, or other tightly enforced trade and financial restrictions, current policies will not be sufficient to prevent Iran from becoming a nuclear weapons state. Moreover, it is entirely possible that Iran will emerge as a nuclear weapons state much more quickly than anticipated. Iran's nuclear programs have benefited from legal and illicit deals with numerous state and non-state actors, including Russia, North Korea, and the A.Q. Kahn network. In June 2008, reports were publicized about digitized blueprints for nuclear weapons designs that might have been transferred to Iran (among other countries) by members of the Tinner family of Switzerland working as part of the A. Q. Khan network, and apparently with the U.S. Central Intelligence Agency seeking to thwart such efforts.⁵ In a report about the blueprints' discovery, Dr. David Albright, a former United Nations weapons inspector, has observed that the blueprints are "troubling" because the designs they contain are "ideal" for Iran (and North Korea), both of which have faced "struggles in building a nuclear warhead small enough to fit atop their ballistic missiles, and these designs were for a warhead that would fit."⁶ Whatever the truth behind this report, Iran's drive to develop and/or acquire and deploy a nuclear weapons capability carries with it potentially profound implications for regional stability, U.S. military planning, and for American and global efforts to counter the proliferation of weapons of mass destruction (WMD).

In order to understand more precisely just how a nuclear Iran might manifest its power, we have developed three heuristic models to examine the implications of Iran's proliferation: (1) a defensive Iran, (2) an aggressive Iran, and (3) an unstable Iran. In assessing expected characteristics of Iranian behavior in each of these models, we have identified four issue areas, or clusters, upon which our analysis is based: (1) the type of nuclear capability that Iran would likely field; (2) the conditions under which Iran might resort to nuclear weapons use or threatened use; (3) the extent to which Iran's military strategy and declaratory policy relating to nuclear weapons possession might embolden Iran and/or its proxies to pursue more aggressive policies in the region and vis à vis the United States; and, (4) Iran's potential to transfer nuclear materials to others in the region and/or the implications of a Iranian weapon for nuclear cascading.

With these three models providing the framework for analysis, we then provide a more in-depth assessment of the strategic, political, and operational planning implications of Iran's emergence as a

⁵ Reportedly, the CIA involvement included efforts to manipulate the designs to confound rogue efforts to benefit from the designs provided by the Kahn network.

⁶ David Albright, quoted in Joby Warrick, "Smugglers Had Design for Advanced Warhead," *Washington Post*, June 15, 2008.

nuclear weapons state. Chapter 1 examines the deterrence dynamics related to an Iran with nuclear weapons, and it introduces the three models. Chapter 2 focuses on Iran's nuclear ambitions as they relate to Iran's foreign policy objectives, domestic political considerations, and Iran's role in the Islamic world. Chapter 3 explores the possible ways in which Iran might operationalize a nuclear weapons capability, and Chapter 4 assesses the implications of Iran's nuclear development for U.S. strategic and operational planning, within the framework of the three models. Chapter 5 lays out specific options for updating U.S. defense and deterrence planning, and Chapter 6 examines the more explicit implications of Iran's nuclear development for irregular warfare (IW) and deterrence of non-state and/or rogue actors. At the end of this report, we offer concluding observations and recommendations for U.S. planning and policy initiatives.

Chapter 1: The Deterrence Dynamics of an Iran with Nuclear Weapons

Without question, an Iran with nuclear weapons has major implications for the United States, Israel, and the stability of the wider Middle East. At the very least, it would challenge U.S. military-operational planning assumptions regarding permissive and non-permissive environments, and raise serious questions about “extended deterrence” guarantees to formal allies (including those in NATO), coalition partners (such as the Gulf Cooperation Council, or GCC, states), and other countries of direct interest to U.S. security, notably Israel.⁷ A nuclear Iran would also raise questions about crisis management and escalation dominance, particularly with respect to firmly established taboos regarding the actual use of nuclear weapons for anything less than national survival. In the best case, a nuclear Iran might act within the confines of established, Western deterrence thought, or, in a worse case, it might operate under a completely different set of assumptions governing nuclear weapons use. If this is so, the United States could no longer assume that it would control the escalation dynamic in a crisis or war with Iran.

Moreover, a nuclear Iran has the potential to implement what international relations theorists term “compound escalation,” or the manipulation of seemingly unrelated issues to raise the stakes for an adversary. Iran could, for example, choose to widen a regional war using proxy non-nuclear forces, or it could deliberately escalate a crisis by threatening to use its nuclear weapons if its conventional forces risked defeat or if asymmetric attacks failed to achieve their strategic objectives. In point of fact, Iran has issued public statements to the effect that an attack on the country would elicit an unlimited response, from attacks directly on the United States to the use of surrogates all over the world. Iran's leaders have also indicated a willingness to close the Strait of Hormuz, despite the implications of

⁷ Extended deterrence refers to one nation's willingness to use its nuclear forces on behalf of non-nuclear allies or coalition partners. It originated in the context of America's Article-5 commitment to NATO, and was extended to include protection of U.S. alliance partners in Asia (i.e., Japan and South Korea) as part of our treaty obligations to those two countries. In part, the rationale for extending U.S. deterrence coverage over U.S. allies was related to American efforts to dissuade allies and other key U.S. security partners from crossing the nuclear threshold themselves. Conceived as such, the extended deterrence concept was implemented to deter both nuclear and conventional attacks against U.S. allies, but its credibility was called into question when the United States itself became vulnerable to Soviet attack, in the context of a confrontation between NATO and Warsaw Pact forces, or in the advent of a war on the Korean peninsula in which the Soviet Union (and later China, when it obtained a capability to strike the United States) became involved by supporting North Korea.

doing so for Iran's own economic well-being. In addition, and building onto Iran's current penchant for asymmetric warfare planning, a nuclear Iran might be emboldened to be more aggressive in a crisis, either by deploying nuclear weapons first, or by providing a security umbrella over proxy forces engaged in terrorist or other irregular warfare attacks either to control the escalation chain or to deter the United States from entering what the Iranians might consider to be a regional conflict. In either eventuality, Hezbollah, or perhaps even Hamas, could find itself operating under the protection of Iranian nuclear capabilities, empowering one or both organizations in a fight against Israel, and potentially even the United States.⁸

In the post-9/11 strategic planning context, conventional wisdom suggests that state-centric nuclear weapons use poses less of a threat to U.S. national security interests than the challenges emanating from non-state actors or proxy forces, using battle-trying tactics, such as the detonation of improvised explosive devices (IEDs) in vulnerable and unsuspecting population centers. However, this line of thinking ignores the fact that nuclear weapons remain an enduring feature of the global security landscape, with more nations, and even al-Qaeda, expressing interest in developing or acquiring precursor technologies and delivery systems. Apart from power and influence, nuclear weapons have variously been identified as the ultimate defense capability (India), an existential deterrent (Israel), an asymmetric weapon (al-Qaeda), and a defense against regime change (North Korea). The danger of nuclear weapons use, in regional conflicts, may, in fact, be increasing with the incipient breakdown of the NPT regime and the relatively greater availability of nuclear components, materials, and delivery systems for sale at the right price.⁹

In this regard, it is important to note that a nuclear Iran might operate under a completely different set of assumptions governing the use or threatened use of nuclear weapons than does the United States, which honed its deterrence planning during the Cold War in the context of the bipolar rivalry with

8 Irregular warfare is defined by the Department of Defense (DoD) as "a violent struggle among state and non-state actors for legitimacy and influence over the relevant populations. Irregular warfare favors indirect and asymmetric approaches, though it may employ the full range of military and other capabilities, in order to erode an adversary's power, influence, and will." U.S. Department of Defense, *Irregular Warfare Joint Operating Concept*, version 1 (July 2007), 4.

9 The Non-Proliferation Treaty was designed to limit the spread of nuclear weapons. It was opened for signature on July 1, 1968, and entered into force in 1969. It has two pillars, non-proliferation and disarmament. Five states (France, the United Kingdom, the Soviet Union and now Russia, China, and the United States) were recognized as nuclear weapons states (NWS). These five states, in signing the NPT, have committed, in Article 1, not to transfer nuclear weapons or their components to non-nuclear weapons states (NNWS), and not to use their nuclear weapons against non-nuclear states except in response to a nuclear attack or a conventional attack by a state allied with a nuclear weapons state. The NNWS who are signatories to the NPT, for their part, have committed not to receive, acquire, or develop nuclear weapons (Article 2), and, in Article 3, to accept the safeguards and verification regimes implemented by the International Atomic Energy Agency (IAEA). Article 6 of the NPT stipulates the responsibility of the nuclear weapons states toward disarmament, while Article 4, which is controversial, implies a "right" of access by NNWS to civilian nuclear technologies, but only if these states comply with the safeguards and transparency stipulated in Article 2. Originally, the NPT was slated to have a duration of twenty-five years, at the end of which time, in 1995, a review process could (and did) extend the life of the treaty for ten more years, to 2005, when another NPT review conference also extended the duration of the treaty. The next NPT review conference is scheduled for 2010, with preparations ready to begin this year. Article 10 of the NPT allows for a signatory's withdrawal from the treaty, after a three-month notification period has passed, and only if an extreme national emergency dictates withdrawal.

the Soviet Union. Deterring a nuclear Iran is not likely to be automatic; neither can it be assumed, particularly if Washington fails to appreciate Iran's military culture, the risks that its leadership may be willing to accept, and the sacrifices it may make to attain Tehran's political and strategic objectives. Unlike the Cold War era in which U.S.-Soviet strategic nuclear parity prevailed and both nations operated under the assumption that a war between the two superpowers would result in catastrophic losses on both sides, rendering "victory" a hollow concept, a nuclear Iran might decide that it had more to gain by using nuclear weapons than by not using them in a crisis or conflict contingency. This is not to suggest that this Iranian leadership or any other would be motivated to act "irrationally" when it comes to protecting Iran's interests. Rather, it is meant as a cautionary warning about gaps in American intelligence about what Iran's leadership actually values and the risks that it may be willing to accept to secure those interests.

For their part, Iran's leaders may not fully understand the awesome nature of nuclear weapons and the unique responsibilities that their deployment entails. Nuclear security and stockpile safety have emerged as formidable challenges in the post-9/11 world, and strategic stability rests on the "rationality" of leaderships to recognize that nuclear weapons use is qualitatively different from non-nuclear operations. To the extent that they can be or have been engaged by Western defense experts and/or government officials, Iranian nuclear experts and regime leaders speculate rather cavalierly about nuclear weapons, drawing on Western deterrence literature of the 1960s and presuming that an Iran with nuclear weapons will have the capacity to deter nuclear and conventional attacks against Iran, undermine Western efforts to change Iran's regime, and lend support to Iranian foreign policy initiatives, while reinforcing Iranian political influence throughout the wider Muslim world. Iranian leaders appear to believe as well that, as was the case with Pakistan (and India's detonations), if Iran did cross the nuclear threshold, the world would soon enough forgive its transgression against the NPT and in short order resume business as usual.¹⁰

Prominent in the Iranian approach to thinking about deterrence is the idea that nuclear weapons remain in a class by themselves because they possess a quality that cannot be subsumed by non-nuclear strategic weapons. This view of course flies in the face of that held by those proclaiming the dawning of the "post-nuclear age."¹¹ Instead, it reinforces the perception that nuclear weapons are unique in their contribution to national security because of their importance as an element of national power. This may be especially true in a future in which nuclear multipolarity might very well emerge as a defining feature of the global security landscape. North Korea's, Iran's, and possibly Syria's quests for nuclear technologies attest to the unique role that nuclear weapons are perceived to play in regional security

10 However, unlike Iran, neither India nor Pakistan (nor Israel for that matter) ever signed the Non-Proliferation Treaty, and hence their crossing of the nuclear threshold did not, strictly speaking, occur outside of international law, no matter how much their actions attracted global criticism. Iran, up until 2003, was an NPT member in good standing, although, as already noted, it has yet to ratify the Additional Protocol covering verification and safeguards with respect to ensuring that civilian nuclear technologies are not diverted for military use.

11 U.S. analyst Edward Luttwak is credited with coining the phrase "post-nuclear age." He used it to describe the shift in attention to advanced conventional weapons and a new-found emphasis on the concept of "conventional deterrence." Subsequently, it was picked up and used by former Soviet President Mikhail Gorbachev, who used it in 1989 to promote nuclear disarmament.

calculations, and with respect to the deterrence of national security threats, including that of regime change. Proponents of this view also contend that conventional deterrence has never attained, and is unlikely ever to command, the credibility that nuclear deterrence once did and still does. Iran's leadership apparently took this lesson to heart after its eight-year war with Iraq. Facing a conventionally superior enemy, which also used asymmetric tactics (missiles targeted on cities), Iran was unable to deter Iraqi missile attacks. With nuclear weapons, even the most determined of adversaries might be deterred, or so Iranian elites appear to believe.

Paradoxically, at a time when nuclear weapons are assuming legitimacy in other parts of the world, their utility to U.S. and Western security planning is under challenge by a growing abolitionist movement that postulates that these capabilities are marginal to meeting modern-day security challenges,¹² and by international relations "realists" who contend that nuclear deterrence must be tailored to twenty-first-century requirements, even beyond the changes that were set forth in the Bush administration's Nuclear Posture Review (NPR).¹³ Revising U.S. deterrence planning to meet the changing circumstances of the day and to reflect the new realities associated with the Soviet Union's demise, Russia's rise, China's emergence as a global strategic actor, and new security challenges from non-state actors (such as al-Qaeda, which is actively seeking WMD capabilities), and states aspiring to deploy nuclear weapons to protect their regimes or to support more aggressive foreign policy interests, is a necessary step for an era in which nuclear weapons remain an aspect of the global strategic landscape.¹⁴ This is not to suggest that the central role that nuclear weapons have played in U.S. strategic considerations may not be reassessed in a new U.S. strategic concept or that conventional force improvements are unimportant to a comprehensive U.S. deterrence strategy. Indeed, the revolution in weapons technologies over the last half-century has yielded impressive advances in non-nuclear capabilities, and, as with missile defense technologies, they can serve to reinforce U.S. defense and deterrence planning in ways that were hardly imaginable

12 George P. Shultz, William J. Perry, Henry A. Kissinger, and Sam Nunn, "A World Free of Nuclear Weapons," *Wall Street Journal*, January 4, 2007.

13 The Bush administration's Nuclear Posture Review (NPR) was completed in 2001, before the 9/11 attacks, but not released until January 2002. In essence, the NPR recommended the establishment of a new strategic triad composed of offensive nuclear and non-nuclear strategic strike capabilities, missile defenses, and the creation of a streamlined and responsive nuclear weapons infrastructure capable of meeting new requirements as they arise. Since its release, U.S. Strategic Command has promulgated a "Global Strike" concept and the Bush administration has registered significant progress on missile defense architectures and developments. Establishment of a streamlined industrial base has lagged, with congressional opposition to the so-called Complex 2030; furthermore, modernization of U.S. nuclear forces, based on the development of the so-called Reliable Replacement Warhead (RRW) and a nuclear "earth penetrator," the RNEP, has stalled. In deliberations over the Defense Department's FY09 budget, all funding for research activities related to the RNEP was terminated, while support for the RRW remains tenuous, dependent on the findings of a commission designated by Congress to weigh the merits and costs of going forward with this program.

14 In this context, the U.S. Congress has mandated the creation of a Strategic Posture Commission to examine and delineate the roles of nuclear weapons and deterrence in future U.S. strategy. Chaired by two former Secretaries of Defense (James R. Schlesinger, Jr., who also served as the Director of the Central Intelligence Agency (CIA) and as Secretary of Energy, and William J. Perry), the Commission is directed to report its findings to Congress by December 1, 2008, after which a broader national debate on U.S. deterrence concepts and force posture is likely to ensue.

twenty-five years ago when President Ronald Reagan first articulated his vision of a Strategic Defense Initiative (SDI).¹⁵

At the same time, however, as Iran's drive to attain nuclear technologies may attest, nuclear weapons are perceived by some regimes to be important instruments of power, to be wielded in situations where less than vital interests are at stake. In some cases, they may be deemed essential to attracting domestic support for regime leadership. In Iran's case, both considerations are likely at play, given the ethnocentric and almost narcissistic nature of the regime and the efforts of Iran's government to distract public opinion from its governance failures. Certainly, in any scenario that can be imagined, the principal purpose of an Iranian nuclear weapon would be to deter an attack against Iran or to have in hand the capacity to raise the ante were an external power to attempt a regime-change operation. However, beyond this consideration, which is central to our development of model 1—a defensive Iran—we also postulate in model 2—an aggressive Iran—that an Iran with nuclear weapons will be inclined to pursue a more activist foreign policy, even to the point of threatening to use nuclear weapons in a crisis.

If this is indeed the case, then efforts to maintain strategic stability in the Middle East rest largely with the United States. This includes both the capacity to defend against and mitigate the consequences of the threatened or actual use of nuclear weapons by Iran and to shape adversary thinking about the utility of nuclear weapons deployments to achieve specific strategic goals. Persuading an adversary leadership of the risks and costs associated with nuclear weapons use has long been an aspect of U.S. non- and counter-proliferation planning, but, as suggested in a recent study of dissuasion,¹⁶ not all actors view the world in the same way, nor do they “share the same model of rationality.”¹⁷ To be successful, dissuasion depends on an awareness of how potential adversaries perceive the strategic context within which they make decisions and how they assess the consequences of their actions. In this respect, information

15 President Reagan introduced his Strategic Defense Initiative (SDI) in 1983, by observing, “Since the advent of nuclear weapons, [U.S.] steps have been increasingly directed toward deterrence of aggression through the promise of retaliation.... What if free people could live secure in the knowledge that their security did not rest on the threat of instant U.S. retaliation to deter a Soviet attack, that we could intercept and destroy strategic ballistic missiles before they reached our soil or that of our allies. I know that this is a formidable technical task But isn't it worth every investment necessary to free the world from the threat of nuclear war? We know it is.” Ronald Reagan, Address to the Nation on Defense and National Security, March 23, 1983, <http://www.reagan.utexas.edu/archives/speeches/1983/32383.htm>.

16 Dr. Andrew F. Krepinevich and Robert C. Martinage, *Dissuasion Strategy* (Center for Strategic and Budgetary Assessments, 2008), CSBAonline.org. Dissuasion is defined as “actions taken to increase the target's perception of the anticipated costs and/or decrease its perception of the likely benefits from developing, expanding, or transferring a military capability that would be threatening or otherwise undesirable from the U.S. perspective” (vii). Moreover, according to the authors, unlike deterrence, dissuasion does not focus exclusively on the threat of military retaliation to influence the target's behavior. Dissuasion is said to incorporate a wide range of economic, diplomatic, military, and other instruments that can be used to alter either side of the cost-benefit calculation (viii). Based on such a wide interpretation, dissuasion can benefit from the notion of “competitive strategies,” which was developed by the Department of Defense in the late 1960s and early 1970s and which was formally adopted as an element of U.S. defense strategy by the Reagan administration. As an approach to the long-term strategic competition between the United States and the Soviet Union, competitive strategies sought to play U.S. advantages against Soviet weaknesses in an effort to force the Soviet Union to compete with the United States in areas that were favorable to U.S. interests.

17 Ibid., xi. “What might appear ‘irrational’ from the perspective of American observers could be entirely logical when the target's culture, religious beliefs, political concerns, personal jealousies, life experiences, and other psychological factors (e.g., the degree of stress to which the target is exposed) are taken into consideration.”

operations (IO) emerge as an important aspect of future deterrence planning, with information assurance and critical infrastructure protection (CIP), including from electromagnetic pulse (EMP) attacks,¹⁸ especially important future planning imperatives. A nuclear detonation in space offers a country such as Iran an important option for leveling the playing field with the United States. The objective of such an attack, presumably, would be to blind or otherwise disable America's space-based command, control, communications, and intelligence architecture, upon which all U.S. operations nowadays depend. For an aggressive Iran, space operations would be an important planning feature, as an EMP attack, for example, might so degrade networks associated with U.S. "eyes in the sky" as to give Iran control of the escalation dynamic in a crisis or wartime scenario. More is said on this point later in this study; for now it suffices to note that the pursuit of space denial technologies has emerged as an enduring feature of asymmetric (or disruptive) planning in a number of countries, China included. It is not beyond the realm of the probable to suggest that Iran might consider this option. For one thing, Iran already maintains an ambitious space-oriented research program, and has recently tried to place a satellite in orbit. For another, Iran has been developing an indigenous long-range ballistic missile capability that many experts contend is the basis for a space-launch vehicle (SLV).¹⁹

Dissuading Iran from crossing the nuclear threshold would require a comprehensive strategic approach that used all tools in the U.S. toolkit (that is, a focused, Interagency commitment) and relied heavily on allied/coalition partner and non-governmental support. Given the consensus in Iran today for civilian nuclear power development, and the nationalistic justifications for the country's nuclear programs, perhaps the best that can be hoped for is an Iran that adheres to what has variously been described as "the virtual model," or "Japanese model"²⁰ in which a nuclear weapons technology base is developed, without actually crossing the threshold to "operationalize" or deploy a weapons capability. Until last year, many observers of the Iranian scene suggested that this was the likely course ahead for Iran, particularly after the United Nations enacted successive sanctions regimes whose cumulative effect on Iran's economy appears to have been substantial. Despite the fact that the third round of sanctions was watered down before the sanctions were agreed to and adopted by the Security Council, Iranian fears of international isolation seemed to support the idea that Iran could be dissuaded from crossing the nuclear threshold.²¹

18 The EMP Commission, created by Congress, was charged with assessing EMP threats to the United States. See Dr. John Foster et al., *Executive Report 2004*, vol. 1, *Report of the Threat to the United States from Electromagnetic Pulse (EMP) Attack*. An updated assessment has been prepared by the EMP Commission and will be released once hearings on this report are scheduled by the Senate Armed Services Committee.

19 Iran's interest in space came to Western attention in 2003, when it established a space agency. Shortly after that, in 2005, Iran created its Supreme Aerospace Council, whose membership includes the Supreme Leader, the defense minister and the IRGC commander. Leveraging foreign technologies, Iran has one satellite in orbit, the *Sina-1*, which was launched aboard the Russian *Kosmos-3M*, and four others under various stages of construction and development. In February 2007, Iran launched a "sounding rocket," which Western analysts have identified as tied to Iran's SLV program.

20 Referred to as the "Japanese model" because Japan is widely assumed to have the technological capacity to produce, operationalize, and deploy nuclear weapons, but has chosen not to cross the nuclear threshold because of the expected consequences (international economic and diplomatic repercussions) of doing so.

21 In March 2008, the UNSC imposed new sanctions on Iran in an attempt to stop Iran's uranium enrichment activities at Natanz. However, against the backdrop of the (then) recently released U.S. National Intelligence Estimate (NIE) that concluded

UNSC Sanctions Against Iran

The UN Security Council has imposed three rounds of sanctions against Iran in an attempt to curtail the country's nuclear ambitions, but U.S. efforts to isolate Tehran through multilateral UNSC action have had limited effect.

Resolution 1737 (Dec. 23, 2006)	Resolution 1747 (March 26, 2007)	Resolution 1803 (March 3, 2008)
<ul style="list-style-type: none"> • Imposes travel and financial restrictions on twenty-two Iranian individuals and entities linked to the nuclear program • Requires states to prevent the export of sensitive nuclear-related equipment and expertise to Iran • Bars training of Iranian nationals abroad that could be applied to the nuclear program • Requires Iran to broaden cooperation with International Atomic Energy Agency inspectors and demands that it halt banned nuclear activities within sixty days <p>Vote: 15–0</p>	<ul style="list-style-type: none"> • Bans all Iranian arms exports and expands UNSC 1737 to include twenty-five more individuals and entities linked to Iran's nuclear and military agencies • Targets specific individuals and entities linked to Iran's Revolutionary Guard Corps and Qods Force • Threatens additional penalties against Iran if it fails to suspend its nuclear program within sixty days <p>Vote: 15–0</p>	<ul style="list-style-type: none"> • Imposes a travel ban on five individuals involved in Iran's most sensitive nuclear efforts and travel and financial restrictions on twenty-four others • Bans trade of critical nuclear-related materials and calls on states to monitor and report on Iranian banks suspected of facilitating Iran's nuclear activities • Authorizes voluntary inspections of cargo to and from Iran if there are "reasonable grounds" to suspect the transit of prohibited materials • Threatens to impose "further measures" against Iran if it fails to halt sensitive activities within ninety days <p>Vote: 14–0 (Indonesia abstained)</p>

However, as new information has emerged, it is increasingly apparent, as the IAEA pointed out, that this Iranian regime is fully invested in pursuing a nuclear weapons option for Iran. Their stated intention of only developing a civilian nuclear power generation capability flies in the face of evidence to the

with "high confidence" that Iran had stopped its nuclear weapons program in 2003, these sanctions were watered down from their original version, which had sought measures against Iran's Revolutionary Guards Corps (IRGC) and its elite Qods Force. Both Russia and China objected to a harsh sanctions regime, and cited the NIE as one of the reasons for their decision in this regard. The toughest measures, as depicted in the chart above, included a travel ban on five Iranian officials and a mandate for other nations to "exercise vigilance" with respect to new export credits and transactions with Iran's Meli and Saderat banks.

contrary. An IAEA report released on May 26, 2008, makes clear that Iran's suspected nuclear weapons development remains "a matter of serious concern," especially in light of Tehran's "willful lack of cooperation," in answering questions about "suspicious activities."²² Since the imposition in March 2008 of a third round of UNSC sanctions, Iran has upgraded and increased the capacity of its centrifuges at Natanz, continued work on developing long-range ballistic missile technologies, and very likely even warhead designs, contrary to the findings of the highly controversial 2007 National Intelligence Estimate that suggested that Iran had stopped such work in 2003 in response to international pressures and against the backdrop of the war in Iraq.²³ However, the NIE also proclaimed that it was uncertain whether the weapons design work had resumed, while concluding as well that the regime had carried on work in the areas of uranium enrichment and missile development. Nonetheless, the impression that the NIE conveyed has been undercut by Iran's recent activities,²⁴ and the likelihood that the regime is actively pursuing nuclear weapons to support Iran's security interests is something that the United States will have to deal with, militarily, in operational planning terms, and politically and strategically when considering U.S. regional interests and global responsibilities, including Washington's capacity to address the potential threat of onward proliferation and what looms as a wholesale failure

22 See Elaine Sciolino, "Nuclear Agency Accuses Iran of Willful Lack of Cooperation," *New York Times*, May 27, 2008, 1. The report describes Iran's installation of new centrifuges, commonly referred to as the IR-2 and IR-3, and noted Iran's production of double the amount of enriched uranium (150 kilograms, or 330 pounds) produced during the same period eighteen months earlier. The report also highlights the role that the military seems to be playing in Iran's nuclear program, which seems to confirm speculation about the full extent of Iran's nuclear programs and their objectives.

23 The NIE on Iran was released in 2007 and has generated much debate. For many, the key judgments in the NIE are overstated and reflect, perhaps, a reaction to previous intelligence community (IC) judgments that overestimated Iraq's WMD capabilities. Moreover, the decision to define Iran's nuclear weapons program in terms of its weapons design and weaponization work and covert uranium enrichment-related work necessarily bounds the assessment in ways that in hindsight are not realistic and, as a result, skew understanding of the scope of Iran's nuclear development programs. Thus, for example, the key judgment that Iran terminated its nuclear weapons program in 2003 fails to consider the full implications of Iran's resumption of its declared uranium enrichment program at Natanz for Iran's weaponization. Nor does the NIE address Iran's on-going ballistic missile development efforts or the plutonium enrichment path on which Iran is also embarked. Most of all, it fails to address the extent to which Iran may have put into place a parallel and covert military program, as well as the extent to which Iran may have benefitted from the A.Q. Kahn network—a factor that raises the possibility that Iran has had access to weapons blueprints and advanced miniaturization designs. For more detailed information on these speculations, see David Albright, "Swiss Smugglers Had Advanced Nuclear Weapons Designs," an Institute for Science and International Security (ISIS) report, June 16, 2008, http://www.isis-online.org/publications/expcontrol/swiss_doc_summary_16june2008.pdf.

24 As noted earlier, former weapons inspector and nuclear expert Dr. David Kay is among those who believe that "Iran is 80 percent of the way to [developing] a functioning nuclear weapon." Basically, he goes on to explain, because of a track record of eighteen years of illicit covert activities, Iran has "a handle" on "getting the uranium and turning it into fissionable material . . . and of producing weapons-grade material," using "materials obtained from China in their secret enrichment efforts," and designs and gas centrifuges from the A.Q. Kahn network. "They undertook plutonium-separation experiments between 1988 and 1993 . . . and built and tested a uranium-conversion test facility that produced uranium metal." He also reports that Iran constructed the Kalaye Electric Company as a front for use as a pilot uranium-enrichment facility, and in 1999 it used unreported uranium hexafluoride (UF₆) for centrifuge testing and the subsequent production of low-enriched uranium. Iran has also experimented with laser enrichment and isotope separation, while accelerating its (now acknowledged) uranium-centrifuge program, moving from a rudimentary design to a more sophisticated centrifuge that is also more reliable. In Kay's estimate, Iran is now two to four years away from producing five nuclear weapons per year. Weaponization would take longer, but if, as is suspected, the Iranians do have in place a vast covert program, this time-span could be significantly shortened, from the two to seven years that it would take if starting from scratch. See David Kay, "The Iranian Fallout," 1–3.

of the 1969 NPT regime.²⁵ For this reason, the United States needs to prepare for Iran's emergence as a nuclear weapons state, by gaining clearer insights into exactly how this might be manifested and under what conditions the Iranians might consider using nuclear weapons.

Does the Nature of the Regime Matter?

However, before doing so, it is important to address the enduring question of whether a change in regime would affect Iran's nuclear ambitions, and if so, how? More than one Western analyst has suggested that regime change is key to containing Iran's nuclear ambitions. For example, Geoffrey Kemp has argued that a moderate Iranian regime that withdraws from the NPT and crosses the nuclear threshold openly would "be easier to tolerate" than a regime that espoused a radical ideology and decided to proliferate.²⁶ Nuclear weapons states that are democracies are said to be more responsible and even conservative when it comes to nuclear weapons deployments, and in general regard them as weapons of last resort in the direst of contingencies—in other words, as defensive deterrents. In India's case, facing both a nuclear China and a nuclear Pakistan, development of an assured destruction (AD) capability has emerged as a central aspect of Indian defense and security planning. In the case of Israel, nuclear weapons are viewed as essential to ensuring the survival of the state, and in this context, the government in Tel Aviv has developed operational plans for their use against regional adversaries. Iranians may perceive the value of nuclear weapons to lie somewhere between these two conceptions. Elite opinion in Iran, for example, may view Iran's development of nuclear weapons as a "necessary evil" to counter what they see as a U.S. effort to surround Iran via American forward deployments in the region, and in this context support the development of a defensive deterrent. The ruling regime might also consider nuclear weapons to be important tools of political and strategic leverage to be used to contain America's regional influence and to deter a U.S. attack against Iran. However, if taken seriously, the statements of President Ahmadinejad indicate as well a more sinister purpose for Iran's nuclear ambitions, that is, to exert greater influence over its more vulnerable neighbors and to support the pursuit of a more aggressive Iranian foreign policy, as proposed in the model of an aggressive Iran.

Because of the strong support among the Iranian public for nuclear energy development, it is unlikely that Iran can be dissuaded from pursuing civilian nuclear energy development. It is important to note, as we did earlier in the Introduction, that there is a widespread belief, in Iran and among other

25 Iran is an NPT signatory, and it has signed the Additional Protocol, but the Iranian parliament (Majlis) has not ratified the latter. Nevertheless, Iran is still subject to IAEA inspections, and until 2003 it had more or less complied with IAEA requests and allowed for on-site inspections at some facilities. The problem has been that the country has failed to declare all of its nuclear-related infrastructure, and some sites, such as that at Isfahan, were only discovered using defector information. In the present situation in which Iran has virtually doubled its centrifuge capacity at Natanz, the regime in Tehran has refused to allow IAEA access to "sites of interest," and many fear that much of Iran's nuclear program remains obscured from view, based on a military program and using alternative or otherwise concealed facilities.

26 Geoffrey Kemp has argued that the nature of the regime matters. In his view, a "moderate" Iranian regime that withdraws from the NPT and crosses the nuclear threshold openly would "be easier to tolerate" than a regime which espouses radical ideology and decides to proliferate. Geoffrey Kemp, "Iran's Nuclear Options," in *Iran's Nuclear Options: Issues and Analysis* (The Nixon Center Papers, 2001), <http://www.nixoncenter.org/publications/monographs/IransNuclearWeaponsOptions.pdf>

developing states, that the right to acquire reactor technologies is enshrined in the Non-Proliferation Treaty.²⁷ Crossing the line from civilian energy development to pursue a military program has mixed support among Iranians, especially if they believe that in doing so, Iran's economic development and prosperity would be seriously compromised, whether by sanctions or by Iran's virtual isolation from the international community. If the contention about democracies and nuclear weapons holds, it could be suggested that regime change in Iran might produce a leadership more amenable to dissuasion (stopping short of weaponization, as the Japanese have done), and/or result in the deployment of a nuclear force posture that is clearly defensive in nature, as opposed to one that supports an aggressive foreign policy. Arguments along these lines, then, suggest the need to think about regime change in Iran as a policy priority in the United States, but to do this will not be easy in view of the fact that Washington's understanding of the political forces within Iran remains rather limited. Identifying a center of gravity for leading domestic opposition to the regime is made difficult by inadequate intelligence and by the regime's ongoing, active repression of regime opponents and their leadership. In other words, choosing regime change as a means of stopping Iran's breakout from the NPT, or of influencing the way in which it weaponizes, may be theoretically attractive, but in reality it faces too many uncertainties to offer much chance of success. At any rate, the cultivation of opposition groups takes exquisite planning and time, which is running out if we assume, as do the Israelis, that Iran could be in possession of a nuclear weapon in the 2009–2012 timeframe. From this discussion, two questions then emerge: what are our options if Iran crosses the nuclear threshold and how is Iran's nuclear deployment likely to be manifested? What follows is a description of three models of a nuclear Iran. Subsequent chapters explore these models in greater depth and use them as a basis for identifying options to update U.S. strategic and operational planning, including with respect to extended deterrence and countering asymmetric threats.

Model 1: A Defensive Iran

In many respects, this is the most benign of the three models. This model postulates that the motivating factor in Iran's nuclear weapons development is a perceived need to possess a nuclear capability to deter the United States from attempting regime change and to deter Israel from attacking Iran with either conventional or nuclear weapons. On this basis, and in theory, a defensive Iran would be less concerned about operational strategies and more inclined to view its nuclear weapons as

27 In Ahmadinejad's words, "Some powerful states practice a discriminatory approach against access of NPT members to material, equipment, and peaceful nuclear technology, and by doing so, intend to impose a nuclear apartheid." He also said, "Today, the most serious challenge is that the culprits are arrogating to themselves the role of the prosecutor. Even more dangerous is that certain parties relying on their power and wealth try to impose a climate of intimidation and injustice over the world, while through their huge media resources they portray themselves as defenders of freedom, democracy, and human rights." The full text can be found at: <http://www.globalsecurity.org/wmd/library/news/iran/2005/iran-050919-iran02.htm>. Alternatively, others have argued that this is not an automatic right of NPT non-nuclear signatories. In their view, access to civilian nuclear technologies is explicitly contingent upon member-state compliance with the IAEA safeguards and verification regimes. Still, they he also argues that the wording of the basic treaty contains loopholes that have been exploited by so-called "threshold" states, and even with the creation of the Additional Protocol, any ability to enforce compliance with the NPT's intent resides in the United States, which unfortunately has enjoyed little success to date in dissuading determined proliferators (i.e., North Korea and Iran, in particular) from pursuing their nuclear weapons objectives.

an “existential” capability, similar to the way in which some in France and India each perceive their nuclear weapons.²⁸ In other words, these would be weapons of last resort, never to be used as war-fighting instruments on the battlefield. They might, however, be employed to test enemy intentions or to warn an adversary from pursuing an attack against Iran, but never as part of an integrated strategic-operational military campaign.

In this regard, it seems reasonable to suggest that Iran, as conceived in this model, would have to demonstrate its nuclear capability, either by openly testing a nuclear device, as India and Pakistan both did, or by communicating the fact that it had successfully crossed the nuclear threshold either by means of an official announcement or by telegraphing its capabilities in Soviet-like fashion via a highly public display, such as a military parade. For Iran, demonstrable proof that it had crossed the nuclear threshold and had operationalized a nuclear weapons capability would offer several benefits. Above all, it would send the message that an attack upon Iran would be met by the potential for nuclear weapons use, reinforcing the defensive nature of Iran’s nuclear breakout. In turn, this would raise the stakes for a potential adversary, and perhaps of greater importance, allow the regime to feel confident that its survival could not be threatened by outside powers, including, especially, the United States. Once Iran actually crossed the nuclear threshold, initial concerns about the country’s isolation (which might well be one result) would likely be replaced by the pride that many Iranians would feel as a result of Iran’s technological achievement and this would (in the eyes of many Iranians) oblige the rest of the world to treat Iran with the deference and respect that many Iranians perceive is due Iran today. In this context, too, it should be noted that Iranian officials, speaking in the West, point to India’s and Pakistan’s nuclear testing, and seem to have drawn the lesson that even if Iran initially is ostracized for its nuclear activities, the global economy’s need for energy would force industrialized states (and developing nations) to move on and resume normal trading relations after a “decent” interval.

However, because of concerns about Iran’s isolation on the global stage, an Iranian regime, especially under the defensive-Iran model, might conclude that its best option lies in concealing its nuclear programs for as long as possible, preferring to operate in the twilight as Israel currently does, to create sufficient ambiguity about the existence of Iranian nuclear weapons, to inject an element of uncertainty into the regional power equation. Never being quite certain if Iran had an operational capability, potential adversaries would still have to engage in worse-case planning for contingencies involving Iran. Adopting such an approach might postpone the negative consequences that an overt nuclear weapons capability might bring down on the country, providing the regime with a degree of flexibility as it maneuvers around NPT seams and under the IAEA radar, as the international community strives to make Tehran accountable for past actions and suspicions about its current programs. Iran could, under this scenario, conceal its nuclear weapons activities and deny that such programs exist, to help it buy time for its strategic stockpile to grow from a handful of weapons to a more substantial number needed for a reliable deterrence policy.

28 The comparison with India comes in the context of Indian thinking about deterring a nuclear-armed China, and not Pakistan, whose nuclear holdings, while significant, are not as substantial as those of China.

Given how rumors and gossip flavor perceptions in this part of the world, innuendoes about an Iranian nuclear program might have just as great an impact on regional perceptions as would a public unveiling of a specific weapons system. In other words, Iran, at least initially, might not have to demonstrate a weapons capability to foment uncertainty in the minds of regional leaders and vis à vis the United States and Israel (both the objects of an Iranian deterrence strategy). If, for example, the regime's objective was to create a situation of ambiguity in which verifiable certainty about Iran's attainment of an operational weapons capability was not possible or likely, then, Iran could, under this model, decide to create a "Potemkin village," using deception and other tactics to fool the world into thinking that it had an operational capability, when in fact, it did not. Saddam Hussein tried this approach, but ultimately failed to deter a U.S. attack. The Soviet leadership failed, too, in the run up to the Cuban missile crisis, but that episode ended with the withdrawal of Soviet missiles from Cuba in exchange for the dismantlement of U.S. *Jupiter* missiles in Turkey.²⁹

Iran would benefit in many ways from this approach. International concern about Iran would decrease and so too would the likelihood that an Iranian nuclear weapons capability might trigger a cascade of nuclear weapons developments in other nuclear aspirants in the Middle East region and beyond. In many ways, this would be the most sensible approach for Iran, assuming that its leadership was concerned with international norms and acceptability. It would also support those in Iran who are arguing for engagement with the West, and for putting a softer face on Iranian policies. However, to be certain that Iran's nuclear capabilities are perceived by potential aggressors as operational capabilities that could be used to protect Iran, the virtual approach may not be the best avenue for a country that seeks to deter an enemy attack and to control domestic opinion. For this reason, the regime in Tehran is more likely to showcase its nuclear status by openly deploying a small, but operationally credible nuclear force posture.

Indeed, the defensive-Iran model assumes a commitment to a minimum deterrence posture. As traditionally understood, a minimum deterrence posture is based on a force that is small but reliable and whose sole objective is the deterrence of a direct attack. Iran's strategy under this model therefore is likely to be accompanied by a declaratory policy that specifies the conditions under which Iran would use or threaten to use nuclear weapons. Under this model, the Iranian leadership might declare that Iranian nuclear weapons would only be employed in retaliation against an attack on Iran, be it a conventional or a nuclear attack. Iran could thus be the first to use nuclear weapons in a contingency, but only after Iranian territory had been attacked. Because Iran's nuclear weapons would be used only in extremis, according to the prevailing assumptions of this model, and in response to an enemy attack,

29 A recent book describing the Cuban missile crisis asserts that, "Khrushchev had done his best to disguise the fact that the Soviet Union was the weaker superpower with spectacular public relations feats. He had launched the first man into space and tested the world's largest bomb. 'America recognizes only strength,' he told his associates. His son Sergei was taken aback when Khrushchev boasted that the Soviet Union was churning out intercontinental rockets 'like sausages.' A missile engineer himself, he knew this was not true. 'How can you say that when we only have two or three?' Sergei protested. 'The important thing is to make the Americans believe that,' his father replied. 'That way, we can prevent an attack.' Sergei concluded that Soviet policy was based on threatening the United States with 'weapons we didn't have.'" Quoted in Michael Dobbs *One Minute to Midnight: Kennedy, Khrushchev, and Castro on the Brink of Nuclear War* (New York: Alfred A. Knopf, 2008), 37.

the priority of a defensive Iran would be to convey very publicly the defensive nature of its deterrent posture. Declaratory policy would be very important in this regard, especially with respect to making “red-lines” very clear and regarding the intention to use nuclear weapons in the face of any attack on Iran’s territory.

Operationally, a defensive Iran would be likely to develop a nuclear force that was dispersed and concealed so as to enhance its chances of surviving a preemptive (or preventive) attack, as discussed at greater length in Chapter 3. It is important to note that the defensive-Iran model, however, would raise for Iran’s leadership the need to consider options for launch-on-warning (LOW) or launch-under-attack (LUA), both of which would require a far more sophisticated command and control and intelligence network than Iran presently has in place. To attain a credible LOW and/or LUA capability, Iran would have to enhance its intelligence, surveillance, and reconnaissance (ISR) capabilities to detect an adversary attack and, at the same time, develop and/or acquire more sophisticated defensive technologies to protect high-value aim-points, including nuclear weapons delivery vehicles and storage sites. The Iranians are apparently trying to do this, having signed, according to the foreign minister, a contract with the Russians to purchase the S-300 surface-to-air (SAM) missile system,³⁰ presumably to protect high-value assets, such as Iranian ballistic missile launchers, the obvious choice for operationalizing a defensive deterrent capability.

Of the three models posited in this study, an Iran that strives to develop a defensive deterrent force would be the least challenging for the United States technically, but very challenging politically because it assumes that the Iranian leadership would not resort to nuclear weapons use or threats lightly, most probably not unless Iran were the object of an enemy first-strike nuclear or non-nuclear attack. A nuclear posture along these lines would cast a long shadow over Iran’s interactions with states in the region and with trading partners in Europe and (possibly) Japan, confronting the United States with the need to reassure jittery allies and to protect them from intimidation and Iranian efforts to shape the political agendas of its Persian Gulf neighbors at a time when allies or coalition partners might not agree about the nature and extent of the threat from a defensive Iran. As with the next model—an aggressive Iran—the United States, would be forced to update its thinking about extended deterrence and place far greater emphasis on the defensive aspects of U.S. strategic planning, from active defenses to consequence management (CM). However, unlike the case of an aggressive Iran where political consensus may exist on the nature of the threat that a nuclear Iran poses, a defensive Iran would probably place the onus on the United States for developing a common threat picture and in so doing would require a vast and tailored diplomatic effort to bring U.S. allies and coalition partners onside with respect to resisting Iranian persuasion. Also of importance, under this model, is the notion that strategic stability rests on an assumption of rather benign motivations behind Iran’s nuclear breakout. This, in turn, suggests a limited force structure, whose threatened use need not rely on sophisticated targeting strategies or a larger number of weapons. While the aggressive-Iran model described below

30 There are conflicting reports from Russian and Iranian sources about whether the S-300 sale has in fact taken place. If it has, Iran would be much better positioned to try to defend against a preventive U.S. or Israeli strike against its nuclear infrastructure.

could also settle on a smaller force structure, it is more likely that it would seek to rely on a more robust set of capabilities, based on the potential need to retaliate after an Israeli or U.S. attack—including one aimed at the destruction of Iran’s nuclear weapons—balance a nuclear Pakistan, and hold its own vis-à-vis a nuclear India and a nuclear Russia.

Model 2: An Aggressive Iran

This model represents a worse-case scenario for the United States. An aggressive Iran with nuclear weapons increases the prospect of crisis confrontation and miscalculation, as Iranian arrogance and possible misperception of the United States (and of its willingness to use force to protect American interests) inform and shape Iranian foreign policy calculations. Most Iran experts suggest, in this regard, that the goals of Iran’s current leadership include the following: (1) expanding Iran’s influence over the Gulf Arabs and reclaiming sovereignty over disputed territories and waters; (2) codifying the influence of Persian nationalism among dissident tribes and provinces within and bordering Iranian territory; (3) controlling the flow of Persian Gulf oil and its pricing; (4) isolating the United States and expelling its influence from the region; and (5) bolstering Iran’s credentials as leader of all Muslims, including those in the Arab world. Permutations of these objectives exist, but basically they embody the primary influences on Iranian policy formation and the context within which our aggressive-Iran model was developed.

Without question, nuclear weapons would enhance Iran’s bargaining power in the region, and empower it in dealings with regional neighbors, including with Turkey, itself potentially a nuclear threshold state; Russia, which has been a nuclear benefactor to Iran; India, a once and future partner; a nuclear Pakistan, which looms as a possible rival; and Afghanistan, which, together with Iraq, is perceived to be part of a U.S. “plot” to encircle Iran. The dynamics of deterrence for an aggressive Iran vary in relation to each of these possible security challenges. Iran’s possession of nuclear weapons, whether or not it necessarily adds to Iranian security, would put an aggressive Iran on more or less equal footing with prospective adversaries. It also has the potential to provide the regime in Tehran with a more cost effective alternative to a conventional force build-up, and, in a crisis, nuclear weapons may be regarded as necessary to obscure deficiencies in other Iranian military capabilities, such as airpower, which, up until now, Iran has neglected to modernize.

An aggressive Iran aspiring to leadership in the wider Middle East would have to neutralize the deterrent effect of Israel’s conventional and nuclear power, and ensure that it has the capacity to influence the escalation dynamics in a confrontation with the United States. Against Israel, Iran can employ missiles and asymmetric attacks, and it always has the prospect of using proxy forces to terrorize the civilian population. Against the United States, Iran perceives that it has the option of disrupting oil flows through the Strait of Hormuz and it is developing a variety of asymmetric tactics, for example, the use of swarm boats to surround U.S. and allied naval platforms operating in the Persian Gulf region.³¹

31 The swarm tactic refers to the use of small boats in groups to ambush merchant convoys or warships transiting important shipping corridors. Iran has employed swarm tactics from both coastal and off-shore staging areas. They have been used with

It also always has the option of unleashing Hezbollah or even Hamas against U.S. and allied/coalition partner high-value targets in the region, and presumably the leadership of an aggressive Iran, would strive to develop new capabilities to threaten the United States directly, such as with the development of an intercontinental ballistic missile (ICBM) capability, the creation of an anti-satellite, or ASAT, and/or an EMP capability—as suggested earlier in this report, or through the deployment of nuclear-tipped missiles from container ships operating off the American coasts.

However, an aggressive Iran would also have to compete successfully with Pakistan’s Muslim bomb in order to derive full political clout from its nuclear breakout. In many areas, Pakistan and Iran are in competition, including with respect to Afghanistan’s future and in the context of Iranian efforts to build a new and strong commercial relationship with India. In this context, too, the regime in Tehran has expressed concerns about the growing radical Salafist influences in Pakistan and what this might portend for regional stability and balance-of-power considerations.³² There is clear evidence that the regime in Iran worries about the extent to which extremist elements in Pakistan might reinforce and shape Taliban thinking about governance in Afghanistan once the international forces withdraw. This might help to explain, in part, the reason why Iran decided in 2007 to step up its support for the insurgency in Afghanistan, at the same time as enhancing efforts to influence decision-making in Kabul. However, at least with respect to the Iranian decision to supply the Taliban with weapons and training support, the more persuasive rationale resides in Iran’s desire to accelerate the withdrawal of U.S. forces and NATO’s International Security Force (ISAF) from Afghanistan. Iran, in this respect, is also looking to the future, and perhaps is considering options for creating what essentially would be an anti-American alliance network in the region, composed of a post-Karzai Afghanistan, India, Russia, and maybe even the Central Asian states and China, essentially the nations who are already a party to the Shanghai Cooperation Organization (SCO). An aggressive Iran could be expected to endorse the notion of a competing anti-U.S. coalition, and seek to leverage it for its own purposes.

Iranian concerns about the stability of Pakistan’s government have increased since the 2007 assassination of Benazir Bhutto, and President Pervez Musharraf’s forced resignation on August 18, 2008. Baluch separatism also looms as another prospective security challenge for Iran, involving Pakistan.³³ Together with heightened apprehensions about the weakness of Afghanistan’s Pashtun

great effect to test enemy responses, as was the case in early January 2008, against U.S. Navy platforms transiting the Strait of Hormuz. For an in-depth assessment of Iran’s asymmetric naval planning, see: Fariborz Haghshenass, “Iran’s Asymmetric Naval Warfare,” The Washington Institute for Near East Policy, Policy Focus paper No. 87, September 2008.

32 Rooted in the eighteenth-century thought of Saudi religious ideologue Mohammad bin Abd-al Wahhab, Salafist, Taliban, and Deobandist ideologies all share a politico-religious philosophy that is characterized by violence and intolerance. Al Wahhab’s interpretation of Islam rejects all innovation and reduces the religion to absolute monotheism. Under this interpretation, the notion of “lesser jihad” (*jihad kabeer*, or armed struggle) took precedence over “greater jihad” (*jihad akbar*, or inner spiritual struggle). Deobandism migrated to India and Pakistan, thanks to the teachings of Syed Ahmed. By the late 1970s Deobandi influences had infiltrated Pakistan’s military and intelligence services.

33 The Baluch are an Iranian ethnic group found in southern parts of Afghanistan, in western Pakistan, in the Federally Administered Tribal Areas (FATA) to the north, and in southeastern Iran. Sistan o Baluchestan is the largest province in Iran and is home to Iran’s Baluchi Sunni minority. In Afghanistan, Baluchistan covers a vast area in Nimroz, south of Helmand, Kandahar,

government,³⁴ especially its inability to control the drug trade across Iranian borders, and ethnic unrest in Tajikistan (the one Central Asian state that is predominantly Persian-speaking and Shia), the potential for crisis and/or conflict between Iran and Pakistan, or among Iran, Pakistan, and Afghanistan (into which the United States conceivably could be drawn) is a contingency that has captured the attention of some Western analysts. According to one such analyst, the “inter-regional linkages between theaters of conflict,” may reinforce for the Iranians the rationale for nuclear weapons, as the military dimension of major power relations in the Middle East/Central Asian region tend to set the tone for political partnerships and alignments.³⁵ Possession of nuclear weapons may be viewed in Tehran as essential to deter Pakistan, as compensation for Iran’s inadequate conventional forces, and increasingly important as a diplomatic tool for intimidating weaker neighbors or to enhance Iran’s negotiating status.³⁶

In the post-Saddam era, Iran unquestionably perceives itself to be the preeminent power in the broader Middle East/Central Asian region, with nuclear weapons critical to the perpetuation of that notion. In Tehran’s view, nuclear weapons will promote Iran’s political and economic interests, not to mention its aspirations of political and cultural dominance in the region. As part of a multifaceted strategy to attain this objective, Iran can be expected to intensify its current efforts to engage Sunni Arab leaders (such as the Saudi royals) to marginalize the United States and those Arab leaders (for example, the al-Khalifas in Bahrain and the bin Zayeds in United Arab Emirates) whose legitimacy Iranian leaders dispute. This strategy is not without pitfalls, and, as events in Iraq continue to illustrate, Iran’s support for Iraq’s Shiite militias and for sectarian violence in Iraq has come at the expense of that country’s Sunni population—a fact that is not lost on the Saudi and Jordanian leaderships. It is also a strategy that threatens to irritate Iraq’s secular leadership, especially as the prospects for reconciliation in Iraq improve over time and Iraqi nationalistic sentiments grow, even among Shiites in the south, who increasingly appear to be alienated by Iran’s overbearing influence on Iraq’s domestic considerations. On the other hand, however, Iran’s growing economic interests in Iraq may have the opposite effect of blunting Iraqi nationalism when it comes to Iranian interests. An Iran with nuclear weapons might either subdue a restive Iraq, if the United States withdraws, or alternatively, it could, one day, embolden a future Iraqi government to reconsider Iraq’s own nuclear option. This may seem

and southwest of Farah province. Most likely, they are an off-shoot of the Kurds. Baluchistan is also the largest province in Pakistan, and a major supplier of natural gas. It is also the site of Pakistan’s space-launch center and the Sonmiani missile-test range.

34 The Pashtun people are an eastern Iranian ethno-linguistic group, with tribes in Afghanistan, Pakistan, and Iran, and a sizable community found as well in India and in the Persian Gulf states, where they work as migrant laborers. They are the main ethnic contingent of the Taliban, and they practice Pashtunwali, which embraces a traditional code of conduct and honor.

35 Geoffrey Kemp, “Iran’s Nuclear Options,” in *Iran’s Nuclear Options: Issues and Analysis*, The Nixon Center Papers, 2001, <http://www.nixoncenter.org/publications/monographs/IransNuclearWeaponsOptions.pdf>.

36 Critics of nuclear weapons often cite the 1999 Kargil crisis as evidence that deterrence cannot be guaranteed, even in a situation where the major protagonists both have nuclear weapons. From this perspective, Pakistan’s intention was to escalate the conflict, using nuclear weapons, to defeat the Indians on the battlefield. It was only because of international intervention and pressure on Pakistan (and the threat of Pakistan’s international isolation) that the embattled government of Prime Minister Nawaz Sharif (which was displaced in a coup d’état headed by the army chief and now-former Pakistani president, Pervez Musharraf in October 1999), backed down. India’s decision not to cross the line of control (LOC) also contributed to resolving the crisis before Pakistan took the decision to escalate to nuclear weapons use.

highly unlikely in the present circumstances, but it is a contingency that should be thought through in the context of debate over the future of an American presence in Iraq and the Persian Gulf region more broadly.

Nuclear weapons would also empower an aggressive Iran in its dealings with Egypt and Saudi Arabia, unless, of course, one or both Arab states decided to follow Iran down the nuclear path. Should that happen, we might be faced with the emergence of two competing power alignments in the wider Middle East/Central Asian regions, with Egypt, likely, leading one faction and Iran the other. Alternatively, as Israel already possesses nuclear weapons, the notion of competing alliances is something that an aggressive-Iran model would have to take into account. For this reason, an aggressive Iran would, logically, have no interest in depending on a “virtual (nuclear weapons deployment) model.” Strategic ambiguity would, to all intents and purposes, defeat the case for going nuclear in the first place. Thus, it is reasonable to conclude that an aggressive Iran would be more likely to demonstrate its nuclear capability, and, while a survivable, missile-based force structure (similar to that attributed to the defensive-Iran model) would do the job, an aggressive Iran conceivably could strive to deploy a larger force, and perhaps seek to field its own first-strike capability, maybe by creating force redundancy by arming cruise missiles with nuclear weapons or by developing nuclear mines.

With this model, Iran would also likely reject the no-first-use principle, and adopt a declaratory policy that makes clear its intention to use nuclear weapons if vital Iranian interests were at risk. This is an Iran that would probably seek to develop an operational nuclear capability and integrate it into broader strategic-military planning, as Pakistan has done. This is a model that also envisages the possible use of small bombs and asymmetric tactics (a “dirty” bomb), including the employment of a nuclear device to disrupt the functioning of U.S. Fifth Fleet Headquarters or other assets, or to inflict damage on allied/coalition partner territories (such as Israel or Saudi Arabia), or economic infrastructure (although a nuclear weapon would not be necessary to destroy offshore oil platforms or natural gas pipelines). Iran, under this model, would likely pursue as well more advanced collateral technologies (satellite guidance or warhead miniaturization, for example) to enhance the trappings of its nuclear power.

Motivated by pretensions to regional power leadership, an aggressive Iran is unlikely to relinquish control over its nuclear weapons by transferring weapons, components, or know-how to an ally (i.e., Syria) or proxy forces (e.g., Hezbollah). In this regard, an unstable Iran (our third model) poses the greater proliferation threat/challenge to U.S. planners. However, with our second model, an aggressive Iran, it is reasonable to contend that Iran might consider extending a deterrence umbrella over selected partners, Syria, for example, or perhaps even Hezbollah, as a means of empowering their actions in situations where Iranian interests might be served. In either instance, however, as noted above, operational control of Iranian weapons would reside with Iran’s leadership in this state-centric model. The only possible exception might be the provision to proxy forces of radioactive materials for use in the manufacture of a dirty bomb, but this would only likely occur if an Iranian leadership were confident that its role would be undiscovered or, at best, not readily subject to forensic attribution. The same may not necessarily be true for our unstable-Iran model, where under a fractured regime ultra-

nationalist or Islamist elements and/or rogue military commanders gain control over Iran's nuclear weapons and decide to transfer them or their components to proxy forces outside of Iran. Scenarios involving the threatened or actual use of nuclear weapons to settle old scores, notably the creation of Israel and its territorial gains since the 1967 Arab-Israeli conflict, are entirely conceivable in a setting rife with fanatics who believe that they derive spiritual power from the Mahdi. As described by one senior Israeli analyst:

The rhetoric sounded by President Ahmadinejad with regard to the annihilation of Israel and his denial of the Holocaust highlights the problem. Ahmadinejad represents a group of politicians who rose to power through the ranks of the Revolutionary Guards and nationalist radicals who want to return to the core values of the revolution, and who endorse confrontation with the West and hatred towards Israel.... Leaders of his type at the helm of the Iranian regime are liable to take unforeseen, reckless steps that defy accepted logic, and such conduct will also hamper the cultivation of stable deterrent relations with a nuclear-enabled Iran.³⁷

As noted throughout this report in discussion of our third model, introduced below, this so-called insider problem³⁸ has serious implications for a nuclear-armed Iran, particularly in light of the growing role of Iran's Revolutionary Guards Corps (IRGC) in the country's national security decision-making.³⁹

Model 3: An Unstable Iran

Among U.S., Israeli, and European analysts, there is speculation that regime stability in Iran could be an issue in the years ahead. Fissures among the elite are widening, popular expectations about economic reform are not being met, and structural problems relating to Iran's economy appear to be getting worse.⁴⁰ The cumulative effect of international sanctions has had some impact on Iran's economy, exacerbating the effect of the disastrous economic policies of the current government. Since the election of Mahmoud Ahmadinejad as president in 2005, Iran has experienced an enormous flight of capital (between \$25 billion–\$30 billion), with thousands of businesses having relocated to Dubai alone. Inflation rates are skyrocketing and unemployment figures hover around 18 percent,

37 Quoted in Ephraim Kam, *A Nuclear Iran: What Does It Mean and What Can Be Done?* Memorandum no. 88 (Tel Aviv: Institute for National Security Studies, February 2007), 81.

38 The "insider problem" is discussed in Chubin, *Iran's Nuclear Ambitions*, 48–63.

39 Iran's Revolutionary Guards Corps (IRGC) was founded in 1979 by Ayatollah Ruhollah Khomeini, the father of Iran's Islamic Revolution. Originally, the IRGC was intended to monitor the ideological commitment of the remnants of the shah's Imperial Army and to disarm non-Islamic members of the Revolution. From its operations in the War of the Cities (against Iraq from 1980–1988), the IRGC's fame and stature grew, having "established a reputation as an efficient military force, and political influence soon followed." According to one assessment, "The nature of the Islamic Republic is changing from a system governed by the Shiite clergy and guarded by the IRGC into a regime dominated by the military. Ali Alfoneh, "How Intertwined are the Revolutionary Guard in Iran's Economy?" (American Enterprise Institute for Public Policy, paper no. 3, October 2007).

40 In the winter of 2007–08, Iran's natural gas shortage became acute, resulting in rolling blackouts throughout the country, people left without heat or electricity for hours on end, and roads empty of traffic. Many Iranians blamed the Ahmadinejad government, which in one view has tended to believe that, "ideology could suffice as a guide for running a modern economy." Quoted in Michael Slackman, "A Frail Economy Raises Pressure on Iran's Rulers," *New York Times*, February 3, 2008.

although many speculate that the real figure is much higher. Iran's youth bulge is a significant factor, even though the vast majority of Iranian young people are not politically active. Many would prefer to emigrate rather than worry about change from within Iran. Against this backdrop, the Supreme Leader appears to be consolidating his power and working his succession through members of the Guardian Council and with President Ahmadinejad in the Supreme Council for National Security (SCNS)—which until October 2007, boasted the participation of former nuclear negotiator Ali Larijani as the Supreme Leader's representative.⁴¹ Larijani still remains a force in Iranian politics and his loyalty to the Supreme Leader marks him as a potential presidential contender and an Ahmadinejad opponent over the issue of how and on what terms to engage the West. At the same time, the Council for the Discernment of Expediency (CDE) led by former President Ali Akbar Hashemi-Rafsanjani and the Assembly of Experts, also a Rafsanjani stronghold, is making its own bid for power with the result that tensions between the conservatives and the reformers appear to be growing.⁴² Nearly every Iran analyst recognizes that the nature of Iran's political system, divided as it is among multiple factions, with each striving for power, is such that messages are often confused, objectives unclear, and compromises virtually impossible.

Yet, on the nuclear issue, the differences between Iran's competing factions are more about how the regime should present itself to the West, and not on the fundamentals of governance, which is based on Ayatollah Khomeini's concept of *Velayat-e-Faqih*, or the idea that the Supreme Leader, as the representative of the Twelfth Imam on Earth, has specific powers and constitutional responsibilities, melding church and state. On this basis, among Iran's clerics and government leaders, there is no official support for returning to a secular government, although in a widely heralded telephone poll into Iran, conducted in the summer of 2007 (Terror Free Poll), some 71 percent of those polled (i.e., unofficial Iranians basically living in Tehran) endorsed the creation of a secular government along the lines of that in Turkey. For many Iranians, the conservative government of Mahmoud Ahmadinejad has not delivered on its campaign pledge to fix the ailing economy. Instead, as perceived by the average Iranian, the current government has worsened Iran's international position and increased inflation, unemployment, and the flight of capital and knowledge to the Persian Gulf states, Europe, and America. The situation inside of Iran reportedly has gotten so bad that even in religious circles, some younger clerics, members of the reformist movement,

41 Ali Larijani was elected to the Majlis and voted to be its speaker in May 2008. This is significant because it positions Larijani as a presidential contender in the June 12, 2009 presidential election. There is widespread speculation in Iran and outside of the country that Larijani will emerge as victorious over Ahmadinejad and over the former President Hashemi Rafsanjani, if he chooses to run, but who is also generally considered to be influential, although he is viewed as "yesterday's man." Much has been made of the perceived divisions within Iran's leadership, including the resignation of Ali Larijani as Iran's top nuclear negotiator. However, it is the consensus of Iran defense experts in the United States and Israel that the apparent differences between the so-called pragmatists, or reformers, and the fundamentalists, or conservatives, is not about policy differences; rather, these factions are differentiated by their approaches to dealing with the West, particularly over the nuclear issue. Larijani thus remains an important political figure in Iran, and, as noted above, many expect him to challenge Ahmadinejad's re-election bid next year.

42 It is not easy to categorize rival political groups in Iran. Depending on the issue and the context in which they are discussed, Iran's Conservatives have alternately been described as "ideologues," or "fundamentalists." The Reformers, on the other hand, have been called "pragmatists" or "technocrats."

have begun to speak out in support of adopting a “China model”⁴³ for Iran, which suggests that the desire for change cuts across Iranian society.⁴⁴

In an unstable Iran, command and control of Iran’s nuclear weapons and related delivery systems would emerge as a central concern. For example, rogue elements of the IRGC and its Qods Force⁴⁵ could, in a state collapse scenario, seek to empower one faction over another by wresting control over Iran’s nuclear weapons. They might also seek to use Iran’s nuclear weapons to support the radical Islamist agenda and transfer nuclear materials and/or know-how outright to Hezbollah, or even to al-Qaeda, using the Qods Force network (for terrorist training and support) that is already in place. Or, leadership elements might, with IRGC support, use Iran’s nuclear weapons to divert popular attention away from Iran’s domestic ills, by brandishing them over long-standing adversaries—Saudi Arabia comes to mind—to create the fiction of Shia dominance in the region and to undermine Saudi security, especially in the Kingdom’s eastern provinces with Shia majorities. Indeed, evidence suggests that some in Iran, perhaps even Ahmadinejad, might welcome a conflict with the United States, so long as it was limited and produced low collateral damage, as a surgical strike might do. This could galvanize civil support for the regime and undermine the voices of pragmatists in the regime, such as Rafsanjani and Larijani, who at one time had argued for a grand bargain with the United States as a means of appeasing Western concerns about Iran’s nuclear activities and of ensuring that a crippling sanctions regime could not be enacted by the United Nations.⁴⁶

If developments inside Iran do destabilize the regime in coming years, the need for cutting-edge “hedging” policies and strategies will grow. Deterring regime elements or non-state actors requires a different set of capabilities than those necessary to deter a state-centric actor. It also necessitates an Interagency, whole-of-government approach, using non-military, as well as military tools. In this context, a dedicated intelligence effort, aimed at identifying Iranian elites and future leaders is key, as are enhanced and focused activities to trace and plan to disrupt Iranian networks that support Qods

43 The so-called “China model” refers to an alternative framework for building the Iranian economy. As such, it is said to incorporate elements of Western economic liberalism within an autocratic political context in which limited “freedoms” are accorded to individuals with the government still controlling the parameters of how far and to what extent such freedoms are tolerated to ensure that they do not deviate too widely from *Sharia* law and customs.

44 See, for example, Ali Alfoneh, “Ahmadinejad versus the Technocrats” (American Enterprise for Public Policy, paper no. 4, May 2008). According to Alfoneh, Ayatollah Mohammad-Reza Mahdavi Kani, the general secretary of the Society of Combatant Clergy and a member of the Assembly of Experts, harshly rebuked Ahmadinejad for his April 16, 2008, speech in Qom, during which the president accused foreign hands and Iran’s internal enemies of engaging in a conspiracy against the government and plotting to raise inflation to 80 percent. Ayatollah Kani also was reported to say, “We are not allowed to blame others for the ills of society ... and (Ahmadinejad) should not expect praise from our side.” Alfoneh reports that this opened the floodgates for others to criticize the government, and the president by name.

45 The Qods Force is an elite, special operations element of the IRGC responsible for operations outside of Iran, including terrorist operations. It is deeply involved in training Hezbollah and other militant Shia groups in Iran, Lebanon, Sudan, and elsewhere in the region.

46 As it is often described, the essence of the so-called grand bargain would involve an end to sanctions, normalization of relations, and the provision of a negative security guarantee by the United States (not to attack Iran) in exchange for an end to Iran’s nuclear programs and its support to terrorism.

Force operations. Because proliferation is a grave concern in the unstable-Iran model, activities under the Proliferation Security Initiative (PSI) and the Bush-Putin Global Initiative to Combat Nuclear Terrorism (GI) should be increased and perhaps even formalized in the G-8, assuming that in the aftermath of Russia's invasion of Georgia, U.S.-Russian collaboration on nuclear trafficking and with respect to Nunn-Lugar activities can be continued, despite apparent differences on NATO enlargement and Russia's support for the independence of Abkhazia and South Ossetia.⁴⁷ Within the United States, greater attention and resources should be devoted to nuclear forensics to ensure that nuclear weapons use can be traced and source attribution made (to facilitate retaliatory action). Regional security initiatives should likewise be expanded, to include enhanced maritime collaboration (similar to what has been developed in the Mediterranean by the U.S. Navy's Sixth Fleet and NATO's Southern Command) and broader investment in the U.S. Gulf Security Dialogue.

Chapter 2: Considerations Influencing Decision-Making about Iran's Nuclear Posture

Iran's drive to develop nuclear technologies is based on a diverse and complex set of considerations, which in turn will influence the scope and nature of Iran's nuclear posture once the decision is made to cross the weapons threshold. According to Iranian officials, domestic-economic factors are among the primary drivers behind Iran's pursuit of nuclear power technologies, but this is not the entire story by any means. It is clear that many Iranians equate nuclear energy with technological prowess, and with power and influence on the world stage, and while many Iranians insist that Iran's nuclear programs are intended only for peaceful purposes, others contend that Iran has the right to develop nuclear weapons if it chooses to do so. To those subscribing to this view, Western efforts to constrain Iran's nuclear technologies or to impose sanctions on Iran for its work in the nuclear field are characterized as a poorly disguised bid to retain control of the global levers of power. Institutional frameworks such as the G-7 and the United Nations Security Council tend to be perceived in Iran as disproportionately favoring the world's industrialized nations, at the expense of developing states. To be sure, Persian nationalism and ethnocentrism come into play in this regard, but many in Iran also feel deeply that the country is being discriminated against by powers that have a narrow self-interest in containing Iran's nuclear aspirations. After all, Iranians contend, Israel is a nuclear power and has crossed the nuclear threshold and still enjoys international support. India, which defied the international community by testing and deploying nuclear weapons in 1998, may benefit from a wide-ranging civilian nuclear power deal with the United States, now that the Nuclear Suppliers Group has given its approval for implementing the accord; and North Korea, which may have sold nuclear-related technologies to

⁴⁷ The Proliferation Security Initiative is a U.S. initiative designed to stop shipments of weapons of mass destruction, their delivery systems, and related materials. Announced by President Bush on May 31, 2003, and stemming from the 2002 National Strategy to Combat Weapons of Mass Destruction, the PSI also is intended to help implement UNSC resolution 1540, which calls on all states to prevent WMD trafficking. PSI is a set of activities, not a formal treaty-based organization, based on partnerships established by participating nations, of which there are fifteen core countries, including the United States, Russia, Japan, France, Germany, and the United Kingdom, and seventy-one others, including the Vatican and Liechtenstein, that have agreed to cooperate on an ad hoc basis. The Global Initiative to Combat Nuclear Terrorism was launched by Presidents Bush and Putin in July of 2005, coming out of the Saint Petersburg summit. Its purpose is to expand and accelerate efforts to combat the threat of nuclear terrorism. Subsequently, Australia, Canada, China, France, Germany, Japan, Italy, Kazakhstan, Morocco, Turkey, and the United Kingdom signed on to the GI's goals.

Syria, has crossed the nuclear threshold and from all appearances intends to keep its nuclear holdings, while extracting, or attempting to extract, aid and trade from the participants in the Six-Party Talks and their global partners.⁴⁸

Foreign policy and strategic-operational planning considerations are likely, as well, to be among the varied and complex motivations behind an Iranian decision to proliferate. As discussed in the preceding chapter and as depicted in the accompanying graphic on page 27, entitled, “Iran’s Presumed Strategic and Operational Goals,” nuclear weapons, in the Iranian case could be seen as promoting a range of strategic and operational objectives. Depending on the context within which they are developed and the force structure they are meant to support, nuclear weapons might be viewed as instruments of prestige to bolster Iran’s international and regional pretensions of power, as posited under our aggressive-Iran model, or they could be considered as essential elements of military policy, either to deter enemy aggression against Iran or to gain the initiative in escalation dominance calculations, or both, as suggested in our defensive-Iran model.

Religious considerations may also be an important factor in the Iranian decision calculus, as they may drive Shia Iran to deploy nuclear weapons in order not to be overshadowed by Sunni Pakistan. More than this, however, Iran’s more orthodox Shia ideology, which is imbued with an apocalyptic vision associated with the return of the Twelfth Imam, may be a more important motivating factor behind Iran’s nuclear ambitions. In this respect, it is important to note that nuclear weapons use in support of religious principles has been ruled as acceptable under Islam.⁴⁹ In 2006, Iran’s spiritual leaders issued

48 However, before this agreement goes into effect, it must get U.S. Congressional approval. The U.S.-Indian civilian nuclear power deal has been controversial from its inception, not only in the United States, but in India, and among members of the broader international community. In the first instance, there are many who believe that this deal sets a bad precedent for global non-proliferation efforts, as India still refuses to sign the Non-Proliferation Treaty. Secondly, elites in India are concerned about the impact that this deal will have for Indian efforts to modernize India’s strategic nuclear force. According to reports surrounding the September 5, 2008 NSG approval of the accord, India has committed to allowing IAEA inspections of its civilian programs, to show the world that it is not siphoning-off civilian nuclear technologies for its weapons modernization program. Thirdly, concerns about another round of nuclear testing also are providing a basis for opposing this deal. In this regard, some proliferation security analysts fear that India may be emboldened to undertake new nuclear tests, once this deal has provided India with the uranium stores it needs to supply its existing reactors and to fuel new sources of energy supply (i.e., new-generation civil nuclear reactors). Against that prospect, analysts worry that other countries, especially Pakistan, but also China, will follow suit in short order. This could, it is hypothesized, have an impact on a country on the brink, like Iran, and send the message that if you are important enough to the global economy, as India and Iran now see themselves, then the world will “excuse” their nuclear testing, in rather short order.

49 This idea was argued by Professor Noah Feldman in “Islam, Terror and the Second Nuclear Age,” *New York Times*, October 29, 2006, <http://www.newyorktimes.com/2006/10/29/magazine/29islam.html>. However, there are those who disagree with this thesis and point out that prominent Islamic scholars have issued fatwas against nuclear weapons use in the name of Islam. In a very interesting *New Yorker* article, Lawrence Wright, author of *The Looming Tower: Al-Qaeda and the Road to 9/11* (New York: Alfred A. Knopf, 2006), reports on the rebellion within radical Islamist circles over the use of terrorist tactics to promote jihad against the West. According to Wright, the chief architect of this controversy is none other than Dr. Fadl (also known as Sayyid Imam al-Sharif) who was founder of the Egyptian terrorist group Al Jihad, a mentor to both Usama bin Laden and Dr. Ayman Al-Zawahiri, and a source of inspiration for al-Qaeda’s sophistry. The murder of civilians is at the root of much of the controversy, and this extends to Sunni-on-Shia violence as well. WMD use, from the perspective of the reformers, could only be seen as “indiscriminate murder” and therefore illegal under Islamic law, which in any case, Fadl argues, restricts the possibility of holy war to extremely rare circumstances. Lawrence Wright, “The Rebellion Within: An al-Qaeda Mastermind Questions Terrorism,” *The New Yorker*, June 2, 2008, 37–53.

Iran's Presumed Strategic and Operational Goals

- Strategic goals:
 - Expand Iranian influence over the Gulf Arabs and re-claim sovereignty over disputed waters/territories
 - Consolidate the influence of Persian nationalism over dissident tribes and provinces within and bordering Iranian territory
 - Control the flow and pricing of Persian Gulf oil
 - Isolate the United States and eliminate its influence in the region
 - Establish Iran as leader of Muslim world
- Operational goals:
 - Implement a strategic deterrence strategy to deter a U.S. or Israeli attack on Iran and to change the power equation in the wider Middle East/Central and South Asian regions
 - Keep U.S. forces bogged down in Iraq and Afghanistan, use terror as a tool
 - Use of proxies to strike at “soft” or asymmetric targets (e.g., Hezbollah and Hamas)
 - Master nuclear technologies before the UNSC can take meaningful action

a fatwa, or holy order, sanctioning the use of nuclear weapons against Iran's enemies. The edict was issued by Mohsen Gharavian, a disciple of Ayatollah Mohammad Taghi Mesbah-Yazdi, the cleric who is widely regarded as the spiritual advisor to President Mahmoud Ahmadinejad.⁵⁰ In a speech in Qom, Gharavian reportedly observed that, “when the entire world is armed with nuclear weapons, it is permissible to use those weapons as a countermeasure.”⁵¹ This line of thought dovetails with Ayatollah Yazdi's previous contention that the use of suicide bombers against the “enemies of Islam” is justified. Given these and similar reports, and reading between the lines, it is safe to assume that at least one faction in Tehran's clerical community appears to view Iran's pursuit of nuclear weapons as central to the country's defense and deterrence planning. Further, this line of thinking goes, Western concerns about collateral damage are outside the strategic context within which nuclear weapons development and their potential use are being considered.

Yet, religious motivations may pale in comparison to considerations relating to Iranian or Persian nationalism. Identification of precisely which factors may carry more weight in the Iranian decision calculus can tell us much more about how an Iranian leadership chooses to operationalize a weapons capability. This in turn has implications for nuclear doctrine and specific force structure choices. However, before delving into the characteristics likely to reflect specific cases, it is useful to recall several enduring truths surrounding Iran's nuclear development:

- First, as mentioned earlier in this report, the Iran-Iraq war was the formative and integrating event for the generation of Iranians now in charge; it provided the military leadership with actual

50 Colin Freeman and Philip Sherwell, “Iranian Fatwa Approves Use of Nuclear Weapons,” February 18, 2006, <http://www.telegraph.co.uk/news/main.jhtml?xml=/news/2006/02/19/wiran19.xml>.

51 *Ibid.*

battle experience that shaped subsequent Iranian thinking about weapons of mass destruction. Iraq's use of chemical weapons, together with the missile strikes in the so-called "war of the cities," contributed two major insights into contemporary Iranian military planning. The first is that reliance on conventional forces for deterrence is less effective than nuclear weapons. With nuclear weapons, even a better-equipped adversary can be defeated and brought to its knees. The second is the importance of asymmetric strategies to keep an adversary off-guard and to gain strategic and psychological advantage. From this perspective, nuclear weapons can be viewed as the ultimate asymmetric weapon. This implies a willingness to use nuclear weapons if circumstances dictate their employment and raises questions about Iranian conceptions of deterrence, escalation management, and crisis de-escalation strategies.

- Second, Iranian paranoia about the United States and what it perceives as American policies to encircle Iran feeds the cognitive mindset of Iranians who believe that "Iran is the center of the universe." At a minimum, this could foster overconfidence when it comes to Iran's ability to deal with the West. Both phenomena, that is, Iranian paranoia about the United States and their ethnocentrism, appear to be fueling Iran's drive for nuclear weapons, and each, on its own, presents a difficult planning challenge for the United States. Thus, while the regime in Tehran is convinced that the United States has plans to attack Iran, there is also a perception that the United States is so overextended in Iraq and Afghanistan that it would be hard pressed to take direct military action against Iran. Against these inconsistencies, Iranian leaders may feel emboldened to act more strongly and forcefully than they have in previous years. This helps to explain their overt support of Hezbollah in the summer 2006 action against Israel and their transfer of C-802 missile technologies, which surprised many in the intelligence community and led them to conclude that the current leadership in Tehran is not risk-averse. In fact, as one analyst put it, Iranian overconfidence had led to overstretch. This sense of overconfidence is only likely to be enhanced in an Iran with nuclear weapons, or at least, in an Iran that resembles our aggressive-Iran model.
- Related to this sense of overconfidence that Iranians may be feeling and which is likely to be exacerbated if and when Iran crosses the nuclear threshold is the melding of radical Shia theology and Persian nationalism, which has yielded a sense of "manifest destiny" among a generation of Iranians who know little of the outside world and, as noted earlier, a youth bulge that is largely uneducated and unemployed. This does not bode very well for Western efforts to engage Iran today, much less a nuclear Iran tomorrow. At the very least, it could lead to miscalculation in a crisis. Getting inside the Iranian psyche the way in which we did with the Soviet Union, thus, emerges as an important intelligence and strategic planning imperative for the United States and Western governments. Iran may constitute an unimpressive military challenge in conventional terms (when considering U.S. forces), but its capacity for asymmetric warfare should not be underestimated. The willingness of the regime to use terror as an instrument of policy suggests an analogy with respect to nuclear weapons, at least, again, in the context of our aggressive-Iran model.

- In addition, Iranian aspirations to lead the Muslim world are well documented. In recent years, especially since the Iran-Iraq war, this has included the creation of Hezbollah and support to Sunni terrorist groups, including Hamas, as a means of creating ambiguity and of taking the worldwide struggle for Islam to its “enemies” in asymmetric fashion. Indeed, Iran’s emphasis on irregular warfare is an important component of its operational planning, and melded together with Iran’s messianic vision, there is no telling how far the Iranian regime will go to attain its objectives. Of course, much will depend, in this regard, on the nature of the regime in control of Iran’s governance, Iranian threat perceptions, and most importantly, the state of U.S.-Iranian relations. If, for example, the regime in Tehran perceives relations with America within the context of a “zero-sum game,” then the forecast is likely to be bleak, and we can expect more of the same, except intensified when Iran becomes a nuclear power, as described in our aggressive-Iran model. However, should an Iranian regime moderate its behavior over the next year, after the parliamentary elections (which potentially could, in a “free” election, usher in a new, more pragmatic government), then the regime in Tehran might be content to rely on the defensive-Iran model, in which nuclear weapons are developed and perhaps deployed (if they did not decide to rely on the “virtual” model) principally for defensive purposes. However, if next year’s elections produce more of the same, then the best that can be expected is an Iran on the road to a nuclear weapons deployment to shore up the regime’s more expansive foreign policy aspirations.
- Finally, over the last two years, Iran has demonstrated a new, more forward-leaning foreign policy, based, presumably, on a calculation that America was becoming a “sunset” power, while Iran’s regional and global influence was on the rise. Perceiving a wounded superpower in Iraq, the regime in Tehran stepped in to adopt a proactive role in Iraq, providing materiel, training, and intelligence support to Shia armies and factions through its Qods Force network. Iran also provided refuge for elements of the Sadr Organization, including for its leader, Moqtada al-Sadr, and supplied weapons and explosively-formed projectiles (EFPs) to the Shiite insurgents in Iraq and to the Taliban in Afghanistan. While Iran’s support to the Taliban is debated among some analysts in the West, at least with respect to goals, and the level of support from the Iranian government to Taliban fighters, most observers of the Afghan scene agree that in 2007, Iran changed its policy and stepped up support for the insurgents in Afghanistan. From this, and in light of other evidence of enhanced political activity by the Iranians, there is little question that Iran is seeking to enhance and cement its influence in Western Heart, over the Baluch tribes in Iran and within its border areas, as well as over the government in Kabul. In so doing, the Iranian leadership, apparently, seeks to shape decision-making in Kabul in ways that run counter to U.S. and coalition-partner interests. Some analysts also contend that Iran is actively working with the Taliban (through its IRGC/Qods Force elements) to eject U.S. and ISAF forces from the country, along the lines of “the enemy of my enemy is my friend,” but few believe that Iran sincerely wishes for, or would support, a resurgence of a Taliban regime in Afghanistan. For this reason, many experts contend that Iran is walking a narrow line and could possibly be engaged by Western powers and the broader international community on specific issues related to regional stability, Afghani refugees, for example—though not,

according to Iran experts consulted for this study, on the nuclear issue.⁵² On the nuclear issue, the consensus is that Iran has drawn a “red-line” under its right to pursue nuclear power technologies, and most conclude that this extends as well to Iranian nuclear weapons development. As already stated, the only questions that remain in this regard are precisely how Iran’s nuclear weaponization will evolve, and for what purposes? Answers to these questions, in turn, will have specific and perhaps unique operational implications for U.S. defense and deterrence planning, crisis management, and escalation control, as the following analysis suggests.

A Defensive Iran’s Nuclear Posture, Doctrinal Priorities, and Force Posture

Iran’s nuclear programs were begun not by the radical Iranian leadership that came to power after the overthrow of Mohammad Reza Shah Pahlavi, but instead by the shah himself, with the aid of the U.S. Atoms for Peace program.⁵³ While speculation abounds as to whether the shah really wanted to use Iran’s civilian nuclear reactors as the basis for a weapons development program, his commissioning of Akbar Etemard to build the Atomic Energy Organization of Iran (AEOI) seems to confirm this view, as Etemard was the scientist who oversaw Iranian efforts to construct a dual-track program aimed at uranium enrichment and plutonium production. After the Iranian revolution in 1979 and the shah’s ouster, Iran’s clerical leadership shelved Iran’s nuclear programs to concentrate on more immediate concerns, and it was not until the Iran-Iraq war of 1981–88 that Iran’s nuclear ambitions were revived, primarily as the result of Iraq’s use of chemical weapons against Iranian forces. From that point on, evidence suggests that the regime in Tehran began to consider seriously the nuclear option, first as a deterrent to offset Iraq’s own efforts to develop nuclear weapons, and later to deter the United States from attempting regime change in Iran. Ever since President Bush’s 2002 State of the Union address in which he singled out Iran together with Iraq and North Korea as constituting the “axis of evil,” and against the backdrop of the U.S. invasion of Iraq in 2003, the Iranian leadership has harbored fears of a U.S. preemptive attack whose objective would be to promote a secular, democratic government to replace the country’s clerical rule. This, together with American policies in the wider Middle East, in particular U.S. support of Israel and the establishment or deepening of relationships with countries

52 This was one of the major conclusions of the so-called Baker–Hamilton Commission on Iraq. Headed by former Secretary of State, James Baker, and former Congressman Lee Hamilton, the Baker-Hamilton Report was issued in December 2006. Also known as the Iraq Study Group, the purpose of this commission, which was impaneled in March 2006, was to assess the situation in Iraq and to make recommendations about the future course of U.S. policy in relation to Iraq. The consensus view of the ten-member panel was that the United States should actively engage Iran and Syria, based on the presumption that both of Iraq’s neighbors have a stake in regional stability.

53 The Atoms for Peace program was unveiled by President Dwight D. Eisenhower in a speech on December 8, 1953, with the objective of putting nuclear weapons technologies to good use, to support medicine, scientific development, and the peaceful application of nuclear power. Since its unveiling, however, some prominent U.S. analysts contend that the policies and capabilities it produced have inadvertently fueled nuclear proliferation. However, the balance sheet is not that clear, as, on the one hand, Eisenhower’s initiative did enable the international diffusion of scientific and industrial nuclear technology, and some recipient nations—Israel, India, and Pakistan—did divert U.S. nuclear assistance to military uses. On the other hand, the Atoms for Peace program produced many of the most important elements of today’s nuclear non-proliferation regime: the International Atomic Energy Agency (IAEA), the concept of nuclear safeguards, and, most importantly, the norm of nuclear non-proliferation.

on Iran's border, including Afghanistan, Azerbaijan, India, and Pakistan, has contributed to Iranian perceptions of encirclement and to the notion that the United States is trying to contain Iran and undermine its emergence as a major power in the Middle East and Central Asia.

With suspicions about American intentions a key factor in the regime's decision-making, nuclear weapons arguably could provide a means to check American power and to deter the use of force against Iran. It could also be argued that Iran's current efforts to produce its own fissile material are intended to elicit from the United States a negative security guarantee—a promise not to attack Iran in order to effect regime change—in exchange for Iran's agreement not to cross the nuclear threshold to field a weaponized capability. This, however, appears to be less of a possibility, with a more likely scenario being one in which Iran crosses the nuclear threshold and deploys a small deterrent force to discourage an attack by either the United States or Israel. As a defensive deterrent, Iran's nuclear posture need not be overly complicated, though force protection considerations would weigh heavily, especially with respect to command and control. This deterrence model, as described briefly earlier, could also include a launch-under-attack policy directed against U.S. regional partners and allies (Israel and NATO Europe). Under the LUA policy, Iran most likely would operationalize its *Shehab*⁵⁴ family of ballistic missiles in an effort to intimidate European NATO nations, and in so doing undermine the U.S.-NATO partnership, potentially by creating political and logistical support difficulties for U.S. operations in a crisis or conflict involving Iran. One of the main objectives of any Iranian deterrence strategy may be to erode Alliance faith in the U.S. extended deterrence concept by sowing doubts in the minds of allied and coalition partner leaderships with regard to America's willingness to defend countries under threat of attack from a nuclear-armed Iran. By planting these doubts, Iranian leaders may hope to erode or otherwise diminish allied/coalition support for U.S. military operations (either a non-nuclear air strike or a full-blown conventional attack against Iran), constrain U.S. access to bases and facilities in the region, and deny over-flight rights for U.S. and allied/coalition partner forces operating against Iran.

More importantly, from a U.S. defense planning perspective, a regime seeking nuclear weapons for defensive purposes alone might be content to rely on a minimal force structure, whereby dozens of weapons, and not hundreds, would be sufficient for deterrence purposes. If indeed this was the main motivation for the regime's nuclear weapons programs, then it follows that, as in Pakistan, Iran would probably choose to arm its *Shehab*-family ballistic missiles with rudimentary nuclear warheads, being less concerned, for example, about precision targeting or lowering collateral damage and more interested in creating a psychological effect on neighbors and potential adversaries. Emblematic of this mindset

⁵⁴ Tehran is aggressively pursuing foreign technology in an attempt to develop the medium-range *Shehab-3* (1300 kilometers with a payload of 1650 pounds). Based on North Korea's *No Dong*, the *Shehab-3* was flight-tested for the third time in September 2000 and became operational in 2003; the United States alleges that Iran's *Shehab* development benefits substantially as well from Russian technology. With this capability, Iran is able to target Israel, Turkey, and Saudi Arabia. A newer system, tentatively called the *Shehab-4*, is based on the old Soviet SS-4 IRBM design, and is being built to have a larger payload of 2200 pounds and a range of 1240 kilometers. In January 2007, Alaeddin Boroujerdi, chairman of the National Security and Foreign Policy Commission, announced that Iran had finished building a reconnaissance satellite and had converted a ballistic missile into a space launcher. Dubbed the *Shehab-ER* by Western analysts, this program is the prospective basis for an Iranian ICBM capability, having a solid-fuel capability and three stages. See page 32 for a snapshot view of Iran's missile capabilities.

A Snapshot of Selected Iranian Missile Capabilities

Shehab-1, 2:

Two Scud variants, with ranges between 300 and 500 kilometers. Both are indigenously produced.

Shehab-3:

A derivative of North Korea's No-Dong-1 ballistic missile, this is a single-stage, liquid-propelled missile with a range capability of 1,000 and 1,500 kilometers. In 2005, Iran claimed to have successfully tested a solid-fueled Shehab-3. Sometimes referred to as the Zelzal-3 ballistic missile.

Shehab 3B, 4, BM-25:

The Shehab-3B, Shehab-4, and the BM-25 are all derived from Shehab-3 technologies. Each is said to have a range capability between 1,500 and 3,000 kilometers, allowing the targeting of the GCC nations, Turkey, and southern Europe. Some may be operational, such as the Shehab-4, which is thought to be a two-stage, liquid-propelled missile with a 2,200-km range. Other improvements to the Shehab-3B include a new guidance system, an improved re-entry vehicle, and greater maneuverability.

Shehab-6:

Thought to be in the development stage, this missile is believed to be a three-stage ICBM with a target range of 5,500 to 6,200 kilometers, with a 1,000-, 750-, or 500-kilogram warhead depending on the number of stages used in its launch. The Shehab-6 is often referred to as the Kosar and reports indicate that it is based on North Korea's Taepo Dong-2 technology. Its development has also benefitted from Russian help, with the incorporation of SS-4 and SS-5 IRBM technologies.

Ghadr-1:

Declared in September 2007 as a new 2,500 to 3,000 kilometer range, solid-fuel missile; independent experts believe the Ghadr-1 is a redesigned Shehab-3 and not a new missile.

Kh-55:

Ukraine surreptitiously exported twelve 3,000 kilometers cruise missiles to Iran. Though nuclear-capable, the missiles are believed to be in poor condition.

Thaqeb:

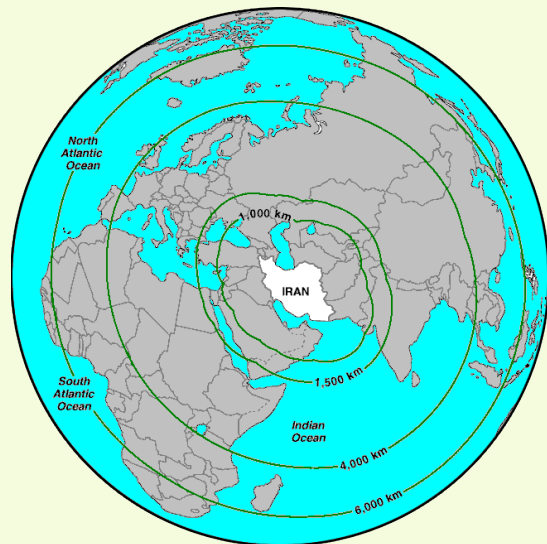
Iran's first and only submarine-launched missile; some analysts claim the 2006 demonstration of the THAQEB was a hoax and Iran cannot launch missiles from underwater, only torpedoes.

Kowsar:

Iran's newest anti-shiping missile; a cruise missile allegedly capable of speeds of 300 miles per hour, travelling ten feet above the water's surface.

Nour:

Air-launched cruise missile with a 200 kilometer range.



are the 2001 remarks of former President Rafsanjani, who claimed that while “even a single bomb on Israel would destroy everything ... such a bomb would only cause damage to the Muslim world.”⁵⁵ If the main purpose of an Iranian weapons program was to telegraph to prospective enemies its capacity to retaliate with devastating consequences, then it is likely that the regime would opt to showcase its nuclear weapons, much as the Soviets and the Chinese did during the Cold War, to telegraph to a global audience that they were great powers. For its part, Iran would be signaling to the United States that it could inflict devastating damage on U.S. allies in the region, and in the event of a U.S. attack, Iran would have the option of destroying Israel and targeting the Persian Gulf states. Probably, in this context, a defensive Iran would refrain from targeting U.S. military facilities in the Gulf region directly, in the expectation that they could control the escalation chain and deter the United States from attacking Iran, at least using nuclear weapons. At the same time, by demonstrating its nuclear capability, either through testing or some less overt means, Iran would also be sending a signal to the Islamic world that it had assumed the mantle of leadership over it, regardless of ethnicity or sectarian preference (Sunni or Shia).

Another aim of an overt display of Iranian nuclear weapons capability would be to demonstrate to the Western world, and to the United States in particular, that the regime in Tehran would never again accept Western patronage, and more than this, that there was no grand bargain to be sought on the issue of Iran’s possession of nuclear weapons. It is interesting to speculate as to whether a more pragmatic, or a “democratic” regime would be dissuaded from crossing the nuclear threshold in the first place, given all the other factors apparently motivating Iran’s nuclear development? From the earlier discussion about the nature of the regime, found in Chapter 1, this appears to be a factor in determining how a nuclear Iran might manifest its nuclear capability. However, by all appearances, it is clear that the conservative bent of the current regime—and, most likely the next government that very well could usher in Iran’s nuclear status—sees the only acceptable outcome a nuclear Iran, as that is the only way in which the West, and the United States in particular, will respect Iran and deal with the country as an equal, not a client state, as was the perception during the shah’s reign.⁵⁶ Moreover, the conservatives now in power recall the West’s response to the reformists’ calls for a “dialogue of civilizations,”⁵⁷ which, essentially, was to increase the pressure on Iran as a means of provoking change within the country.

55 Kam, *A Nuclear Iran*, 79.

56 By all accounts, the privileges that the shah awarded American citizens in Iran, notably immunity from Iranian judicial prosecution, were derided by most Iranians. Many Iranians saw this as part and parcel of a capitulation to the United States, and they perceived in this an American arrogance that they claim persists today with respect to American flouting of international law (such as the treatment of prisoners at Abu Ghraib prison in Iraq, and Washington’s refusal to sign on to the International Criminal Court) and to its pursuit of “imperialistic” policies (e.g., the “invasion” of Iraq). See, for example, Yossi Melman and Meir Javedanfar, *The Nuclear Sphinx of Tehran: Mahmoud Ahmadinejad and the State of Iran* (New York: Carroll and Graff Publishers, 2007), esp. chap. 3, “A Messianic Vision;” and Barbara Slavín, *Bitter Friends, Bosom Enemies: Iran, the U.S., and the Twisted Path to Confrontation* (New York: St. Martin’s Press, 2007), esp. chap. 1, “‘Death to America’ and ‘Can I Have Your Autograph?’”

57 Playing off of Harvard professor Samuel Huntington’s thesis concerning the “clash of civilizations,” reference to which is made of page 54 of this study, former Iranian president, Mohammad Khatami, proposed the notion of a “dialogue among civilizations,” an idea that subsequently was the focus of United Nations activity in 2001, before the 9/11 attacks. According to Khatami, in his address to the UN General Assembly on September 5, 2008, “In order to provide natural unity and harmony in form and content for global culture and to prevent anarchy and chaos, all concerned parties should engage in a dialogue in which they can exchange

Ayatollah Ali Khamenei makes it eminently clear in his speeches that compromising on the nuclear issue as a result of U.S. pressure—whether it comes from increasing U.S. carrier deployments in the Persian Gulf or nearby waters or from building coalition partner capacity—will not guarantee the security of Iran. Indeed, interviews for this project with Iranians living outside of Iran and with specialists on Iran revealed a widely shared view, even among Tehran’s elites (many of whom had supported former President Mohammad Khatami’s efforts to reform and liberalize Iran’s economy and society), that Khatami’s attempts to engage the West, in particular the United States and especially after the events of September 11, 2001, were rebuffed. Far from welcoming Khatami’s overtures, President Bush, in his 2002 State of the Union address, identified Iran as part of the “axis of evil.”⁵⁸ This sequence of events allegedly reaffirmed for many Iranians the need for self-reliance and autonomy when it comes to dealing with other states, especially nuclear powers. From this, elites in Iran appear to have deduced that nuclear weapons are essential to protecting Iran’s independence and maintaining regime stability. Indeed, in this respect, many of the Iranian elite appear to view the United States as an anti-status quo power, based upon decisions taken to topple Saddam Hussein in Iraq and to eliminate the Taliban in Afghanistan. Iran, they contend, has no imperial ambitions, except to enlarge its political influence within the Muslim world. Indeed, official statements identifying Bahrain as a “province” of Iran, and Iran’s ongoing disputes with the United Arab Emirates (UAE) over Abu Musa and the Tunbs Islands, tend to be dismissed by Iranian elites as legitimate, if contested, legacy claims.⁵⁹ For them, these territorial disputes are a matter of pride and of strategic significance. Resolution in Iran’s favor of these issues would help to consolidate Iran’s control of the Gulf littorals, especially if the United States were to withdraw from the region and if selected Gulf Cooperation Council (GCC) entities, Oman in particular, but also Dubai and others in the UAE, were to concede to Iran major-power status and all that it implies with respect to trade and soft-power influence.

An Aggressive Iran That Flexes Its Muscles

If Iran is pursuing nuclear weapons to support a more aggressive foreign policy rather than for defensive purposes, then operationalization of its deterrence posture may look quite different and be based on quite different planning assumptions. First and foremost, it is likely that if foreign policy considerations were the primary impetus for Iran’s nuclear weapons development, and not principally the need for self-preservation in anticipation of a U.S. or Israeli strike, then it is very likely that at some point Iran will move away from its present course of denying the obvious and make clear its nuclear intentions. Of course, this will mean renouncing its NPT obligations and discarding a policy of strategic

knowledge, experience and understanding in diverse areas of culture and civilization.” Khatami speech before the UN General Assembly, in New York, on September 5, 2000, found at: <http://www.unesco.org/dialogue/en/khatami.htm>.

58 Comments made at an IFPA workshop on Iran, held on September 24, 2007, at the Army and Navy Club, Washington, D.C.

59 Abu Musa and The Greater and Lesser Tunbs are islets located in the Persian Gulf, off of the United Arab Emirates and Iran, both of which claimed sovereignty over them after the British withdrew from the Gulf in 1971. At that time, Iran under the shah agreed to administer the islets jointly with Sharjah (now a member of the UAE). Since then, however, Iran has sought to militarize all three islets, and has encouraged Iranian migration to Abu Musa, the only islet that is inhabited, as a means of changing its demographic composition. On Abu Musa, Iran has built a military base and installed an airport. The UAE has repeatedly called for international arbitration of the status of the islets, but Iran continues to refuse.

ambiguity as regards its nuclear weapons development. For many Iranians, abrogating the NPT is not a contentious issue, inasmuch as the international community, from the Iranian perspective, sat back and condoned Iraq's violation of the 1949 Geneva Conventions when Iraqi troops used chemical weapons during the Iran-Iraq war.

With the Iran-Iraq war as the defining experience for much of Iran's contemporary populace, Iranian elites theorize that nuclear weapons would deter U.S. efforts to change the regime by force, Israeli attempts to contain Iran's military modernization, while providing a key capability to support Iranian foreign policy initiatives and exploiting the political shadow that is cast by nuclear weapons possession. In a region where Israel, Iran's main adversary, possesses nuclear capabilities, the elite see it as necessary for balance-of-power considerations that Iran also deploys a nuclear arsenal. Escalation dominance is a central issue in this regard, but so too is the deployment of a military capability able to destroy Israel. However, it would be a mistake to focus on Israel alone as the principal variable in Iranian nuclear calculations. It is eminently clear that deterring a U.S. attack and undermining American influence in the wider Gulf region and beyond in Central and South Asia, has emerged to be an important regime objective. Nuclear weapons, in this context would serve Iran well, though other factors as well are likely to hold sway in Iranian thinking. A perceived requirement to balance India's nuclear capability and to compete with Pakistan for Muslim "hearts and minds" have each been cited by Iranian officials as important to Iranian thinking about nuclear weapons development. Coupled with considerations of Persian pride and ambition, these factors are said to provide powerful incentives to risk international condemnation by Iran's crossing the nuclear threshold.

Apparently, Iranian strategists believe that with nuclear weapons Iran can enhance its influence over the smaller states in the region, and a nuclear Iran does indeed have the potential to change the political dynamics in the Middle East. An Iran in possession of nuclear weapons might be emboldened to occupy Bahrain, or to exert ownership over Abu Musa or the Tunbs. An aggressive Iran might also extend its deterrence protection to Syria as a means of cementing its tactical alliance with that country against Israel. Conceivably, in this context, it could threaten to use nuclear weapons on behalf of Syria, against Israel. It might also be inclined to extend a deterrent umbrella over Hezbollah, though the aggressive-Iran model postulates that the regime in Tehran would not allow nuclear weapons to be transferred out of the country and placed directly under Hezbollah's control. They might, however, under this model, opt to provide Hezbollah, or some other terrorist organization, with nuclear materials (for a radioactive device), if Iran's interests were to be served by doing so, and if attribution of Iran's role could not be made. In contrast, our third model, that of an unstable Iran, speculates that regime elements are likely to transfer nuclear weapons, as well as know-how or materials, outright to "allies," however, and in this context, as will be explored in greater depth later on in this study, the network nodes through which a nuclear-related technology transfer might take place offer important prospective targets for U.S. counter-proliferation and offensive deterrence planning.

The so-called "*Divine Victory*" against Israel in the summer of 2006 demonstrated just how tightly connected Hezbollah and Iran are. Iran has recently completed construction of a fiber optic "backbone"

in Lebanon for Hezbollah, and, according to Israeli sources, Qods Force elements of the Iranian Revolutionary Guard Corps are integrated into every level of Hezbollah's operations, and have transferred advanced equipment to the non-state organization, including unmanned aerial vehicles (UAVs), missiles (C-802s), and electronic warfare capabilities to jam Israeli equipment.⁶⁰ All of this, of course, reinforce our contention in a chaotic Iran the tottering regime might opt to transfer nuclear assets out of Iran either to ensure IRGC control or to protect them for use (or threatened use) to further the cause of the Islamic revolution.⁶¹ Both contingencies obviously are highly speculative, and cannot be proven, although if plausible they need to be addressed more comprehensively in U.S. IW planning, as discussed more extensively in Chapter 6.

An Unstable Iran and the Potential Need to Deter Rogue Elements and Non-State Organizations

Thomas Schelling, whose thinking shaped much of Cold War decision-making about deterrence, has recently suggested that Iran, even short of attaining a weaponized capability, has already attained a "sloppy, asymmetrical" form of deterrence,⁶² and on that basis it really doesn't have to operationalize a nuclear weapons capability. On the other hand, it might very well be inclined to do so since "no state armed with nuclear weapons has ever attacked another state similarly armed."⁶³ The logic of deterrence holds that states have too much to lose from nuclear weapons use, and even a diverse group

60 A recent assessment by Dr. Nimrod Raphaeli for the Middle East Media Research (MEMRI) group explores what he calls "the Iranian roots of Hezbollah." Dr. Raphaeli concludes that, Hezbollah, having been created and sustained by Iran, "now serves as an extension of Iran's strategic expansion into the Middle East." He also contends that, "Iran's extended arm in Lebanon would not be possible without the collusion or approval of the Syrian regime." After Najaf and Qom, "Damascus," he contends, "is considered the third largest Shiite center in the world." Dr. Nimrod Raphaeli, "The Iranian Roots of Hezbollah," a MEMRI report, no. 448 (June 17, 2008).

61 An Iranian dissident, Alireza Jafarzadeh, who as a member of the Mujahedin-e Khalq (MeK)—which has been designated a terrorist group by the United States, but recently was removed from the UK's terrorist watch list (and is about to be removed from that of the European Union as well)—and was involved in the exposure of the Natanz centrifuge site to the IAEA, contends that the IRGC controls a number of sites dedicated to Iran's development of a nuclear weapon. These include Imam Hossein University, an IRGC school where scientists, including Fereydoun Abbassi, a noted Iranian physicist, are said to be producing polonium-210 and beryllium for an atomic trigger; a command and control center located at Lavizan 2 in Tehran (Noor township); Malek-Ashtar University at Isfahan, where the Center for Readiness and Advanced Technology is located; and Novin Medical Radiation Institute in Tehran. Research on fissile material is being carried out by Abbassi and Mansour Asgari, while laser enrichment is under the direction of Mohammad Bassam at Parchin. Nanotechnology, widely used in the production of nuclear weapons, comes under the direction of Salid Borji, an IRGC member, at Mojdeh. Working closely with him is Ali Mehdi-pour Omrani at Parchin. None of these sites has been declared, so none has been the subject of an IAEA inspections request. According to the MeK, the command and control center is known as "Mojdeh" and comes under the direction of Mohsen Fakhrizadeh, a nuclear physicist who is an IRGC member who reports directly to Iran's defense minister, Mostafa Mohammed Najar. According to one report, "reliable sources within the regime report that Tehran is actively pursuing the production of nuclear warheads in an area called Khojir," which is a vast, secured military area southeast of Tehran, that is also the site of *Shehab-3* development. Other scientists alleged to be involved in Iran's military nuclear programs include Mehdi Naghian Fesharaki, former head of research and development at the Air and Space Industries Organization of Iran, and Mohammad Hossein Ghezelayaq, head of the auxiliary research department at Maek Ashtar University.

62 Quoted in Thomas Barnett, "Nuclear Ringtone: The Lasting Peace Provided by Nuclear Weapons," *Scripps News*, September 7, 2007, <http://www.scrippsnews.com/node/26648>.

63 *Ibid.*

of actors—including democratic nations, totalitarian states, and actors supporting specific religious causes, for example, Pakistan, India, and Israel—has thus far refrained from nuclear weapons use because of the assured destruction threat that was central to deterrence thinking in the last century. Schelling has also made the argument that in this respect, Iran would not be any different, but this assumes a state-centric Iran and one that would not risk the country's destruction for a religious principle or in support of an extreme conception of Islamic jihad. Schelling's statement also presumes that the Iranian leadership accepts the longstanding assumption, central to established deterrence theory, that nuclear weapons are so destructive that they will not be used except as weapons of last resort. However, if the Iranian leadership instead entertained an apocalyptic vision, Schelling's observation may have no relevance for Iranian conceptions of nuclear deterrence. In this case, and if we in the United States keep to Schelling's logic, America may be deterred by Iranian nuclear weapons, but Iran would not necessarily be deterred by the threatened use of U.S. or Israeli nuclear weapons against Iran. This dichotomy is likely to be exacerbated if Iran fractures along ethnic or religious lines or if the country becomes embroiled in a civil war, with, for example, the reformers opposing the conservatives. In either instance, comfortable assumptions about assured destruction and Western deterrence theories may not hold up, especially if a regime finds itself in the last throes of power and control of nuclear weapons lies in the hands of rogue elements. Even as this may be a less likely possibility in Iran's case, it needs to be considered much more carefully in the broader context of deterrence thought. Deterring nuclear weapons use could be much more problematic under these circumstances, just as it would be were al-Qaeda to acquire and threaten to use WMD.

Given Iran's relationship with Hezbollah, it is useful to speculate as well about the possible effect on U.S. (and Israeli) deterrence planning were Iran to transfer fissile materials to extremist organizations. Dr. Fred Iklé, writing in *Annihilation From Within*, asserts that, "(t)he ineluctable dissemination of technology and scientific discoveries will make nuclear and biological weapons accessible to merciless insurgent groups, and genocidal doomsday cults."⁶⁴ Deterrence as a construct may only have limited applicability to such groups; at the very least, it can be applied to such groups only with careful thought about the personalities of their leaders, their support and financial structures and networks, and the entities used to further their objectives. Tailoring the implementation of a deterrence strategy to focus on networks and actors is a far more daunting task than holding a sovereign state and its leadership accountable. Yet that is what is sought by the new strategic posture developed by the Bush administration and unveiled in 2001, shortly after the September 11 attacks. In subsequent years, the precepts of U.S. global-strike planning and the implementation of the New Triad concept have been refined and adapted to the strategic challenges of the day, even though there remains considerable doubt about the utility of nuclear weapons for compelling or deterring non-state actors, especially those who are religious fanatics or who have mindsets that reject, in the name of justice, globally accepted Western values and behavioral norms.⁶⁵

64 Fred Charles Iklé, *Annihilation from Within* (New York: Columbia University Press, 2006), 59.

65 As noted above and elsewhere in this report the Nuclear Posture Review was essentially completed before the events of 9/11. As a result, it touches only tangentially upon transnational, non-state actor threats, principally by addressing U.S. homeland security threats. Its principal focus is on state-centric threats and not on post-modern terrorist challenges. One of

In this respect a key question is, can an Iran in chaos in possession of nuclear weapons be deterred from using such weapons? The answer to this question may not be as clear-cut as it first might appear. Clearly, neither the assured destruction paradigm developed during the Cold War nor recent efforts to update U.S. deterrence planning to focus on tailored and situation-specific responses would hold much relevance against regime elements that had wrested control of Iran's nuclear weapons and were determined to leverage them to gain power inside of Iran. Moreover, in an unstable-Iran model, even if the clerical regime still managed to maintain its control over the IRGC, there are no guarantees that nuclear weapons would not be used against Iran's external enemies to prop up the regime in Iran. This is an Iran that essentially would be "undeterrable," just as rogue elements of the IRGC, seeking to retain their power base and/or to promote radical fundamentalist objectives, would likely be. However, detonation of a nuclear device against U.S. interests in the Middle East, in Israel, or even a target in the continental United States (CONUS) that could be attributed to Iranian agents or proxies would invite kinetic retaliation against aim-points in Iran, and this could dissuade independent actors from taking the first, provocative, escalatory step. On the other hand, if attribution were not possible, these same actors might be more emboldened to act, using a nuclear strike to demonstrate power and/or to influence the domestic situation inside of Iran. This assumes a willingness to defy convention and to violate the nuclear taboo that has been in place for years and that provides the basis of Western deterrence thought. For the most part, IRGC leaders are not irrational actors; neither would they likely resort to nuclear use, except in extreme circumstances, given the anticipated response from the United States against Iran directly.

The more worrisome scenario is one where a religious fanatic, operating more or less alone, sanctions the transfer of fissile material (for use in manufacturing a dirty bomb) to suicide bombers, in anticipation of the final revelation of the Twelfth Imam.⁶⁶ This is a scenario that today preoccupies U.S. officials, and one about which there continues to be considerable speculation.⁶⁷ Much remains unknown about the control of Iran's nuclear materials, although the chain of command is not entirely opaque. From all that we can tell, the Supreme Leader holds ultimate authority over Iran's nuclear policies and Iran's military, the Iranian Revolutionary Guards to be specific, plays a role in Iran's weapons development and most likely will do so as well with respect to their operational control. The role of Iran's president is debated, although many have speculated that his views on the nuclear issue correspond generally to those of the Supreme Leader, or he would not be allowed to continue his public pronouncements on the topic. Both, however, belong to Iran's Committee for Special Operations, which, as far as can be discerned, operates independently from the Supreme National Security Council, whose membership includes the chief of the general staff, and, depending on the topic, specific ministers of government

the defining characteristics of the modern era is the intention of radical, non-state actor groups to acquire or attain weapons of mass destruction. A post-9/11 assessment by the Director of National Intelligence noted that, "we are more likely to see an attack from terrorists using weapons or agents of mass destruction.... Reporting indicates that nearly 40 terrorist organizations, insurgencies, or cults have used, possessed, or expressed an interest in chemical, biological, radiological, or nuclear agents or weapons." Statement of John D. Negroponte to the Senate Select Committee on Intelligence, February 2, 2006.

66 To borrow from the lexicon of suicide terrorism, this would be more or less akin to what is termed the "lone wolf" phenomenon.

67 See, for example, David Ignatius, "Portents of a Nuclear al-Qaeda," *Washington Post*, October 18, 2007.

and informal counselors. Ayatollah Muhammed Taghi Mesbah Yazdi has great influence on the SNSC, both through his protégés, who include Ali Akbar Mohseni, the minister of intelligence and security, Mustafa Pour-Mohhamadi, until quite recently the minister of the interior, and Gholam Hossein Ejehi, the minister of information, as well as by virtue of the fact that he and Ahmadinejad are close friends and colleagues.⁶⁸ Former President Rafsanjani has also been deeply involved in Iran's nuclear programs, and many believe that he plays a role in contemporary decision-making about Iran's weaponization.

Efforts to identify the scientists and technicians working on Iran's nuclear power projects have, until recently, yielded mixed results. However, as Iran's nuclear programs have progressed and the controversy surrounding them increases, more information is coming to light about the personalities involved in the country's nuclear programs.⁶⁹ From dissident and Israeli reporting, it is clear that the IRGC plays the critical operational role in controlling Iran's ballistic missiles, so it is likely that its leadership, too, plays and will continue to play an operational role in Iran's nuclear policy, as it develops and as weapons come on line. According to one Iranian dissident, twenty-one IRGC commanders are top scientists in Iran's nuclear programs.⁷⁰ Moreover, the Mujahedin-e Khalq has identified specific individuals thought to be associated with Iran's nuclear weapons development, and their identification with the IRGC underscores the extent to which Iran's Revolutionary Guard is involved in the country's nuclear programs and that their involvement appears to signal Iran's intent to move ahead with an operationalized capability.

Chapter 3: Nuclear Weapons Operationalization

Iran's operationalization of a nuclear weapons capability will rest on how the leadership views nuclear weapons and their relationship to defensive and offensive strategic calculations. In this respect,

68 On April 8, 2008, President Ahmadinejad used his blog to announce cabinet changes. Notable was the apparent purging of Interior Minister Mustafa Pour-Mohammadi, since he was one of the two remaining clerics in the government. The only other cleric remaining in Ahmadinejad's government is the minister of intelligence, Gholam-Hossein Ezheh-i. This contrasts sharply with the military representation in Iran's government. At present, twelve of twenty-one cabinet ministers have had IRGC or Basij (paramilitary/national guard-like) experience.

69 Speculation about personalities and their roles in Iran's nuclear programs has become a cottage industry in Israel and the United States. The Israelis contend that they have been able to identify key officials connected to Iran's nuclear programs. Information about personalities has also been made available to the West by the Mujahedin-e Khalq of Iran, or MeK, which are a militant and secretive political party—some would say a cult—that advocates the overthrow of the government of the Islamic Republic of Iran, and replacing it with a democratically elected government. As noted earlier, the MeK has been designated by the United States as a terrorist organization. Its affiliated political organization, the National Council of Resistance in Iran (NCRI) has, in the past, supplied vital intelligence on Iran's clandestine nuclear programs and other military-related projects. The majority of MeK members now reside in Iraq in a U.S.-protected refugee compound. It was the Mek that provided the West with information regarding the Natanz site.

70 Claude Salhani, "Iran Nearing Nuclear Weapons Capability," *Middle East Times*, June 3, 2008, http://www.metimes.com/international/2008/02/22/iran_nearing_nuclearweaponscapability/4147/ and Bret Stephens, "The NIE Fantasy," *Wall Street Journal*, December 11, 2007, <http://www.opinionjournal.com/columnists/bstephens/?id=110010974>. It was clear from interviews in Israel that the Israelis have registered success in this area, possibly because they might be considering punitive action against key individuals. One such person is identified by Olli Heinonen, the IAEA official running the Iranian inspection teams, to be Moshen Fakrizadeh, the military official in charge of Iran's nuclear efforts. William J. Broad and David E. Sanger, "Vienna Meeting on Arms Data Re-ignites Iran Nuclear Debate," *New York Times*, March 3, 2008,

decisions regarding Iran's deployment modalities, weapons characteristics, and strategic doctrine will be influenced by foreign policy and domestic political considerations. The resultant configuration of Iran's nuclear weapons and their deployment modalities will of necessity be a function of resources, technical expertise, equipment availability, and survivability considerations. The programs that Tehran may choose to pursue will depend on and be shaped by Iranian threat perceptions and the regime's conception of the role that nuclear weapons can and will play in forwarding specific objectives. If those objectives can be reduced to regime survival, a missile-based, inaccurate, minimal deterrent force would be sufficient. The idea here would be to develop a capability to retaliate directly with nuclear weapons against U.S. interests, including strikes against regional U.S. partners to raise the ante in a U.S. calculation regarding regime change in Iran. The expectation would be that the United States would not risk the unintended (nuclear) consequences of such an attack and, thus, be deterred from interfering in Iran's domestic affairs. Under the defensive-Iran model, an Iranian regime would, however, resort to nuclear weapons use if an attack were imminent or had taken place, even using conventional forces. It is also conceivable that a defensive-Iran model would feature nuclear weapons use by Iran in an U.S. "boots on the ground" scenario in which a "use them or lose them" mentality prevailed. In any such contingency in the nearer-term, or one under the defensive-Iran model in which Iran was committed to a minimum nuclear force posture, America's possession of a wider array of offensive strike options—nuclear or non-nuclear—implies that nuclear use by Iran would indeed constitute an existential option, particularly if its small number of nuclear weapons had the potential of being rendered ineffective by a combination of American offensive strike and missile defense assets.

Iran itself could conceivably develop over time a more diversified capability to create a survivable force for retaliation. This could include nuclear weapons fired from ballistic or cruise missiles deployed on a ship near U.S. shores, allowing for a heavier payload and more accuracy.⁷¹ However, threshold considerations are likely to prevail, resulting in a decision to use asymmetric terrorist and non-nuclear attacks against U.S. targets in and outside of the Middle East (and against Israel), and using conventionally-armed ballistic and cruise missiles and mines in Persian Gulf waters to strike U.S. naval forces operating in the region. Iran could use asymmetric tactics against U.S. forces operating in the region and against allies and coalition partners to dissuade them from either actively supporting U.S. operations or allowing the United States use of facilities on their territories. Another option open to Iran is to close the Strait of Hormuz to commercial traffic, although in doing so it risks bringing harm to its own economy.⁷² Finally, the regime could intensify efforts to interdict gas and oil pipeline flows throughout the region by targeting off-shore platforms and other energy infrastructure.

71 Richard L. Garwin, "When Could Iran Deliver a Nuclear Weapon," *Bulletin of the Atomic Scientists*, January 17, 2008, <http://www.thebulletin.org/web-edition/features/when-could-iran-deliver-a-nuclear-weapon>.

72 The Strait of Hormuz separates the Persian Gulf from the Gulf of Oman and the Indian Ocean. At its narrowest point, it is twenty-one miles (i.e. thirty-four kilometers) wide. Following a takeover of three small (UAE) islands in the Gulf in 1971, Iran positioned itself to control the traffic in and out of the gulf, and since 2006 Iranian leaders have overtly referenced Iran's capacity to close the strait to commercial traffic. In that same year, Iran conducted military maneuvers in the strait to highlight its ability to do just that. Later, on the seventeenth anniversary of Ayatollah Khomeini's death, his successor, Ayatollah Khamenei, proclaimed that, "If the Americans make a wrong move toward Iran, the shipment of energy will definitely face danger, and the

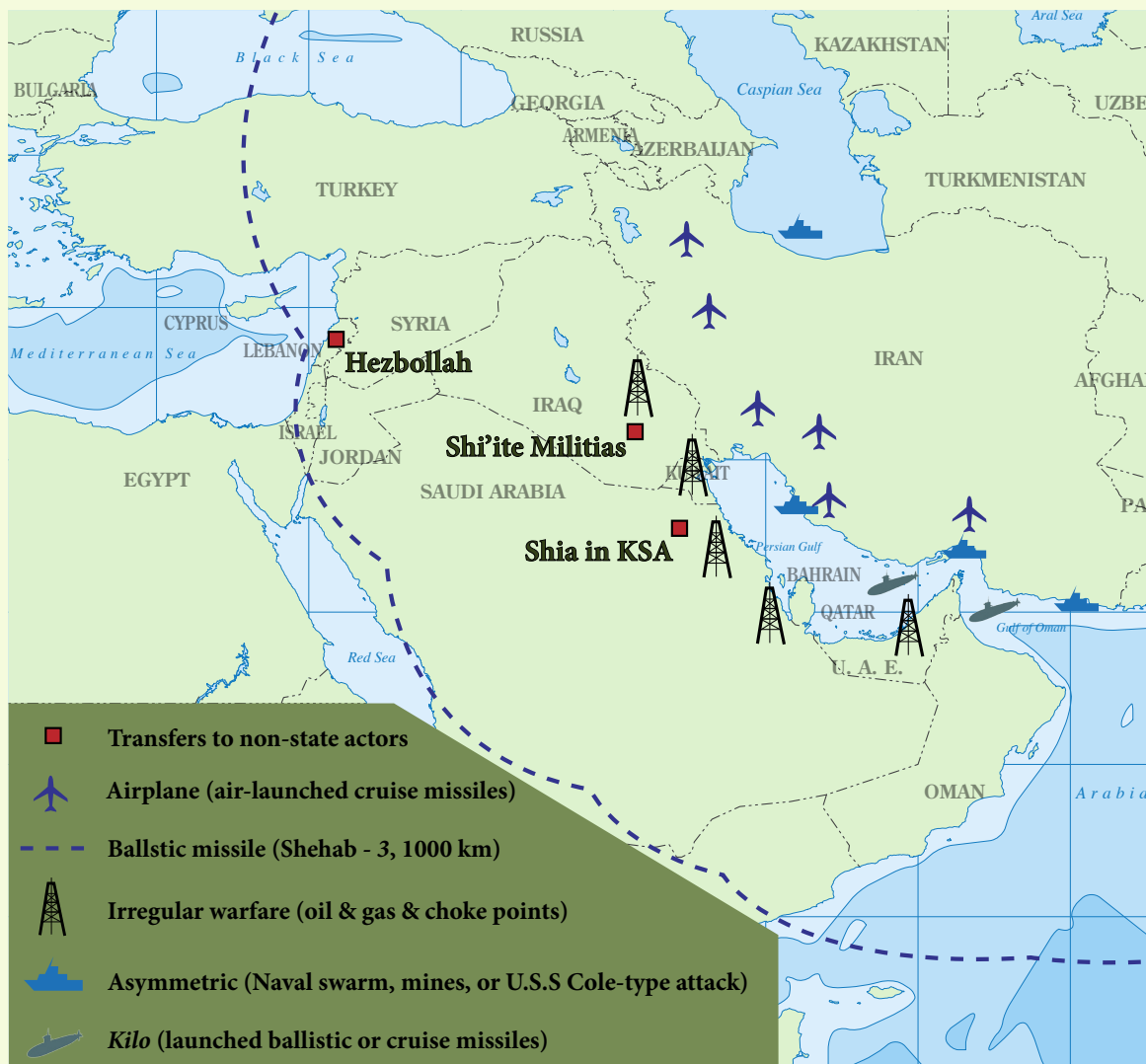
If Iran's motivations for obtaining nuclear weapons are more or less strictly related to deterrence, then it is reasonable to assume that nuclear weapons use would be considered a last resort, to be used only in extremis, similar to the way in which it is generally regarded in Western strategic planning. However, if the predominant rationale for an Iranian nuclear capability is identified as a tool to support an aggressive foreign policy, then, as already stated in this study, the Iranian leadership might easily determine a need for a more diversified capability, based on a doctrine for use that is rooted in operational rather than existential deterrence planning requirements. Projecting Iran's extant capabilities into the future, and with an eye on how Iran's nuclear force posture might evolve, it is safe to say that Iran is likely to pursue development of a serious long-range ballistic missile capability, supported potentially by satellite guidance technologies, perhaps to attain a limited counterforce capability.⁷³ Iran already is developing an intercontinental ballistic missile (ICBM), and it is known to be experimenting with multiple independently targeted re-entry vehicle (MIRV) technologies, using its space-launch program as the basis for some of this technology development. According to one official U.S. government estimate, Iran will obtain an ICBM capability by 2015, and if Iran has benefitted from Pakistan's warhead miniaturization designs, it may be able to field a credible deterrent force very quickly. In so doing, Iran may hope to deploy a capability capable of defeating U.S. missile defense systems, and at the same time, deploy an assured destruction capability in an effort to establish a putative deterrence relationship with the United States and/or Israel. However, if this were Iran's objective, it would be able to hold U.S. cities hostage, or threaten U.S. operating forces with catastrophic attacks by using less sophisticated capabilities. For example, a container ship loaded with nuclear-tipped cruise missiles to be fired off a U.S. coast would have the same effect. Moreover, as noted earlier in this report, Iran has been flirting with development of an EMP weapon, which would allow Iran to launch and detonate a nuclear weapon in space or in the atmosphere to destroy and/or disable America's command and control and intelligence networks.⁷⁴ A key question that is raised in this regard is how Tehran would approach

Americans would not be able to protect energy supplies in the region." Quoted in Simon Henderson, "Facing Iran's Challenge: Safeguarding Oil Exports from the Persian Gulf" (Washington Institute for Near East Studies, July 6, 2007).

73 Counterforce refers to the targeting of military forces, bases, and their infrastructure by an opposing force. Ideally, a counterforce strike would diminish so-called collateral damage and civilian casualties. In contrast, a counter-value strike would be optimized to target civilian casualties and in some instances to destroy specific socio-economic entities, such as industrial sectors and cultural sites. During the Cold War, counterforce targeting was often equated with efforts to develop a first-strike capability, where nuclear weapons would be used to wipe out an enemy's ability to retaliate. This concept was also associated with that of limited nuclear war, as well as with the notion of escalation management.

74 In March 2005, Dr. Peter Vincent Pry, a senior staffer with the Commission to Assess the Threat to the United States from Electro-magnetic Pulse Attack, testified about Iran's efforts to develop an EMP weapon for use against the United States. According to Pry, "An Iranian political-military journal, in an article entitled, 'Electronics to Determine Fate of Future Wars,' suggests that the key to defeating the United States is EMP attack. According to the article's authors, 'Advanced information technology equipment exists which has a very high degree of efficiency in warfare.... Iranian flight-tests of their *Shehab-3* medium-range missile, that can reach Israel and U.S. forces in the Persian Gulf, have in recent years involved several explosions at high altitudes, reportedly triggered by a self-destruct mechanism on the missile. The Western press has described these flight tests as failures, because the missiles did not complete their ballistic trajectories. Iran has officially described all of these same tests as successful. The flight-tests would be successful, if Iran were practicing the execution of an EMP attack.... Iran has also successfully test-fired a missile from a vessel in the Caspian Sea. A nuclear missile concealed in the hold of a freighter would give Iran, or terrorists, the capability to perform an EMP attack against the United States homeland, without developing an ICBM, and with some prospect of remaining anonymous. Iran's *Shehab-3* medium-range missile ... is a mobile missile, and

Iran's Nuclear Delivery Options



diversification in delivery modes, and, in particular, whether Iran might seek to develop a nuclear cruise missile capability or a sea-based deterrent force, using the *Kilo* submarines it has acquired from Russia. Iran's development of the Thaqeb SLBM suggests a desire to move in this direction.

Speculation about an air delivery capability focuses on Iran's aging U.S. fighter/bomber platforms, purchases from France and more recently from Russia, and development of Iran's own indigenous technology base.⁷⁵ Any of these capabilities could be configured to carry nuclear weapons, though

small enough to be transported in the hold of a freighter." Statement of Dr. Peter Vincent Pry, EMP Commission Staff, before the United States Senate, Subcommittee on Terrorism, Technology, and Homeland Security, March 8, 2005.

⁷⁵ Included in Iran's aircraft inventory are platforms transferred to Iran during the shah's tenure, including twenty-four (out of an inventory of seventy-nine) F-14 aircraft, fifteen aging F-4D and twenty-nine F-4E *Phantom II* aircraft, twenty-four *Mirage* F-1BQ and EQ fighter aircraft, three SU-25 *Sukhoi* fighter/bombers, twenty-four *Mig-27s* and sixty *Mig-29s* from Russia, and the IAMI *Shafag*, fighter/bomber, which is just entering service. A new, indigenously produced *Morghé Ashura* long-range bomber

this would be easier with some than with others, either using gravity bomb techniques or carrying air-launched cruise missiles. To maximize delivery redundancy and/or to create options for irregular warfare purposes, Iran could also develop asymmetric delivery options for use by IRGC/Qods Force elements. In this context, Tehran's preoccupation with strategic surprise and escalation dominance enhances the possibility that Iran will seek to develop nuclear-armed mines and small bombs for suicide missions, to be delivered on small boats or even in container ships. Iran might also consider the manufacture and use of a dirty bomb against off-shore platforms in the Persian Gulf, to deny their use to Western or GCC energy companies. This type of capability is easier to achieve than weaponization of missiles and aircraft, and the regime might decide that deploying a nuclear mine or a dirty bomb would be less likely to provoke a Western nuclear response against Iran, because from an Iranian perspective, this may be an ambiguous enough capability to confound Western deterrence planning considerations.

In international meetings, featuring Iranian participation, it appears that the intricacies of Western deterrence theory are not well understood in Iran, and that Iranian elites have only just begun to contemplate the operational consequences of a deliberate decision to cross the nuclear threshold. From this, we can speculate that it is also probably the case that Iranian officials do not truly understand the dynamics of a dyad or a triad deterrence paradigm in which Israel must be regarded as an independent actor—one that probably cannot live with a situation of strategic ambiguity about Iran's nuclear development. As discussed in Chapter 4, Israel could choose to act on its own, before Iran deploys an operational nuclear capability. However, Iran would still be able to retaliate against Israel, using non-nuclear and/or proxy forces, and a region-wide war might then ensue, drawing the United States into the fighting. A nuclear Iran, however, would, in essence, checkmate Israel, as the consequences of an Israeli strike under these circumstances could well be the destruction of Israel if the Israeli strike failed to destroy all of Iran's nuclear weapons and if Iran, then, was able to retaliate against Israel, using nuclear weapons.

Both of the above operationalization paradigms—a defensive deterrent force for Iran and an offensive capability undergirding an aggressive Iran—presume a state-centric Iran, and not, as implied in the model of an unstable Iran, a regime that is losing control over its population and ethnic minorities. An unstable Iran, or one verging on chaos, could easily be beset by a struggle for control over the country's nuclear weapons and their infrastructure. This is an Iran that might be far more easily tempted to transfer nuclear or fissile materials to allies or proxy forces to gain leverage in what could easily morph into a regional power struggle. Although highly speculative, to be sure, these suppositions provide a useful basis for assessing how Iran might operationalize a nuclear weapons capability, and under what circumstances its leadership, or elements thereof, might consider transferring nuclear technologies to other regional or global actors. The analysis that follows seeks

is under development. Reportedly, Iran is seeking to purchase new aircraft from China and Russia to modernize its inventory. From Russia, Iran reportedly seeks two hundred SU-30 fighters, while the Iranians are in talks with China to purchase forty J-10 aircraft, as reported in Marc Champion, "Achieving Global Accord on Iran Sanctions May Be Harder," *Wall Street Journal*, November 17, 2007.

Essential Elements of Three Models for Iran's Nuclear Operationalization

	<i>Defensive Iran</i>	<i>Aggressive Iran</i>	<i>Unstable Iran</i>
Objectives	Status-quo oriented; Prevent enemy aggression "Security Insurance"	Anti-status quo oriented Punish and coerce	Preserve revolution and deny Western capacity to exploit regime instability
Deterrence Concepts	Existential deterrent <ul style="list-style-type: none"> Indian model Ambiguity re: capability <ul style="list-style-type: none"> Deception and concealment Maybe test demonstration Japanese model 	Operational planning like Pakistan <ul style="list-style-type: none"> Escalation dominance considerations MAD Dispersed and survivable force Augmented C² Possible "pre-strategic" use Extended deterrence over Syria and Hezbollah 	Secure Assured Destruction capability <ul style="list-style-type: none"> Possible: "Use it or lose it" mentality Shia apocalyptic vision could inform use Extended deterrence for Syria, Hezbollah, and Sunni extremists possible
Nuclear Posture	Minimum deterrent <ul style="list-style-type: none"> Precision not required Numbers limited Mobility, but not platform diversity 	Larger and diversified posture <ul style="list-style-type: none"> Ballistic and cruise missiles and <i>Kilo</i> platforms Warhead precision as satellite guidance evolves, but not necessary Target neighbors, Israel, U.S. bases, NATO and eventually CONUS 	"Small but sufficient capacity" <ul style="list-style-type: none"> IRGC/Qods elements C² control Dispersion outside of Iran possibly to support regime factions or a religious cause, or to secure strategic assets
Operational Concepts	"No First-Use" Survivable capability Launch under attack (LUA) No transfers to Hezbollah or Syria	Reject "No First-Use" Hone first-strike capability and create viable follow-on strike options for Israeli and U.S. contingencies Asymmetric/disruptive options to include ASAT and EMP options Use on behalf of Hezbollah through Qods if control resides in IRGC	Asymmetric targeting and terror "Dirty-bomb" and IND use Focus on Israel, GCC, and U.S. forces in-theater Transfer of assets outside of Iran possible

to describe just how Iran's nuclear weaponization might evolve, based on capabilities in place and under development by the Iranian military.

If the popular debate over the consequences of Iran's actions in the nuclear field has just begun, so, too, has a more informed discussion among military experts of the strategic paradigm under which Iran should pursue its nuclear ambitions. As depicted in the chart on page 44, and as discussed briefly earlier in this report, the operationalization of Iran's nuclear capability is closely entwined with Iranian threat perceptions and world-view. Of the three paradigms proposed in this study, only the defensive-Iran model assumes a status-quo vision of Iran's future. Both the aggressive-Iran model and the unstable-Iran model envision a change to existing geo-strategic realities. Moreover, these two cases also present the more dangerous proliferation challenges, although it is quite likely that in the case of an Iran whose objective is to pursue an aggressive foreign policy, the possibility of outright material or systems transfers would be limited by a state-centric mindset, the dominant influences of which would be Persian nationalism and irredentist territorial claims. Certainly, within the context of a defensive deterrent posture and with respect to an Iran that seeks to brandish its nuclear weapons to support a more aggressive foreign policy, it is more than likely that the leadership in Tehran would look to Iran's ballistic missile holdings to provide a basis for weaponization. Doctrinal development would differ between these two postures, with the first possibly limited to a virtual capability, while the second would require a more robust capability and perhaps some weapons or delivery-mode diversification. Either as part of an aggressive foreign policy or in the instance of regime instability, leadership elements in Iran might be more inclined toward asymmetric options, quite possibly planning for disruptive options in an irregular warfare context or to threaten to use nuclear weapons on behalf of a client state. What this means more precisely for nuclear doctrine, strategy, and force structure is explored below, within the context of the three distinct approaches to Iran's weaponization that IFPA has conceptualized.

Model 1: A Defensive Deterrent.

The major purpose of Iran's nuclear weapons in this context would be as insurance to deter a prospective U.S. conventional attack or an Israeli preemptive strike against Iran. Iran's leaders would likely plan to use its nuclear weapons as defensive tools to punish a would-be attacker, rather than as elements of an offensive strategy to coerce potential enemies or to escalate deliberately in order to raise the stakes for an aggressor. As the ultimate line of the country's defense, Iranian nuclear capabilities under this model would not have to be precise enough to target enemy forces, just effective enough to instill terror at the thought of their use. Accuracy and low collateral damage rates would not necessarily be important to an Iranian defensive deterrent, though it could be important if escalation control were an issue with the regime or if the value of human life were a consideration. As it is, Iran's ongoing activities in the areas of ballistic missile development and with respect to warhead miniaturization would suffice for minimal deterrence purposes. The numbers of weapons would not have to be extensive, although the requirement for survivability would be great, and this could trigger a research and

development effort in the areas of force protection and perhaps even a submarine-launched ballistic missile or cruise missile capability.

However, to deter Israel or to intimidate its neighbors, Iran would not need to develop longer-range systems. Longer-range systems would be necessary to influence the Europeans, and they would be useful to Iranian efforts to shape the U.S. deterrence decision-making calculus, although short-range systems, targeted on the territory of U.S. allies or operational forces, would, in and of themselves, be sufficient to influence American strategic and operational planning.⁷⁶ This would enable Iran to strike the United States in the expectation of inflicting severe enough damage to deter U.S. retaliatory action. In the case of Israel, because of its small geographic size, Iran could mount a nuclear attack with proportionally more devastating consequences. Unless Israel itself develops a survivable second-strike capability—an option that is discussed later on in this study—Iran might be able to obtain escalation dominance over Israel if it were able to target Tel Aviv’s land-based deterrent weapons, using sophisticated guidance technologies, beyond those that exist today in the *Shehab* missile. However, a defensive Iran presumably would shy away from such an attack, preferring to maintain a survivable force to deter attacks intended to coerce or compel some specific Iranian behavior or to provoke a change in Iran’s leadership.

Iran’s Operational Command Structure

- Quam – 10 (Southern Command)
 - Postured against Gulf Cooperation Council Countries (GCC)
- Zellaghar – 19 (Northern Command)
 - Focused on Israel
- Tawhed – 23 (Western Command)
 - Postured against Baghdad and Iraq
- Ra’ed – 5 (Ballistic Missile Command)
 - Controls Shehab programs and deployments
 - HQ located at Na Jefabed
- Hadid – 7 (Central Command)
 - Defense of Tehran and the nation

Most experts agree that Iran’s *Shehab* ballistic missiles would provide the basis for operationalizing an Iranian nuclear weapons capability, once Iran had crossed the nuclear threshold and had managed to develop indigenously or acquire (from North Korea, or on the “black” market) warhead miniaturization capabilities. Here, Iran would not require a large nuclear inventory, but it probably would have to disperse and conceal its force to confound preemption or an enemy attack. Nuclear weapons under this model would be important for strengthening Iran’s ability to deal with other regional states in the Middle East and with states outside the region, for example, in Europe, as well as the United States itself. Except for the circumstance in which Iran was attacked, policy on potential nuclear weapons use—including a strategic

⁷⁶ Barry Posen, a professor at the Massachusetts Institute of Technology, suggests that “fearing preemption by a neighbor, Iran could adopt a ‘hair-trigger’ alert posture, or due to poor command and control, a fearful Iran might in a crisis inadvertently launch a nuclear weapon.” Barry Posen, *A Nuclear-Armed Iran: A Difficult but Not Impossible Policy Problem* (New York: A New Century Foundation Report, 2006), 17.

decision to threaten or actually use these weapons to disrupt further enemy operations or to coerce neighbors in the region into backing away from supporting the American cause—would likely be shrouded in ambiguity.

As with France, however, and French strategic doctrine, which in the 1970s and into the 1980s, provided for a “pre-strategic” use of nuclear weapons to test the enemy’s will, a defensive Iran might well conclude that it needed to adopt the “test” concept as an intra-war deterrent and hence to gain escalation dominance. This path might be attractive if Tehran concluded that the United States would not, under virtually any circumstances short of a direct threat to its own territory, choose to cross the nuclear threshold itself, even after an Iranian first-use. This may be a highly debatable contention, but consider the possibility, as one analyst has put it, “that [since] the strategic culture of rogue states might not be so amenable to the otherwise persuasive logic of deterrence [theories], the possibility of deterrence failure—even a ‘bolt-out-of-the-blue attack’—cannot be discounted.”⁷⁷ In this context, Western notions of damage and collateral-damage limitation would not be a major factor in Iranian decision-making. It is more probable that an Iranian regime bent on deterring war in the first place, or on terminating further action, would seek precisely the opposite. The regime would place a premium on inflicting as much damage as possible against U.S. operational forces, regional U.S. partners, and even allies, notably Israel and NATO, to get the war termination message across. If Iran hoped to play to an international audience, to get the UNSC to prevail upon the United States for instance, its leaders might forego targeting Israel and NATO allies, concentrating instead on Arab neighbors in a not-so-transparent effort to persuade non-Arabs of the need to end the war before it grew into a wider conflagration. As noted elsewhere in this report, Iran could also conduct asymmetrical terrorist attacks against the Gulf states or use its conventional cruise and ballistic missile forces to intimidate GCC leaders.

Model 2: An Offensive Deterrent for an Aggressive Iran

As an offensive deterrent, Iran’s nuclear weapons development and deployments would be regarded as tools of the country’s foreign policy and used to craft a more finely honed deterrence posture, with greater emphasis on doctrinal development and on force modernization than in the case of a defensive deterrent. Numbers of weapons would be more important under this model, but not so important if a small but sufficient capability could be fielded. The regime would likely reject Western concepts of a conventional-nuclear “fire-break” in favor of nuclear first-use if Iranian policy objectives required it, and the proliferation of capabilities to support asymmetric or irregular-warfare operations would

⁷⁷ David S. McDonough, *Nuclear Superiority, The ‘New Triad’ and the Evolution of Nuclear Strategy*, Adelphi Paper 383 (London: International Institute for Strategic Studies, 2006), 74. According to McDonough, “At the very least, a rogue state would begin to rely on ever-more destabilizing employment strategies for its own deterrent, especially if the goal is to provide a degree of positive control during the more complicated situation of intra-war deterrence. A good example is Saddam Hussein’s reported pre-launch delegation authority over Iraq’s [chemical and biological] weapons to local commanders during the Gulf War. The temptation to ‘launch-under-attack’ (LUA) in order to assure retaliation in the event of intra-war deterrence failure or to launch-on-warning (LOW) against an impending first-strike would be especially dangerous given their uncertain early-warning and C³ capabilities,” 75.

be emphasized. In fact, the bifurcation of Iran's military development to support both conventional operations and irregular warfare might drive Iran's nuclear development under this model to focus on a high-low technology mix of capabilities. Operationally, a triad of capabilities (i.e., missiles, mines, and air-delivered capabilities) could be deployed to safeguard Iran's territorial security, based primarily on a survivable first-strike capability, and secondly on flexible options to facilitate planning across the warfare spectrum. Moreover, under this model, escalation-dominance considerations would loom large, and the need for denial as well as punishment capabilities could trigger the development of a variegated force posture, using the *Shehab* ballistic missile as the basis of its nuclear deterrent capability, at least initially, but branching out later to develop a sea-launched nuclear missile system and perhaps even an air- or sea-launched nuclear-tipped cruise missile to strengthen its strike potential.

Under the offensive-deterrent paradigm of our aggressive-Iran model, Iran's leadership might be more brazen in testing enemy resolve, and more amenable to taking risks. This is also an Iran that might well decide to facilitate or support al-Qaeda or Hezbollah efforts by covertly providing (but under Qods control) dirty-bomb materials to these groups, as a means of promoting specific objectives that these groups may have in common with the regime in Tehran. In doing so, however, plausible deniability would be the prerequisite, and using its Qods Force operatives to control and shape the way in which weapons materials, technologies, and know-how are provided for use to support non-state actors under this construct, the regime in Tehran would be taking a calculated risk in assuming that the Western ability to trace ownership is less advanced than has been advertised. Indeed, in pursuing such a deliberate course of action, Iran's leadership would also likely realize that a "renegade" non-state actor nuclear strike against U.S. interests in the Middle East could likely result in retaliation against Iran. On this basis, it is reasonable to assume that under the aggressive-Iran model, the regime in Tehran would also seek to develop a long-range strike capability to target the United States directly, as a means of "checkmating" a further U.S. escalatory response. Indeed, as discussed elsewhere in this report, Iran is trying to develop an intercontinental-range ballistic missile. The rationale for doing so would only be strengthened in the case of the aggressive-Iran model, although short of achieving that objective, it could seek to develop, as it is also doing, a longer-range intermediate-range ballistic missile (IRBM) to target NATO-Europe, in the hope of either isolating the United States in a crisis contingency, or of drawing it into a wider regional conflagration. With respect to the former, the expectation of Iranian officials probably would be that the American public would not tolerate another resource-intensive operation in the volatile Middle East. They may also be banking on the likelihood that Europe would be divided about how to respond, despite the fact that some NATO nations might seek to invoke the Alliance's Article 5 commitment, which maintains that an attack upon one member is an attack upon all members. In the current strategic setting, galvanizing NATO for action is not a sure thing, and much, in the context of an Iranian contingency, would depend on which ally Tehran had targeted and what kind of damage had ensued. However, it may well be that an aggressive Iran would avoid targeting Europe at all, basically to divide further the transatlantic allies and to put the onus for escalation on U.S. shoulders alone.

At the same time, the Iranians could threaten U.S. allies in the region in an effort to split them from the United States and to deny America the use of facilities and bases from which to prosecute a war against Iran. Under the aggressive-Iran model, the regime in Tehran would seek to optimize capabilities for assured destruction, focusing very specifically on threatening the territories of U.S. Gulf partners, Israel, and NATO Europe. In this context, a major aspect of Iranian strategy would be to undermine the U.S. extended deterrence concept by creating doubts in the minds of U.S. partners about the reliability of U.S. security guarantees. As will be explained later and in greater depth, this could come back to haunt the Iranians if key Gulf partners—Saudi Arabia in particular—and Turkey or Egypt were to decide to acquire or develop their own nuclear deterrence capabilities. However, this may not be as major a consideration as one might think for an Iranian leadership, who might conclude that nuclear cascading or horizontal proliferation would be an even greater concern for Western governments than it threatens to be for Iran.

In any case, Iran has other options as well. Notably, it could attempt to close the Gulf to commercial shipping in an effort to harm the economies of countries friendly to the United States. However, because this would also damage Iran's interests, it is an option that Tehran would implement selectively and most likely only for a short time, depending on the positioning of U.S. forces at the time. In the event that U.S. naval assets were outside the Strait of Hormuz, they would be forced to fight their way back into Gulf waters. If they were trapped within Gulf waters, they would likely be subjected to small-boat swarm attacks and mine threats, creating hazards for carrier and expeditionary force operations. Though not an impossible situation for the U.S. Navy, carrier vulnerability would emerge as an issue, placing increased importance on the need to leverage and build local counter-mine and other niche capabilities (for example, UAE SOF) in the expectation that they would have to be mobilized in an Iranian contingency to support U.S. forces.

At the very least, a regime in Tehran may calculate that even with a small nuclear arsenal it would now be in a better position to disrupt U.S. operations should America opt to mount military action against Iran. One way of doing so would be to use nuclear weapons and WMD asymmetrically, by detonating a suitcase-type bomb in a suicide attack or by exploding a dirty bomb in the vicinity of a major U.S. base, against maritime platforms operating in the Persian Gulf region, or against a civilian target located in a state friendly to the United States. An aggressive Iran might even refrain from nuclear use against regional targets and, instead, resort to biological weapons to target coalition partner urban centers or U.S. bases in the region. In so doing, an Aggressive Iran might calculate that it could divide regional allies from the United States and coerce them into denying the United States access to facilities and forces located on their territories. Such a strategy might also be employed, perhaps, to confound American retaliatory calculations, based on the assumption that the United States would not want to be the first to use nuclear weapons in a contingency, especially in response to non-nuclear WMD use. International relations theorist Robert Harkavy has used the phrase “triangular or indirect deterrence” to describe such a strategy. According to Harkavy:

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...a weaker power lacking the capability to deter a stronger and (importantly) distant power might choose to threaten a nuclear (or chemical or biological, or also conventional) riposte against a smaller, closer or contiguous state, usually but perhaps not always one allied to the larger tormentor or to one of its clients (or providing them base access in a crisis), but perhaps also a neutral state, one with no real political connection to the ongoing conflict.⁷⁸

By this strategic logic, the center of gravity for disrupting a U.S. strike would be the political support for American operations. By undermining the security of U.S. coalition partners, Iran could achieve its deterrence objectives without necessarily having to target the U.S. homeland directly. The United States is an extra-regional power, and one that would rely on forward basing and/or over-flight rights for military operations, unless it considered launching an attack against Iran from the sea, in which case Global Strike and USN assets would form the centerpiece of air operations, with the expeditionary strike groups dependent on sea-bases for their operational support. This scenario, as noted above, would entail a certain amount of risk for large-deck U.S. naval platforms, especially those operating in or near the Strait of Hormuz where enemy mining, small-boat swarm, and missile operations would be a factor. However, because U.S. forward-deployed forces would become a factor in Iranian contingency planning, an Iranian leadership might decide that Iran's interests would be better served by development of a longer-range intercontinental ballistic missile to target the continental United States directly, in accord with the fundamentals of mutual assured destruction theory. It is also possible that a more confident adversary, as a nuclear Iran is likely to be, would seek to go even further, developing more sophisticated attack options—for example, space-oriented capabilities, as described earlier, to destroy U.S. command and control networks or critical infrastructure in the United States itself.

This is not to suggest that Iran would necessarily strive to develop nuclear war-fighting capabilities; that is probably beyond its capacity in the nearer term. What we do suggest, however, is that, as with the French, escalation control and war termination might emerge as important considerations in Iranian thinking, particularly if this entails neutralizing America's ability to launch an attack against a nuclear-armed Iran (that, in turn, has some capacity to strike American territory). While we are speculating here, it is important to recall that the deterrence goals of an aggressive Iran would likely be not only to deter a U.S. attack in the first instance, but also to defeat its capacity for exercising more limited conventional options, such as blockading Iran or seizing control of off-shore oil platforms as a way to send the regime a message.

Model 3: An Unstable Iran and the Need to Deter Regime or Rogue Elements

Depending on the specific circumstances in which regime stability was being challenged, elements of the regime could gain access to Iran's nuclear weapons and rely on proxy actors to carry out asymmetric operations using WMD capabilities. This would be an Iran whose regime is fragmented and thus would have little interest in established nuclear doctrine, particularly if threats from within were perceived

78 Robert E. Harkavy, "Triangular or Indirect Deterrence/Compellence: Something New in Deterrence Theory," *Comparative Strategy* 17, no. 1 (January-March 1998): 64.

to be more serious than threats from abroad. In fact, as is often the case with unstable regimes, certain elements could seek to use external threats as a means of regaining popular support. In this case, elements such as the IRGC, in an effort to reassert control within Iran, could transfer weapons or materials to groups outside Iran to create incidents that would heighten the sense of danger to the Iranian people. Alternatively, were democratic forces within Iran seen to be making advances, IRGC elements or Qods Force members could try to sustain their hold on power or support for their objectives by transferring or making available nuclear components, weapons, or materials to like-minded groups that share an interest in promoting fundamentalist objectives and anti-Western agendas.

Iran already has in place an extensive network for importing nuclear materials and nuclear-relevant or oriented technologies. Its relationship with North Korea is well documented. Less readily appreciated is its creation of a network, reportedly more extensive than that of A.Q. Kahn, that could be used to facilitate a “proliferation in reverse” system of getting nuclear materials, components, or know-how to transnational actors or rogue-state allies were it determined that in doing so specific Iranian or Islamist objectives could be met. From all appearances, the IRGC and its Qods Force element would be central to such a network. Funding for IRGC and Qods Force operations is obtained primarily through business enterprises that have been established for that purpose. Presumably, they would also provide an important conduit for nuclear sales and technology transfers were a decision made to embark on such a course. Also important is Iran’s intelligence network, whose operations include infiltration of businesses in countries outside of Iran. Under certain circumstances, Qods Force elements could probably carry out a weapons transfer. They would likely have to rely on leaders within the IRGC to gain access to an operational weapon, but given the tight relationship that Qods leaders enjoy with the IRGC, this is within the realm of the probable and certainly a contingency that offers elements in Iran the option of altering the “correlation of forces” either within Iran or in the regional setting. Moreover, proliferating Iran’s nuclear weapons know-how, components, or systems themselves would not be as daunting a task as presumed, given that a radiological weapon (a dirty bomb) would be sufficient for asymmetric warfare planning purposes. The objective in this regard would be to disrupt enemy operations and to instill fear among potential U.S. allies. At an operational level, implementation of asymmetric tactics using nuclear capabilities would also have the psychological effect of placing the onus for further escalation on the United States. Given the nuclear taboo that tends to shape Western strategic thinking, nuclear retaliation by the United States cannot be the assumed response, and in that context, Iranians may believe that the United States, essentially, would be “self-deterred.”

However, in this instance, the Iranians may fail to understand the escalation potential and dynamics of this particular situation. While America’s entire nuclear posture is built around the idea that nuclear weapons use would be considered in retaliation for an adversary’s first-use of nuclear weapons, in this instance two qualifying factors are likely to influence the U.S. debate. First, the use of a dirty bomb is not generally regarded qualitatively as the same as the employment of nuclear weapons. While its effects may be devastating and cause mass disruptions and instill terror, the consequences of use would be far less devastating than the detonation of an actual nuclear weapon. Second, as discussed earlier, the United States is in the midst of implementing a new deterrence construct—one that emphasizes a

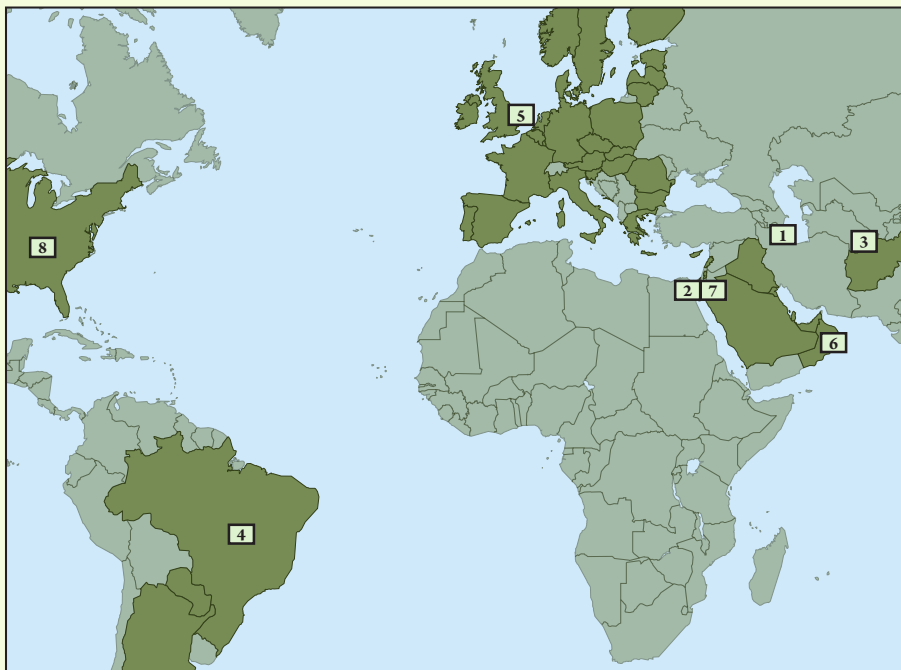
new triad composed of conventional precision strikes in addition to nuclear weapons use, and missile defenses to deter an enemy attack or to mitigate its consequences. Under these circumstances, it would be extremely unlikely that the United States would order a nuclear strike if vital U.S. interests were not at stake, and if American territory itself had not been attacked. Threshold issues would continue to play a critical role in shaping U.S. decision-making in any but the more direct cases of a legacy Russian attack or an all-out Chinese attack against the United States. Thus, in the regional planning setting, U.S. adversaries might conclude that they had greater flexibility in launching an asymmetric WMD attack, even against U.S. operating forces, and the more so if attack attribution could not readily be assigned and the fear of U.S. nuclear retaliation further diminished.

Factions within the regime in Iran could also decide to transfer dirty-bomb materials to Sunni Arab groups, notably Hamas or Palestinian Islamic Jihad (PIJ) to support the Palestinian cause, or to the Taliban in Afghanistan, depending on how the fighting there unfolds. Under the unstable-Iran model, IRGC operations outside Iran and in support of Islamic causes may be intended to provoke an over-reaction on the part of U.S. and/or coalition partner forces, and this, in turn, would be designed to generate a counter-reaction in Iran, reinforcing domestic fears of an attack on Iran itself. In other words, the transfer of nuclear technologies or components to proxy forces or jihadists outside Iran could be seen as providing a means of re-unifying opinion in Iran, and in that way of consolidating IRGC control. At best, this scenario is highly hypothetical, but it deserves to be considered because it could be accomplished relatively easily and without enduring the consequences of a direct head-on attack on the United States.

Al-Qaeda has proclaimed its intention to acquire nuclear technology for use against the United States and its allies, and a prominent Saudi cleric has written a rationale for using nuclear weapons against Western nations.⁷⁹ The possibility of IRGC or regime collaboration with al-Qaeda cannot be dismissed out of hand, particularly in a situation where regime elements thought they were furthering the cause of Islamist extremism. Collaboration with al-Qaeda could enhance the capacity of IRGC or regime elements to strike the United States directly, but, as with other transfer scenarios, it is unlikely that this would be done without giving considerable thought to possible U.S. retaliation options. The key question in this regard would be the stakes at play for the IRGC or regime elements. Would pursuit of radical extremist

79 Sheikh Nasser ibn Hamed, a well-known Saudi cleric associated with al-Qaeda, wrote *A Treatise on the Ruling Regarding the Use of Weapons of Mass Destruction against the Infidels*. The treatise came in response to a question raised following media reports regarding al-Qaeda's intention to use weapons of mass destruction against the United States. The question was aimed at clarifying Islamic law's view of the permissibility of using weapons of mass destruction in the framework of jihad, and specifically whether such permissibility would be inclusive or limited only to the hour of need. In one chapter of Sheikh Hamed's lengthy response, "Proof that the Use of Weapons of Mass Destruction Is Permissible," Sheikh Hamed stated that it was permissible to use weapons of mass destruction against ten million Americans specifically, and against infidels in general, and that support for their use could be found in Islamic religious sources. According to Sheikh Hamed, it is permissible to strike America with weapons of mass destruction in order to repay it in kind. After citing the Koranic verses, Sheikh Hamed wrote, "Anyone who looks at America's acts of aggression against the Muslims and their lands over the recent decades will permit this [the use of WMDs] based only on the section of Islamic law called 'Repayment in Kind,' without any need to indicate the other evidence." For further information, see "Contemporary Islamist Ideology Authorizing Genocidal Murder," MEMRI Special Report no. 25 (January 27, 2004), <http://memri.org/bin/articles.cgi?Page=archives&Area=sr&ID=SR2504>.

Iran's Potential to Support Proxies



In the event of a U.S. or Israeli military operation against Iran, the Islamic Republic has the potential to call upon proxy forces to implement asymmetric operations. Among its options, Iran or elements within Iran could operate in:

1. Iraq

By increasing its support to Shia militias and/or by adopting a higher profile role in support of foreign (Sunni) fighters if it appeared that political reconciliation was succeeding, particularly at the expense of Iran's political influence in the south and over the government in Baghdad.

2. Hezbollah

By providing longer-range missiles to target Israeli cities, strike shipping in the wider Gulf region, and to increase its activities in Lebanon.

3. Insurgent Forces in Afghanistan

Iran has great potential to destabilize the Afghan government and create chaos in the western provinces of Afghanistan.

4. South America

Iranian-supported Hezbollah cells could be used in terror attacks, as they were in 1994 with the bombing of a Jewish facility in Buenos Aires. The Hezbollah presence in the Tri-Border area gives Iran a reach into South America.

5. Europe

European intelligence agencies have identified thousands of Hezbollah members living in European Union countries. Members of Hezbollah and sympathetic individuals could be organized to conduct terror operations on the Continent and in the UK.

6. Shi'ite cells in Gulf

Iran has extensive intelligence networks throughout the Shi'ite populations in GCC states. Using sympathetic populations to stir political unrest or engage in violent attacks, Iran has the potential to undermine allied governments and to destroy bases and infrastructure support for U.S. forces.

7. Israel/Jordan/Gaza

Following Hamas's seizure of Gaza, Iran has become its largest financial backer. The Iran/Syria/Hezbollah "alliance" is responsible for training and enabling terrorists in Lebanon and Syria.

8. United States

Iranian-backed Hezbollah cells have been monitored in the United States since the 1980s for their fund raising activities. This, thus far non-violent, presence could be activated to initiate terrorist action in the United States in a crisis.

objectives be worth the price of Iran's destruction as a result of an anticipated U.S. military retaliation? Even for Iran's religious fanatics the answer might not be yes, given the pervasive allure of Persian nationalism. Plausible deniability might in this instance enhance the willingness to attack U.S. interests, but the larger issue would be the extent to which religious fanatics would be willing to go to promote their radical agenda. IRGC members or elements of the regime might conclude that Iran's territorial integrity was far more important than wounding the world's remaining superpower. In other words, they might be deterred from transferring nuclear materials and using asymmetric tactics if the cost was perceived to be too high in terms of very specific Iranian interests that did not correspond to those of al-Qaeda.

Chapter 4: Implications for U.S. Strategic and Operational Planning

Iran's dogged pursuit of nuclear technologies presents the United States and its allies with the most fundamental of security challenges since the Cold War. Iran is a non-secular Islamist state, with a leadership imbued with a religious theology that embraces an apocalyptic conception of the so-called "clash of civilizations."⁸⁰ Hence, as mentioned above, against the prospect of Iran's development and operationalization of nuclear weapons, Western deterrence paradigms may have limited utility, especially if the source of a WMD strike cannot be established. Still, some of those who participated in the Bush administration's Nuclear Posture Review have argued that holding state sponsors of terrorism at risk might deter some terrorist actions, particularly nuclear weapons use or a dirty bomb explosion. Classic Western deterrence theories, however, include assumptions about the factors (including value structures, levels of violence a society is willing to endure, and risk tolerance) that a leadership would weigh when considering the use of nuclear weapons that may not apply to an aggressive Iran, much less to a terrorist group or to an Iran in chaos. For a nuclear Iran awaiting the Twelfth Imam and certain that the United States was (or had been) in Iraq in part to prevent his return (or so some stories go), the nuclear decision calculus may be entirely different from that on which Western deterrence models are based. These considerations suggest a logical connection between the Islamists' (and terrorist) support for suicide terrorism and the possibility that a nuclear bomb in the hands of radical extremists could be used for an apocalyptic mission that could not be deterred.

This is not to suggest that an Islamic state, such as Pakistan, already a nuclear power, or even Iran, would act in a way contrary to its national interests in deciding on nuclear weapons use. According to one assessment,

The perception 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 decision-makers have generally sought to minimize risk by shunning direct confrontation and by acting through surrogates (such as the Lebanese Hezbollah) or by means

⁸⁰ The phrase, as originally conceived, was first used by Harvard professor, Samuel Huntington, in an article for *Foreign Affairs*, published in the summer of 1993. The full text of the article can be found at the Council on Foreign relations web site at: <http://www.foreignaffairs.org/19930601FAESSAY5188-faarticles/samuel-p-huntington/the-clash-of-civilizations.html>. According to Huntington's thesis, "(t)he great divisions among humankind and the dominating source of conflict will be cultural. Nation states will remain the most powerful actors in world affairs, but the principal conflicts of global politics will occur between nations and groups of different civilizations. The clash of civilizations will dominate global politics. The fault lines between civilizations will be the battle lines of the future."

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.⁸¹

But in a region where violence is ingrained and culturally acceptable, and where radical ideologies are used as cover for politically motivated actions, it is not impossible to imagine a radicalized government rationalizing nuclear weapons use by extrapolating from the suicide bomber case, arguing the legitimacy of killing other Muslims and bringing upon the region mass civilian casualties if it is done in the name of a just cause, in the case of an aggressive Iran, or to preserve regime control, an objective of both the defensive-Iran and aggressive-Iran models. However, a state-centric Iran, with its highly educated and more Western-oriented population, may be “detractable” and its path to nuclear weaponization subject to influence if Washington approaches twenty-first-century deterrence planning in a decidedly different way than it did during the Cold War era. For example, the Iranian objects of deterrence are numerous and diverse. Arguably, some may be more deterrable than others. Among the less deterrable or undeterrable would possibly be the Islamist extremists. Among the more deterrable would be the Westernized elites, for whom survival is an obvious value. Greater attention to this variegated Iranian audience should, therefore, be more explicit in U.S. twenty-first-century deterrence thinking.

In addition to this consideration, updating U.S. strategic and operational planning for an Iranian contingency should be focused on four principal considerations: (1) implementing an operational strategy to achieve U.S. objectives in the face of the threatened use of nuclear weapons by Iran; (2) reassuring allies and coalition partners that extended deterrence remains viable in the face of Iran’s nuclear weapons development; (3) planning against and mitigating the effects of an Iranian first use of nuclear weapons or of a dirty bomb; and (4) preventing the transfer of nuclear materials from Iran to state or non-state actors. Related to these objectives is the pressing requirement to understand the escalation dynamics underlying contingency planning for Iran, especially with respect to intra-war deterrence, and, just as important, the implications of catalytic warfare, where escalation control is out of U.S. hands as a result of actions taken by Israel or another third party.⁸²

Reduced to its essentials, U.S. strategy for the Gulf region is to contain Iran, protect U.S. coalition partners and allies, deter nuclear threats and conventional attacks on U.S. forces and allied-coalition partner territories, and mitigate the effects of an attack should one occur. In part because the United States and Iran have not had formal relations since the hostage crisis of 1979, the danger of miscalculation is greater than at any time in the past. Washington has little knowledge about where Iran’s “red-lines” really lie, and under what conditions it would be willing to use force in pursuit of regime objectives.

81 Michael Eisenstadt, “Deter and Contain: Dealing with a Nuclear Iran,” unpublished draft, March 1, 2005, 3. Subsequently, these thoughts were incorporated into a monograph published as Patrick Clawson and Michael Eisenstadt, *Detering the Ayatollahs: Complications in Applying Cold War Strategy to Iran* (Washington D.C.: Washington Institute for Near East Policy, July 2007), 4–7.

82 An in-depth discussion of catalytic warfare is found on pages 63–65 of this study.

This situation is only likely to become worse once Iran actually crosses the nuclear threshold. Crisis management and escalation control, in this context, should emerge as crucial aspects of U.S. strategic and operational planning, and in the context of deterring and containing a nuclear Iran. Moreover, in this regard, Iran's formidable capacity to leverage proxy forces such as Hezbollah, using IW tactics (for example, EFPs) is a current reality, but a nuclear Iran that was disposed to use or to provide fissile materials or nuclear know-how and support to proxy forces would pose a different sort of escalatory challenge, one that would be very difficult to anticipate and one that could result in a chain of events leading to a region-wide war.

As implied above, deterring a nuclear Iran will involve far different strategic and operational challenges than those associated with efforts to dissuade the Iranian regime from weaponizing in the first place. On the one hand, if Iran's nuclear weapons are intended to protect the regime from attack, then the United States might be able to contain Iran's operationalization of its nuclear capabilities with such deterrent actions as: strengthening relationships with its allies and coalition partners, helping to build coalition-partner militaries and to create viable consequence management capabilities, extending an effective missile defense architecture over those partners and in defense of U.S. interests in the region, in NATO Europe and here at home. It must also hone its strategic communications strategy and send a strong signal (through diplomatic initiatives and military deployments) that America intends to remain engaged in the wider Gulf region, regardless of its force posture and footprint in Iraq and Afghanistan.

On the other hand, if the leadership of Iran intends to use its nuclear programs to support a more aggressive foreign policy, then we might expect it to develop a more sophisticated nuclear weapons capability that includes the development of survivable forces that could be used after an enemy attack against Iran. Such a nuclear Iran would present a more complex deterrence problem for the United States. Depending on the circumstances, Iran could, as noted earlier, formally extend its protection over Syria and/or Hezbollah, creating new challenges for Israel and for reassuring U.S. Gulf partners. It might also use radioactive materials on behalf of important clients—state or non-state actors, but the outright transfer of nuclear weapons to an ally or proxy force is unlikely because of the need to preserve Iran's central role as the dominant partner in its alliance relationships. The actual transfer of nuclear weapons is a more likely prospect in a situation where regime stability in Iran is in question and either there is a perceived need to get the systems out of harms' way or they are transferred to support a fanatical religious cause. Of greater concern in relation to the aggressive-Iran model is the effect of Iranian policies on other nuclear aspirants, including Egypt, Syria, Saudi Arabia, and Turkey. Onward proliferation is almost guaranteed to come about in one or more of these countries as a result of Iran's weaponization, and it could, as well, legitimize nuclear weapons development or acquisition for other nations in Asia and South America.

Iran's preference for strategic ambiguity has been manifest in the way that the leadership in Tehran has chosen to support proxy operations, and it could influence the leadership's adoption of the

defensive-Iran model, in certain circumstances, as described earlier in this report.⁸³ Alternatively, as also suggested in earlier analysis, a nuclear Iran might be more emboldened in this regard, depending on the strategic objectives of a particular action and the risks that the regime was prepared to take. In the context of the ongoing U.S. commitments in Iraq and Afghanistan, and amidst a polarized U.S. domestic audience—half of whom support a precipitous withdrawal from Iraq, half of whom support a long-term U.S. presence in Iraq—the leadership in Tehran may miscalculate American will, as evidenced recently by statements by military leaders and the Supreme Leader himself.⁸⁴ Perceiving a “wounded superpower,” the Iranian leadership might be more willing to pursue its strategic objectives aggressively, openly invoking its nuclear weapons capability.

From this perspective, the deterrence challenges arising from Iran’s proliferation reside not in the regime’s high threshold for pain, but rather in its willingness to take risks and in its capacity for overreach in a crisis, both of which create risks of their own for U.S. operational planners.⁸⁵ On the one hand, a nuclear Iran might be emboldened to adopt a confrontational posture in dealing with regional neighbors, as opposed to trying to lull them into thinking that Iran’s nuclear stature was not threatening to their interests. Similarly, a regime that had access to a weaponized nuclear capability might be even more willing to counter U.S. initiatives that are perceived as hostile to Iran or threatening to Iran’s territorial status. Iran could choose to do this overtly, demonstrating to the world that it had a capability to raise the stakes in a crisis confrontation, either by threatening a missile strike against the United States or by using its conventional military forces against a regional U.S. ally, all the while brandishing the threat of a nuclear strike.⁸⁶

Alternatively, as Michael Eisenstadt of the Washington Institute for Near East Policy points out, Iran could choose to be more nuanced about exercising its nuclear power, for example, by covertly emplacing mines in the Persian Gulf while publicly declaring the creation of an exclusion zone to

83 Notable examples in this regard include the 1994 Jewish community center attack in Buenos Aires, and the 1996 bombing of Khobar towers in Saudi Arabia. In both instances, local Hezbollah affiliates carried out the attacks, and Iran denied any culpability, even after evidence was found, in the Khobar case, linking Iran to Hezbollah in Saudi Arabia.

84 For example, in March 2007, Ayatollah Khamenei proclaimed, “If they want to threaten us and use force and violence against us, they should not doubt that Iranian officials will use all they have in their power to deal a blow to those who assault them.” Reuters, “Leader Says Iran Will Retaliate if Attacked,” March 21, 2007. This has been followed by other such statements from the Supreme Leader, and by declarations issued by key military leaders, including Brigadier General Mahmoud Chaharbaghi, commander of IRGC artillery and missile forces, who was quoted in October 2007 as saying, “In the first minute of an invasion by the enemy, eleven thousand rockets and cannons would be fired at enemy bases ... This volume and speed of firing would continue ... If a war breaks out in the future, it will not last long because we will rub their noses in the dirt ... Now the enemy should ask themselves how many of their people they are ready to have sacrificed for their stupidity in attacking Iran ... We have identified our targets and with a close surveillance of targets, we can respond to the enemy’s stupidity immediately.” *Agence France Presse*, “Iran to Fire ‘11,000 Rockets in Minute’ if Attacked,” October 20, 2007.

85 Clawson and Eisenstadt, *Deterring the Ayatollahs*, 5–6.

86 While not yet a nuclear power, Iran test fired up to nine ballistic missiles, three simultaneously, on July 9, 2008, to demonstrate its ability to hit targets in Israel. Because of a clumsy effort to “photo-shop” this effort (called exercise *Noble Prophet*), it is not entirely clear, however, which missiles were in fact launched. Most Western experts believe that at least one—and probably only one—*Shehab-3* ballistic missile was tested. The rest of the missile launches were probably undertaken using the *Zelzal* short-range ballistic missile, a system that allegedly has been transferred to Hezbollah in Lebanon.

protect the country's vital economic interests.⁸⁷ The strategic ambiguity created by Iran's action, the uncertainty as to whether the mines were nuclear-capable or not, how and to what extent Iran's conventional capabilities would be backed up operationally by a nuclear first-strike should a crisis escalate out of control, would be sufficient to deter the smaller Gulf states from taking action. Iran may also seek to deter the United States by arming its growing arsenal of anti-ship missiles with nuclear warheads to target USN Fifth Fleet assets, forward operating bases, and infrastructure—including perhaps mobile sea-bases—and creating uncertainty among U.S. coalition partners by directly targeting their territories and by holding Europe hostage to the threat of a nuclear strike.

A nuclear-armed Iran would pose three distinct types of operational planning challenges: terrorism and subversion, limited conventional options (under the protection of Iran's nuclear umbrella), and the actual use of nuclear weapons against U.S. forces operating in the Persian Gulf region, against the territories of U.S. allies in Europe, Israel, and coalition partners in the GCC countries, and eventually perhaps against the continental United States. To deal with these operational challenges, as depicted in the chart on page 59, the United States must now factor in the nuclear dimension much more systematically than has been done to date in its efforts to counter nuclear terrorism, defend forward-deployed forces and assets (such as sea-bases), enhance coalition partner defenses and consequence-management capabilities (through an expanded and augmented U.S. Gulf Security Dialogue), and protect energy flows, infrastructure, and shipping in the Strait of Hormuz and the Persian Gulf region.⁸⁸ As noted above with respect to nuclear mine emplacement, non-traditional means of nuclear weapons delivery cannot be discounted in U.S. operational planning, making early detection of gamma and neutron radiation a high priority. Contingency planning for Persian Gulf-related operations must also consider unconventional methods of using radiation monitors and detection sensors to address, among other possibilities, the suitcase-bomb scenario. Obviously, all of the planning challenges discussed above will require an even tighter coordination between the United States and its principal alliance and coalition partners.

Iran as Catalyst for a New Deterrence Dynamic among Nuclear States

Without question, as alluded to earlier in this assessment, Iran's nuclear breakout threatens to affect regional non-nuclear states, including the Gulf Cooperation Council states, Egypt, and Turkey, and their deliberations concerning their security alternatives, including in the cases of Egypt, Turkey, and Saudi Arabia, consideration of the nuclear option. In fact, Iran's breakout from the NPT will probably set in motion the demise of the NPT, as nuclear aspirants scramble to acquire capabilities and technologies to counter the new political clout that Iran will derive from nuclear weapons. The cascading effect of Iran's nuclear proliferation will bring about new deterrence planning challenges, which are addressed more fully in the next chapter.⁸⁹ Here, it suffices to note that as more nations deploy nuclear

⁸⁷ Clawson and Eisenstadt, *Deterring the Ayatollahs*, 5–6.

⁸⁸ See, for example, Caitlin Talmadge, "Closing Time: Assessing the Iranian Threat to the Strait of Hormuz," *International Security* 33, no. 1 (Summer 2008): 82–117.

⁸⁹ "Nuclear cascading" refers to the trend whereby one state proliferates and that causes other states, usually neighbors, but not always, to reconsider their options, including that of developing a nuclear capability of their own. While the precise

U.S. Strategic Calculus Regarding Iran's Nuclear Development

<i>Operational Concepts</i>	<i>U.S. Strategic Objectives</i>			
	Dissuade Nuclear Acquisition & Technology Transfers	Deterrence Punish/Deny	Security Assurances Negative/Positive	Active/Passive Defenses
<i>Security Cooperation</i>	<p>Influence and shape regional reactions and capabilities</p> <p>Augment and support local border control and SLOC security efforts</p>	<p>Augment pace and scope of PSI in the Gulf region</p> <p>Revisit declaratory policies</p> <p>Augment missile defence assets in-theater</p>	<p>Declaratory policy re: Israel and GCC states</p> <p>“Phase 0” activities with Israel/GCC states</p> <p>Maintain CSG/ESG presence in the Gulf region</p>	<p>Consequence management exercises</p> <p>Force protection exercises</p> <p>PSI exercises</p> <p>Enhance JCET deployments</p>
<i>Consequence Management</i>	Enhance indigenous CBRNE defenses	Deploy CBIRF	Step-up exercises with partners	Focused cooperation with Israel and GCC states
<i>Global Strike</i>	<p>Re-configuration of forces and alert status in the region</p> <p>Employ signaling and perception management techniques to influence decision-making in Tehran</p>	<p>Plan for preemptive option</p> <p>Develop targeting profile</p> <p>Dissuade independent Israeli action</p>	<p>Negotiate SOFAs and base access agreements</p> <p>Prepare strike options and force packages</p>	<p>Upgrade missile defense deployments</p> <p>Protect APOD/Es and SPOD/Es in-theater</p> <p>Enhance Strait of Hormuz patrolling and defenses</p>
<i>SOF/IW</i>	<p>Develop comprehensive IO and PsyOps campaign</p> <p>PSI interdiction</p> <p>Targeted/focused options</p>	<p>Implement IO and PsyOps campaign</p> <p>Support CONPLAN for targeting, etc.</p> <p>Disable operational facilities and sites</p>	<p>Empower GCC SOF</p> <p>Work with Israeli SOF to counter Hezbollah</p>	Implement render-safe options, as appropriate
<i>Crisis Escalation</i>	<p>Activate options to influence strategic elites</p> <p>Employ SOF and special assets</p>	<p>Be clear about “red-lines”</p> <p>Develop signaling mechanisms</p> <p>Deter independent Israeli Action</p>	<p>Strengthen protection of Israel/GCC partners</p> <p>Coordinate allied and partner capabilities</p>	<p>Enhance CONUS protection</p> <p>Step-up CM, CP, and force protection activities in CENTCOM's AOR</p> <p>Include PSI and GNI in war plans</p>
<i>Non-Kinetic Operations</i>	Employ PsyOps and IO	Activate strategic communications plan	Hone public diplomacy with allies and partners	<p>Table-top exercises</p> <p>Augment cyber defenses</p>

weapons, the safety, security, and custody of nuclear stockpiles will become even more pressing issues than they are today. At the same time, Iran's crossing of the nuclear threshold is destined to create a new set of deterrence dynamics between it and its nuclear neighbors, including India, Pakistan, Russia, China, and Israel (which might, under these circumstances, declare its nuclear power).

Leaving aside, for the moment, the deterrence relationship between the United States and a nuclear Iran, and that of Israel and Iran, it is quite possible, especially in the context of an aggressive-Iran model, that the regime in Tehran would be emboldened to take risks to promote Iran's agenda once it declares or demonstrates its nuclear weapons capability. In our defensive-Iran model, we assume that nuclear weapons might moderate Iranian behavior, since the purpose of their deployment would be to enhance the regime's confidence that it could deter an enemy attack. This assumes a more positive role for nuclear weapons than may be the reality, although in deterrence theory, Columbia University professor Kenneth Waltz, among others, has postulated that strategic stability can be served by nuclear multipolarity.⁹⁰ However, in the case of a nuclear Iran, it does seem that the nature of the regime matters, and from all appearances, the current leadership is intent upon acquiring nuclear weapons to serve the purposes of a more assertive foreign policy. Thus, in our aggressive-Iran model, we assume that nuclear weapons have been deployed to deter enemy aggression, to be sure, but also to facilitate Iran's foreign policy agenda and to "sanctuarize its homeland from reprisal."⁹¹ This would be an Iran that runs the risk of lowering the nuclear threshold,⁹² and one that might be prone to miscalculation because of the relative inexperience of its leadership in dealing with the outside world. As a Persian Shiite state surrounded by Arab Sunni neighbors, and with a jaundiced view of the international order (developed largely during the eight-year war with Iraq), an aggressive-Iran model would likely regard nuclear weapons as tools to reinforce Iran's self-sufficiency and great-power status. From its experience in the Iran-Iraq war, the regime in Tehran came to the view that Iran cannot rely on any outside power for its security.

Iran's relationship with Russia is no exception in this regard. It is pragmatic, based on a shared desire to reduce and mute U.S. power and influence in the Persian Gulf/Central and South Asia regions. This probably helps to explain why Iran has joined, as an observer, the Shanghai Cooperation Organization and why, as well, it is promoting the creation of a regional security framework that explicitly excludes outside powers (the United States). Iran's relationship with Russia is also emblematic of a view that Iran's future lies to its east, and with the development of close economic relations with India and China, two of the more lucrative energy markets for Iranian exports. Energy diplomacy is emerging as an important aspect of Iranian thinking, and this is an issue over which it and Russia could compete

90 Scott Sagan and Kenneth N. Waltz, *The Spread of Nuclear Weapons: A Debate Renewed*, 2nd ed. (New York: W.W. Norton, 2002).

91 Chubin, *Iran's Nuclear Ambitions*, 54.

92 Ibid., 55. Chubin also has noted, "The Iranian political system even after twenty-seven years still functions more like a conspiracy than a government." 48. Moreover, decision-making for national security—as was noted at IFPA's September 24, 2007, workshop on Iran—has been concentrated in a few hands. This is a cause for concern, especially in the nuclear area, because these decision-makers are relatively unfamiliar with deterrence theory and the lessons from the Cold War in this regard.

or cooperate, depending on the politics of “pipeline diplomacy.” Whatever one thinks of the phrase, a “new Great Game” is indeed being played out in Central and South Asia, and Iran hopes to benefit by re-emerging as the unavoidable junction on a new “silk road.”

Iran and Russia share an interest in keeping the lid on ethnic tensions in Azerbaijan (whose Azeri population spills over the border into Iran) and in developing the energy resources in the Caspian seabed, although the two countries still dispute the demarcation of their respective exclusive economic zones (EEZs). Moreover, while Iran’s reliance on Russia for arms may have muted its inclination to intervene in Chechnya’s separatist movement, simmering tensions throughout Central Asia between and among ethnic and religious factions could one day bring the two states to compete rather than cooperate with each other. For example, a nuclear Iran might be emboldened to send (conventional) military forces into Azerbaijan to quell ethnic violence spilling over into Iran from Azerbaijan. It is also conceivable that Russia, which opposes NATO expansion into the Caucasus, could challenge Iran’s incursion into Azerbaijan, and this scenario could bring the two nuclear-armed states into a confrontation in which Iran, lacking adequate conventional capabilities, was forced to escalate to nuclear weapons use to stave off a Russian incursion into Iran itself, similar in some respects, to the scenario that occurred in August 2008, when Russian troops, allegedly to protect the Russian population of South Ossetia, crossed into Georgia. As with the situation in Georgia, such a scenario also has the potential to embroil the United States in a Russo-Iranian confrontation over Azerbaijan, since it would involve as well a NATO partner state.⁹³ Three nuclear powers, each having important interests in the region could find themselves facing off against each other, although, it must be emphasized, that if the past is prologue to the future, it is extremely unlikely that the United States would actively become engaged in a conflict in the Caucasus involving Iran and Russia. However, the point is that of the three nuclear states, Iran lacks the extensive experience of interactions on nuclear issues that the United States and the Soviet Union gained during the Cold War. This could lead it to overreach in a crisis, or, equally plausible, it might lead Iran to exercise greater caution in order to minimize the likelihood of escalation. Here again, it is useful to recall that Iran’s behavior in a future crisis is dependent on the nature of its leadership as well as its perceptions of Iran’s role and interests in areas beyond its borders. In most instances, it also depends on great power interactions and how, in this context, Iranians perceive their relations with the United States and America’s power in relation to that of a rising Russia.

93 This scenario was credibly drawn by Jason Zaboriski, “Deterring a Nuclear Iran,” *Washington Quarterly* 28, no. 3 (Summer 2005): 153–167. However, if the August 2008 confrontation between Russia and Georgia is any indication, the willingness of the United States and NATO to become involved in what could become an escalatory confrontation with Russia was limited by the lack of substantive options. The fact that Georgia was not at the time a NATO member, or on its way to becoming a NATO member—recall that the Bucharest Summit rejected for the time being, Georgia’s application to begin the Membership Accession Process (MAP)—may have encouraged Russia to take a calculated risk to reassert sovereignty over South Ossetia. This is an arguable point, to be sure, but depending on how one assesses the implications of Russia’s actions for U.S. efforts to promote democracy in Central Asia and the Black and Caspian Sea regions, NATO membership and U.S. extended deterrence guarantees may be perceived as less valuable to states facing stronger potential adversaries.

To the extent that the leadership of an aggressive Iran may view its relationship with the United States as a “zero-sum game,”⁹⁴ the prospects for “cooperative deterrence,” or the construction of a deterrence relationship built around a shared conception of strategic stability would be unlikely because Iran’s leaders most likely would believe, in the context of our aggressive-Iran model, that the United States seeks to gain influence at Iran’s expense. This is a situation that is ripe for miscalculation, with a very great danger of crisis escalation. Escalation can result from three types of action: increasing the level of violence, widening a conflict, or introducing unrelated issues. While all three elements of escalation management have been addressed in deterrence theory, that of increasing the level of violence, using more devastating conventional or nuclear capabilities remains at the forefront of thought when it comes to crisis management and escalation control considerations, especially with respect to limited war and/or extended deterrence theorizing.

Early-on in the nuclear era, planning for limited nuclear engagements presupposed that both the United States and the Soviet Union would be motivated to control the escalation chain because the other had deployed credible retaliatory forces that could raise the ante and destroy its adversary’s cities and industrial base, if it choose to do so. However, with the passage of time and given the revolution in military affairs (RMA), and the arrival of increasingly lethal non-nuclear munitions, the currency of conventional deterrence gained greater credibility in U.S. operational circles, and with it came a de-emphasis on nuclear weapons in strategic planning. Beyond that, as Western states pushed nuclear deterrence considerations to the periphery of U.S. and Alliance planning, they also created doubts about the viability of a national command authority (NCA) ever resorting to nuclear weapons use, when other more “useable” weapons options had come into being. Largely on this basis, but also because of the relative complacency with which many have come to regard, first, the U.S.-Soviet, and now the U.S.-Chinese, strategic relationships, the notion of escalating a conflict to nuclear weapons use is widely discredited, despite the fact that the first use of nuclear weapons is a real possibility for rising nuclear states such as North Korea and potentially, Iran.

Moreover, the increased sophistication of non-nuclear technologies, giving many such capabilities the attributes of modern-day nuclear weapons technologies, has served to decrease further interest in, or support for, developing modern-day nuclear weapons, as is evident in the lack of U.S. Congressional support for the Reliable Replacement Warhead (RRW), of which more is said later in this study. Suffice it to note that even with respect to new, non-nuclear technologies, changing notions of the “acceptability” of using specific types of capabilities (such as cruise missile deployments), have obscured the message that was intended to be conveyed (by use of a particular capability), and this has led to confusion about intended signals—a phenomenon that must be more precisely understood, today, in the context of this discussion of Iran and its specific culture, ethnicities, and world outlook. For example, in this regard, NATO’s employment of cruise missiles in Bosnia was very deliberately considered

94 Game theory in international relations refers to a decision-making approach that assumes rational actor behavior in a competition where decisions are taken. Each actor tries to maximize gains or minimize losses, even under conditions of uncertainty and incomplete information. In a two-actor zero-sum game, one side may benefit at the other’s expense. This, apparently, is how many Iranians appear to view the U.S.-Iranian relationship.

by Alliance leaders to convey a threat to the Serbs that the conflict was likely to escalate unless they ceased supporting the ethnic cleansing of Muslims in Bosnia. In other situations, the employment of cruise missiles might not be intended to convey an escalatory message at all; in some cases, it might even be considered as an attempt to limit operations, given the precision accuracy of modern-day cruise missile technologies. Controlling the escalation chain and/or deterring enemy escalation in a crisis or conflict must be regarded as extremely situation-specific, requiring innovative thinking and unconventional ideas. In this context, a capability such as the proposed Conventional *Trident* Missile (CTM) would provide unique escalation capabilities in the near term (two to three years), assuming that the program moves forward with the necessary funding.⁹⁵

Israel and the Challenge of Catalytic Warfare

A nuclear Iran or an Iran on the brink of proliferating also presents the potential for catalytic warfare. Unlike the early post-World War II era, the contemporary security environment features third-party actors that have access to independent military capabilities and foreign policy/security considerations that are largely independent of great-power interactions. This is an issue that has long been debated in U.S. strategic circles, with seminal thinking having been done by the late Dr. Herman Kahn, of the Hudson Institute, on catalytic war and crisis escalations. As described by Dr. Kahn, catalytic warfare refers to the “notion that some third party or nation might for its own reasons deliberately start a war between the two major powers.”⁹⁶ According to Kahn, “the widespread diffusion of nuclear weapons would make many nations able, and in some cases also create the pressure, to aggravate an on-going crisis, or even touch off a war between two other powers for purposes of their own.”⁹⁷ Even though Dr. Kahn was writing in the context of the U.S.-Soviet strategic rivalry, and his work centers on U.S. security planning, we can extrapolate this reasoning to the current context in which Israel, perceiving an existential threat from Iran’s nuclear development, initiates military strikes against Iran to degrade or stop Tehran’s nuclear program, and in the course of this action, Iran retaliates not only against Israel, but against the United States itself, or against U.S. interests or forces overseas.

In Tel Aviv, no issue commands greater attention, particularly given Iran’s growing and higher-profile role in enabling Hezbollah and Hamas activities. From the Israeli perspective, a nuclear-armed Iran would pose an existential threat, no matter what the nature of that deployment may be—i.e., defensive or aggressive. It may be viewed as so grave that Israel, even short of an Iranian decision to weaponize, may determine that it cannot live with the strategic ambiguity of the current situation.

95 The Conventional *Trident* Missile program has run into opposition in Congress, and its funding was zeroed out in FY08, although research and development funds for conventional global strike options were kept alive and subsumed under a broader “prompt response global strike element” in the FY08 defense budget. Subsequently, for FY09, the Pentagon requested \$117.6 million for a “prompt response global strike element,” which includes R&D funding for the Conventional *Trident* option. The House Armed Services Committee approved this request, while the Senate Armed Services Committee added another \$30 million to the account for R&D on an advanced hypersonic glide vehicle, to which an additional \$15 million had also been programmed in the FY09 budget.

96 Herman Kahn, *Thinking about the Unthinkable* (New York: Horizon Press, 1962), 57.

97 *Ibid.*, 217.

Many Israelis also contend that Iran would never be content with a defensive deterrent, and they foresee a situation in which a defensive deterrent is readily transformed to support Iran's more expansive foreign policy aspirations. For the Israelis, regime change in Iran, if the mullahs were ousted and some sort of "democratic" government were put into place, might make a difference in convincing them to live with a defensive Iran, but few Israelis appear willing to gamble that Israel's security is or should be dependent on Iranian goodwill, even in the context of regime change.

While we should not overstate the case for catalytic warfare, we nevertheless note that there is compelling evidence that the Israelis are contemplating their own independent action to deal with Iran's nuclear programs.⁹⁸ Israel would be most likely to take such a step if it perceived that the United States had no will to strike Iran itself, and if the international community was unable to come to agreement on the nature and urgency of the threat posed by a nuclear Iran. Israel has a precedent for preemptive action with its 1981 attack on Iraq's Osirak reactor, although the differences between that situation and a prospective attack on Iran's nuclear infrastructure and programs are vast.⁹⁹ For one, Iran appears to be pursuing a redundant path to nuclear weapons development, and many of the aspects of its uranium-based program are located at underground sites and at undisclosed locations, according to dissident reporting. This means that one round of preventive strikes would not do the job, and Israel lacks the capacity for the type of sustained operations that would be required to destroy and dismantle the 24-known sites that have been identified as having a role in Iran's nuclear programs.¹⁰⁰ At most, the Israelis might delay the Iranian program, but this would be only for a matter of years in all likelihood, because of Iran's penchant for redundancy. Even a U.S. preemptive attack, including one by non-nuclear U.S. forces, could only hope to delay the Iranian programs by two to five years, as the redundancy of capabilities, the indigenous knowledge base, and an extensive program of deception, protection, and underground tunneling would inevitably limit the effectiveness of this type of military action. The United States, however, could undertake sustained air strikes, using carrier-based air and long-range bomber assets, unlike Israel. Moreover, any Israeli strike would have to over-fly Iraq, Jordan, and/or Turkey, if not Syria, and that would create political and possibly military challenges. However, in this regard, there is some evidence that the September 6, 2007, Israeli strike against what most believe to have been a Syrian nuclear reactor (under construction) was accomplished with (at least)

98 In June 2008, Israel conducted an exercise that appeared to observers to be practice for an attack on Iran. The exercise involved more than one hundred Israeli F-15 and F-16 aircraft, refueling planes, and search and rescue helicopters. "The Israeli aircraft flew more than 900 miles, roughly the distance between Israel and Natanz, Iran's main nuclear enrichment facility," Jay Solomon and Yochi J. Dreazen, "Israeli Maneuvers Demonstrate Unease Over Iran," *Wall Street Journal*, June 21, 2008.

99 A paper prepared by two PhD students at the Massachusetts Institute of Technology in Cambridge, Massachusetts, examines in some detail Israel's capabilities to destroy Iran's nuclear facilities. See Whitney Raas and Austin Long, "Osirak Redux? Assessing Israeli Capabilities to Destroy Iranian Nuclear Facilities," draft April 2006. Another paper on this topic, but less detailed, was released by the U.S. Army's Land Warfare Institute in March, 2007: see Stephen Blanchette, Jr., "Military Intervention in Iran: Why and How," no. 62, the *Land Warfare Papers* (Arlington, VA: The Institute of Land Warfare of the Association of the United States Army, 2007).

100 Claude Salhani, "Iran Nearing Nuclear Weapons Capability," *Middle East Times*, February 22, 2008, found at: <http://www.metimes.com/international/2008/02/22/iran-nearing-nuclear-weapons-capability/4147/>.

Turkey's tacit approval (for over-flight).¹⁰¹ Several Israeli analysts have gone so far as to suggest that while the main purpose of this strike was indeed to destroy a suspect reactor installation in Syria, it was also intended to calibrate the effectiveness of Syrian and Iranian air defenses in the event of a future contingency against Iran and to demonstrate Israeli resolve regarding the importance given to counter-proliferation tasks by the Israeli government. At the end of the day, the Israeli position is that Iran must not be allowed to proliferate, and it is our sense that the government in Tel Aviv is prepared to do whatever it takes to eliminate Iran's existential threat to Israel's survival, either on its own, or in conjunction with the United States.¹⁰² If Israel does strike before Iran can field a nuclear weapon, Iran is likely to respond with asymmetric attacks against it and, potentially, its U.S. ally, using proxy Hezbollah sleeper cells known to be resident in Israel and the United States.

There is no question of the need for innovative and radical new thinking in relation to Iran's capacity to implement a strategy of compound escalation, either by using nuclear weapons first in a conventional warfare scenario, by widening the scope of violence to target U.S. coalition partners in the region, or by relying on proxy forces using IW tactics. In terms of escalation management, the challenges that a nuclear Iran or an Iran on the brink would present are many and complex. In Iran's case, the regime could be expected to use Hezbollah or Hamas against Israel or other U.S.-friendly targets in this context, as suggested throughout this report. It is also possible that Iran would strive to widen the geographic area of conflict, using perhaps Hezbollah forces deployed outside of the Middle East, as will be discussed in greater detail in Chapter 6, or by targeting U.S. allies in NATO Europe, or the United States directly. However, in this context, it is also important to realize that Israel, too, has its own options when it comes to compound escalation. It could, for example, target Hezbollah assets

101 The Israeli strike of September 6, 2007, remains shrouded in mystery, as neither the United States government nor that of Israel has been willing to come forward with details. Speculation abounds that the target of the strike was a nuclear reactor, modeled after a North Korean plant, and that for this reason and so as not to derail the Six-Party process, the Bush administration has chosen to say nothing on this topic. Based on open source reporting, Israeli intelligence had either tracked or had information that a North Korean freighter, docked in a Syrian port, had delivered cargo to the site. According to interviews with Israeli officials and with Gulf security analysts, the site that was struck by Israeli aircraft was under the control of the Syrian Air Force, which also has responsibility for overseeing Syrian ballistic missile and WMD programs. According to analysts to whom IFFA spoke, if this was a reactor site, and the evidence revealed from satellite imagery suggests that it was a structure similar to that found in North Korea's nuclear program, this would have marked a significant shift in Syrian policy, reflecting the fact that Syria's leaders now felt emboldened to seek their own nuclear programs, as a result of Iran's successful defiance of the West and in light of its determination to continue to pursue its national nuclear programs. Earlier, it should be recalled, Bashir Assad had publicly stated that nuclear weapons were not "useable" and he supported calls for a Middle East nuclear-free zone. The evidence of a change in Syrian policy may also be explained, according to one analyst, as providing a "front" for Iran's nuclear development. In any case, even in Israel, discussion of the strike is muted, and there is a feeling that the Israelis prefer to bide their time and keep their eyes on the more important threat—namely, that of Iran's nuclear development.

102 Not all Israelis share these views. Recently, one prominent Israeli, Efraim Halevy, the former head of Mossad, made the case in his memoir, *Man in the Shadows*, for engaging Iran and Syria. From his perspective, "Even if the Iranians did obtain a nuclear weapon, they are deterrable because for the mullahs, survival and perpetuation of the regime is a holy obligation." On Ahmadinejad and his rhetoric, Halevy says, "I believe that behind their bombastic statements there is a desperate fear that they [Iranians] are going down a path that would have dire consequences. They don't know how to extricate themselves. We have to find creative ways to help them escape from their rhetoric." Efraim Halevy, *Man in the Shadows: Inside the Middle East Crisis with a Director of Israel's Mossad* (New York: St. Martin's Press, 2006), quoted in David Ignatius, "The Spy Who Wants Israel to Talk," *Washington Post*, Outlook Section, November 11, 2007.

located outside of the Middle East or seek to engage the United States in its fight. The Israelis are also pondering the feasibility of “quick NATO membership for Israel,” an option, however, that is extremely controversial, and probably not acceptable to all NATO members. Nevertheless, the idea would be to confront Iran with a broader threat of retaliation should it decide to attack Israel directly.

Of Dyads, Triads, and the Need for a New Deterrence Paradigm Relating to a Nuclear Iran

The deterrence dynamic between Israel and Iran presents another formidable planning challenge to the United States: namely, the need to recognize that U.S. deterrence planning has moved beyond bilateral constructs to embrace a more complex dynamic, comprising three, not two, nuclear actors. Thinking about a deterrence triad is quite different from the bipolar deterrence-planning paradigm that has preoccupied U.S. strategic thinking since the days of the Cold War. It is, however, emerging as the new norm, and much greater thought needs to be given to the notion of catalytic warfare, as described above. For, in addition to the U.S.-Israeli-Iranian nuclear triangle, which looms, Washington already faces other three-way deterrence challenges, including the India-Pakistan-China triangle and the Sino-American relationship vis à vis Taiwan, although at this point Taiwan (insofar as we can determine) does not possess a nuclear weapons capability. Nonetheless, in this context, it is important to note that in the case of the U.S.-Israel-Iran triangle, Iran’s fragmented decision-making structure, reinforced by a government that relies heavily on personal relationships, nepotism, and patronage, makes it difficult to identify the center of gravity, beyond the Supreme Leader (who is notorious for not making difficult decisions), and, in turn, the roles and relationships among institutional players. Obviously, the bureaucratic-actor model does not apply to Iranian decision-making, and this, in turn, raises additional questions about Washington’s ability to communicate intent in a crisis in order to influence Iranian behavior.¹⁰³ Moreover, questions about the chain of command further complicate U.S. efforts to interpret signals that an Iranian leadership may be sending or to devise Washington’s own strategic communications to influence and shape Iranian thinking about the use of force, including the role of nuclear weapons in a crisis situation.

If, for example, Iranian IRGC forces were to disperse Iran’s mobile launchers in a crisis, and at the same time bring what Washington assumes to be operational warheads to sites in proximity to the dispersed launchers, how should the United States interpret this behavior? In the defensive-Iran model, one might assess this to be for reasons of force survival, whereas in the aggressive-Iran model one could interpret such moves as preparation for an Iranian nuclear strike. Whatever the reasoning behind such Iranian moves, the effect might be to lead the United States to try to destroy those launchers in an effort to ensure U.S. escalation dominance. Although U.S. intelligence, surveillance, and reconnaissance capabilities have improved greatly since operation *Desert Storm*, the targeting of dispersed mobile assets nevertheless remains a challenging military mission, especially if mobile

103 One of the three decision-making models developed by Harvard professor Graham Allison in his seminal study on decision-making during the Cuban missile crisis. Graham T. Allison, *Essence of Decision: Explaining the Cuban Missile Crisis* (Boston: Little, Brown, and Company, 1971).

launchers are moved to tunnels or other camouflaged locations and if the Iranians rely on deceptive tactics to mask their intentions.

Western deterrence theories presume that states will refrain from nuclear weapons use because the costs of doing so outweigh by far any benefits to be derived. In other words, deterrence theory relies on a presumption that state actors will be motivated to maintain the territorial integrity of their countries and to seek to avoid catastrophic damage to their populations. Western scholars widely attribute such motivations to Iran's leaders, but in doing so, they fail to appreciate two factors that may figure heavily in the Iranian calculus regarding the use of nuclear weapons. The first, as discussed earlier, is Iran's particular vision of Shia theology, which includes an apocalyptic end of the world and the revelation of the Twelfth Imam. The second has to do with a scenario where the country of Iran is in chaos, our third model, and its leadership may consider that it has nothing to lose and much to gain (uniting the fractured population against an external aggressor) by using nuclear weapons first. The likelihood of this occurring may be disproportionately higher if the regime considers itself to be at risk from an external force.

In other words, if the United States adhered to a regime-change policy and a crisis escalated to war, the Iranian leadership could perceive that it has little to lose by launching a nuclear strike against U.S. interests. Were the United States to back away from discussion of regime change (or even the recently articulated, more nuanced position that seeks to change regime behavior), it might be reasonable to assume that the regime in Tehran would be "assured," and that such assurance in itself would be sufficient to dissuade Iranian decision-makers from thinking that nuclear weapons use in a crisis was their only way to consolidate domestic support for the regime. Unfortunately, however, as with the negative security assurances spelled out in the NPT (that is, signatories commit not to attack a non-nuclear weapons state with nuclear weapons unless it is allied to a nuclear power), there has been so much ill will and so little trust between the United States and Iran that any attempt to moderate Iranian perspectives on regime change as the objective of U.S. foreign policy will face an uphill battle. Substantial evidence suggests that the regime fears a "velvet revolution" from within and fostered by the United States, which helps to explain, at least in part, the imprisonment in the summer of 2007 of American-Iranian scholars and the crackdown on the media and the internet. In a country that is convinced of its own importance to the region and to the wider Muslim world, it will be very difficult for almost any Iranian regime to give up any of the attributes its power, especially nuclear weapons once a strategic decision had been made to cross the nuclear threshold. In this contest it seems improbable that Iran, be it a defensive or an aggressive Iran, with anything less than a truly democratic leadership, would be willing to give up its nuclear weapons aspirations in exchange for an explicit U.S. (negative) security guarantee that it would not attack Iran if it dismantled its nuclear weapons programs and opened the country up to allow on-site verification of any and all facilities of concern.

If Iran's proliferation is assumed, as we do in this assessment, and it operationalizes its nuclear posture around our defensive-Iran model, then it is possible that between the United States and Iran, deterrence could be putatively maintained so long as the regime in Iran cared more about its own survival

than pursuing expansionist objectives or fanatical religious causes. However, once a regime leadership began to aspire for more, the challenges associated with maintaining strategic stability are certain to become more difficult and the danger of overreach (in a crisis) and miscalculation likely to grow. In this context, even the slightest perceived injustice or misunderstanding risks escalation into a full-blown conflict. In the Persian Gulf region where the United States has chosen to display its power through U.S. naval presence deployments, the creation of bilateral and multilateral coalition partnerships with the smaller Gulf states, Saudi Arabia, Jordan, Egypt, and Turkey, and more recently, through efforts to stabilize Iraq, Afghanistan, and, to the extent possible, Pakistan, while forging a strategic partnership with India, the pressures on an Iranian regime to break out of this “encirclement” may be too great. With nuclear weapons, an aggressive Iran might well be inclined to provoke a crisis in the hope (or expectation) that the United States would back down, rather than risk a nuclear exchange.

In the face of Iran’s nuclear development in both the defensive and aggressive contexts, Washington will need to begin to think about regional deterrence and counter-proliferation in new ways. Across the Middle East, the potential for proliferation is high, but little serious official attention is being paid to the need to develop a broader approach to regional deterrence and reassurance. Such a broader approach should include additional efforts to enhance maritime security cooperation with the Gulf allies and other alliance-coalition partners external to the region (for example, the United Kingdom, Australia, France, and possibly even Japan, depending on how far the Japanese government is willing to go in terms of Persian Gulf contingency planning).¹⁰⁴ At the very least, some level of intelligence fusion and command and control (C²) interoperability is required, beyond what currently exists with the Persian Gulf states. It may not be too early to broach the subject of adapting the NATO *Active Endeavor* model to a Persian Gulf contingency.¹⁰⁵ Essentially, this would mean the development of a U.S.-led naval force that would be composed of assets from Oman, Saudi Arabia, the UAE, and Bahrain to implement maritime surveillance, critical infrastructure protection (of offshore oil platforms, for example), and if necessary, embargo interdiction operations. The following chapter explores the essential elements of twenty-first century deterrence planning and implications for key U.S. objectives, such as non- and counter-proliferation, allied/coalition partner assurance, and strategic forces modernization in the United States.

104 In 2007, the Japanese government changed leaders, and the new prime minister, Yasuo Fukuda, appears less willing than either of his two predecessors to take on the parliament (the Diet) over controversial issues, such as renewing the tanker/refueling mission for Japanese vessels in the Persian Gulf region. There are indications, moreover, that should the Diet approve a renewal of this mission, it may also attach restrictions on its execution that would make such support undesirable from a U.S. Navy operational perspective.

105 *Active Endeavor* is a NATO Article 5 maritime counter-terrorism operation focused on trafficking and shipping across the Mediterranean Sea. Its immediate purpose is to prevent the movement of weapons of mass destruction into and out of the Mediterranean region. In February 2003, it was broadened to include maritime operations in the Strait of Gibraltar and, subsequently, ship escort and compliant boardings to enforce international law. Naval forces from NATO’s Standing NATO Response Force Maritime Group are responsible for carrying out these operations. In September 2006, the North Atlantic Council authorized Russian participation in operation *Active Endeavor*, which it has done once to date. However, in August 2008, following Russia’s occupation of Georgian territory, NATO voted to suspend further Russian participation in *Active Endeavor* until the situation in Georgia is resolved in a “cooperative” manner.

Chapter 5: Updating U.S. Strategic and Deterrence Planning for an Iranian Nuclear Breakout

As discussed in the preceding chapter, Iran's decision to develop and deploy nuclear weapons will have profound implications for regional stability, global non-proliferation objectives, and U.S. strategic and operational planning. In terms of regional stability and non-proliferation, it may not make a great difference if Iran develops a defensive deterrent or an offensive posture because states in the region will feel threatened by either and seek to bolster their security through a variety of measures, from looking to the United States for new security assurances to developing their own nuclear weapons acquisition programs—a path that would likely become more attractive if the United States itself were viewed as being vulnerable to an Iranian nuclear threat, as posited in our aggressive-Iran model. To reduce its vulnerability to rogue-nation nuclear threats and to complicate enemy attack calculations, increase the imperative for saturation tactics, and generate doubts about the success of a deliberate attack, it is crucially important that the United States pursue the deployment of a much more robust missile defense architecture than exists or is projected for development. In addition to missile defenses, the development and implementation of a credible offensive posture, based on a combination of nuclear and non-nuclear weapons and an industrial base that facilitates tailored employment options designed for specific contingencies is also essential. For the United States, this means development of the reliable replacement warhead, for which political support is at the moment tenuous.¹⁰⁶ It also means implementing non-nuclear strike options, though in the context of deterring rogue states nuclear weapons technologies retain a quality of their own that may be hard to match through non-nuclear means, and they are necessary if Washington is to have any hope of influencing the strategic decisions of adversaries who themselves possess nuclear weapons. Even as an Iranian leadership may come to adhere to a variant of the assured destruction mindset, the United States and its partners must move beyond the assured destruction paradigm when it comes to dealing with less than a peer-power nuclear threat. In so doing, we must be creative about the options provided to the NCA and much more explicit about articulating the consequences of Iranian actions. Declaratory policy has always been an aspect of deterrence planning, but with the emergence of rogue nuclear powers, such as North Korea and Iran, this aspect of U.S. planning needs to be re-considered and enhanced to support clearly articulated policy objectives. Against a country such as Iran, ambiguity is unlikely to serve our purposes, even as it may have done in years past. The subsequent discussion highlights the principal elements of a preferred 21st century deterrence construct for the United States and identifies key challenges that must be addressed in U.S. strategic and operational planning.

Declaratory Policy, Escalation Control, and Strategic Communications

If we take into account Iran's history, its regional aspirations, and its cultural ethnocentricity, we realize that like the former Soviet Union, a state-centric Iran can be deterred if the threatened retaliation is perceived by Iranian leaders as not only credible but also as capable of destroying Iranian culture, Persian civilization, and key attributes of the state's power. This means that the U.S. discussion of deterrence must be couched in such a way as to leave no doubt about American interests and intentions,

106 The RRW is intended to replace W-76 warheads in the U.S. nuclear inventory.

Tailoring Deterrence to Meet 21st Century Threats

<i>Essential Elements of a New Deterrence Paradigm</i>	<i>Legacy Challenges and Near Peer Competitors</i>	<i>Rogue Regimes and Threshold States</i>	<i>Violent Extremists and Non-State Actors</i>
	<ul style="list-style-type: none"> • Russia • PRC 	<ul style="list-style-type: none"> • North Korea • Iran 	<ul style="list-style-type: none"> • Hezbollah • al-Qaeda
<i>Reassurance</i>	NATO Japan and South Korea, Taiwan U.S. homeland defense Extended deterrence	Japan and South Korea Israel, NATO, GCC U.S. homeland defense Extended deterrence	Israel, GCC U.S. homeland defense Update security collaboration
<i>Dissuasion and Deterrence</i>	Dissuade ASAT, EMP, and WMD acquisition and attacks Deter conventional attacks Discourage onward proliferation Promote Russian, nuclear arms reductions in Europe	Deter conventional and WMD use Transfer of nuclear weapons and expertise Negative security guarantee Interagency and allied-coalition partner non-kinetic initiatives (e.g., sanctions, blockade)	Dirty-bomb detonation Non-proliferation Asymmetric attacks WMD trafficking, state sponsorship, and establishment of sanctuaries (virtual and real)
<i>Coercion and Compellance</i>	Survivable second-strike forces “Prompt response” Global strike, using nuclear and non-nuclear capabilities	Escalation control and dominance Human-terrain mapping Tailored forces for diverse scenarios Offshore strike assets Leverage coalition and partner assets	Value-chain interdiction Human-terrain mapping Identify support network
<i>Defenses and Consequence Management</i>	Space-based and oriented assets Damage limitation and population protection Event mitigation Survivable command and control and ISR Infrastructure protection	Global missile defense architecture Consequence management Enabling partner capacities Leverage U.S. allied security relationships	Consequence management Building partner capacity Military support to civil authorities “Render-safe” capabilities Enhance nuclear forensics and detection
<i>Information Operation and Strategic Communications</i>	Declaratory policy Influence and psychological operations	Declaratory policy Influence and psychological operations	Declaratory policy Influence and psychological operations

including in a crisis, regarding our willingness to use nuclear weapons if circumstances dictate. While there have been times when ambiguity has served us well, such as with respect to responding to non-nuclear WMD threats, countering a nuclear Iran requires that U.S. declaratory policy be clear and concise, leaving no room for misinterpretation, including with respect to Iran's possible use of biological weapons. By the same token, U.S. declaratory policy must not be unrealistic; in other words, Washington must be careful not to promise something that it cannot, or is unwilling to, deliver. Thus, for example, in the present circumstances in which U.S. deterrence forces are built around *Trident* missiles, intercontinental prompt-response capabilities, and air-delivered gravity bombs and nuclear-tipped missiles, the U.S. retains a diversified, but nevertheless limited capacity to tailor strikes and to contain collateral damage.

A declaratory policy that affirms a U.S. commitment to respond to any Iranian aggression—nuclear, other WMD, or conventional—arguably could stimulate debate among the Iranians about the costs and benefits attendant upon Iran's deployment of nuclear weapons. At the very least, it might have the effect of devaluing their acquisition of nuclear weapons if the perceived price to be paid involved risking national assets or territory. Without question, one of the biggest challenges that the United States faces is communicating intent to an Iranian regime that may not share our vision of deterrence dynamics. Lack of familiarity with Iran's values structures or with the perspectives of key leaders makes this an even more daunting problem. As there is no communication between Iran and the United States (or Israel) regarding the other's "red-lines," there is great danger of miscalculation and crisis escalation. This is one reason, among others, that the Israelis are building a sophisticated missile defense network, and why they have launched a diplomatic offensive to strengthen ties with the United States (including militarily with Israel's integration into the U.S. missile defense architecture) and to explore the possibility of some type of association with NATO. Tel Aviv strategists are also considering development of confidence-building measures (CBMs), similar to those put into place by India and Pakistan following their nuclear detonations in 1998. There is little expectation, however, that the current regime in Tehran would be open to such an initiative, unless it was subjected to intense international pressure to join in these discussions. Russia's cooperation would be necessary in this regard, and this poses a problem for the United States, whose ability to constrain Russian action in Georgia has demonstrated the limits of American power in relation to shaping opinion in Putin's Russia.

The essence of deterrence theory is the credibility of a state's ability to implement a nuclear threat. Credibility and will, in other words, are key to the way in which nations perceive U.S. power and to the way in which they will respond to escalatory threats. Up to now, however, the United States has not had much success in tailoring options for less than legacy challenges. With the Bush administration's NPR, American strategic planners attempted to address the shortcomings of U.S. deterrence thinking and posture, while considering the changes that had taken place in the global strategic environment, the impact of new technologies on strategic thought, and the need to place U.S. nuclear modernization within a framework that took into account arms control considerations. In this context, the United States sought to adjust how it thinks about the deterrent roles of nuclear weapons compared to those of non-nuclear offensive strike and defensive weapons, and

how each of these three legs of the New Strategic Triad can best be leveraged to deter potential nuclear proliferators from helping terrorists or other non-state actors to acquire nuclear weapons. In approaching deterrence planning in this way, it quickly became apparent that there was also a need to take a closer look at U.S. command and control architectures, intelligence requirements, and the strategic communications needs of America's nuclear/strategic weapons posture, to ensure that the messages and intentions conveyed by specific U.S. deployments or other activities (this is called signaling) are properly received and understood by those targeted. In adopting this new approach, it immediately became apparent that deterrence planning for less than peer threats needed to be tailored down to the level of a handful of key adversarial decision-makers, enhancing the importance of human-terrain mapping efforts and also of intelligence fusion activities to achieve actionable effects.¹⁰⁷

Prompt-Response and Offensive-Strike Options

Without a doubt, thinking about deterrence, dissuasion, and assurance in new ways that are more appropriate to the radically changed post-Soviet and post-9/11 strategic security landscape imposes a need to focus on tailoring deterrence options to meet new challenges while providing options for dealing with legacy threats. Very specifically, this will entail new thinking about integrating conventional non-nuclear options/weapons capabilities into a broader deterrence framework, one that retains as necessary a strategic (nuclear) deterrence capability and that provides new options for dealing with regional threats that may or may not involve WMD use against operating forces or American friends and partners overseas. To have an effect, however, U.S. deterrence planning must convey credible threats. It must, in this instance, include "useable" coercion and compellence options, such as those contained in the U.S. Strategic Command's (STRATCOM's) Global Strike concept. As envisioned by U.S. strategic planners, the Global Strike concept encompasses nuclear and non-nuclear strike planning and is intended to provide the NCA with realistic options in times of crisis.

Unfortunately, as noted by one former Pentagon official, "little progress has been made on plans to develop and field prompt, conventional Global Strike [capabilities] and to modernize the nuclear force."¹⁰⁸ In this context, the United States must address certain pressing modernization decisions, such as development of the RRW and the future of NATO's dual-capable aircraft platforms in Europe. If such questions are deferred or are taken without having in mind a clear understanding of their broader

¹⁰⁷ In recent weeks, there has been significant reporting about the successes of intelligence fusion teams in Iraq and in Afghanistan, organized around U.S. and allied/coalition partner special operations forces, intelligence professionals, forensic experts, political analysts, mapping and computer specialists, using new technologies (i.e., advanced, armed unmanned platforms and space-related technologies). Building and training such teams are the idea behind the U.S.-inspired NATO SOF Coordination Center (NSCC) and the notion of an Allied Effects Group (AFG) in Afghanistan. The notion of fusion cell teams can easily be transferred to deterrence planning, especially in the context of targeting adversary leaderships in rogue states. For a discussion of this concept, see: Jody Warrick and Robin Wright, "U.S. Teams Weaken Insurgency in Iraq," *Washington Post*, September 6, 2008.

¹⁰⁸ Tom Scheber, quoted in Tom Scheber and Keith Payne, *Examination of U.S. Strategic Forces Policy and Capabilities* (Fairfax, VA: National Institute for Public Policy, 2008), 4.

implications for deterrence planning overall, we may be putting at risk the development of options that a future president might find necessary to deter attack and protect and assure vital U.S. national interests. Yet, if both RRW modernization and prompt-response non-nuclear assets are considered critical to America's ability to meet, contain, counter, and mitigate prospective threats and new challenges to its security interests, then Washington needs to set into place a construct for supporting both programs, based on a package of inducements that would appeal to skeptics and supporters alike. Elements of a RRW package conceivably could include a commitment to streamline the U.S. nuclear infrastructure (elements of which are near collapse) and to provide evidence of how precisely RRW development is supportive of the objectives enshrined in the Moscow Treaty of lowering the number of operationally deployed nuclear warheads.¹⁰⁹

As America transitions to a new administration, the opportunity exists, both in the upcoming Quadrennial Defense Review (QDR) and as the United States looks beyond Iraq, to articulate a new deterrence construct where offensive nuclear and non-nuclear assets can be integrated to support a deterrence framework that reinforces strategic deterrence and COCOM-delineated operational planning. The Cold War delineation between nuclear weapons use and conventional warfare may not pertain to irregular warfare or to rogue-state deterrence calculations. Because the willingness to use nuclear weapons or to threaten to use them is tied to leadership perceptions of a risk/benefit calculus that is shaped by culture, national interests, and, in the Iranian case, perhaps by religious fervor as well, Western taboos against nuclear use may not pertain to Iranian nuclear weapons use. As described earlier, a defensive Iran would likely use nuclear weapons in the event of a conventional attack against its territory or in a conflict in which vital Iranian interests were judged to be at stake. An aggressive Iran could brandish nuclear weapons threats to achieve some desired political end, and actually employ nuclear weapons to attain a decisive goal, such as the destruction of Israel, in the expectation that doing so would advance Iranian interests and improve Iran's position in the Persian Gulf region and across the wider Middle East and into Central and South Asia. Of course, the key factor in this scenario would be the extent to which Iran believed that the United States was willing to intervene to support or protect its regional allies, and, in that event, the degree to which the United States appeared to be willing to sacrifice New York for Tel Aviv. Reminiscent of Cold War MAD debates, especially those over extended deterrence, this line of reasoning might lead an Iranian regime, having little practical experience with the United States, to conclude that Iran, in these circumstances, could act with impunity, as no rational U.S. government would really be willing to expose U.S. citizens to an attack just to save Israel.

In the two scenarios painted above, Iran might calculate that it can act without fear of U.S. retaliation, but the regime in Tehran would have to be concerned about an Israeli retaliation, although it may be

109 The Department of Energy (DoE) has developed a plan, called Complex 2030, that details how the United States ought to consolidate, upgrade, and modernize its nuclear weapons research, development, and engineering and production infrastructure. Without it, DoE argues, new weapons development in the United States will be compromised, as aging scientists leave the work force and nuclear engineering facilities are closed down because for lack of work. Transformation of the U.S. nuclear weapons industrial base was a central aspect of the Bush administration's Nuclear Posture Review, from which it emerged as one of the cornerstones on the New Strategic Triad.

that Iranian officials believe that Iran can ride out and survive an Israeli retaliatory strike. Depending on the circumstances in which nuclear use was considered, the United States is hardly likely to stand back, especially in a crisis when its conventional assets are exposed to the threat of an Iranian attack and its regional partners face annihilation. Preventing Iran from getting to the point where it can launch a punitive attack remains central to U.S. deterrence strategy, and that is why preventive strikes, if not preemption, should remain as core options for American contingency planning.¹¹⁰ Prevention is the operational manifestation of dissuasion, and even though, since Iraq, it has been somewhat devalued (in the public's eyes) as a concept, it remains central to legal arguments for "anticipatory self-defense," which some have argued is the only way to deal with Iran's nuclear ambitions. Operationally, problems exist in this regard, especially the lack of adequate human intelligence about Iran's nuclear programs and its redundancy of efforts. Ideally, to be successful, a preventive strategy would be able to identify and target crucial aim-points related to Iran's nuclear programs and destroy them without too much collateral damage. It is also advisable that this be done before Iran operationalizes its nuclear weapons capability and not after, when capabilities can be dispersed and protected, making the targeting problem all that more difficult and complex. Moreover, deception has long been an aspect of Iranian military planning, and the problems associated with locating hidden and dispersed weapons launchers and warheads will be even more difficult and problematic than would an Osirak-type strike designed to destroy key production facilities and manufacturing sites.

Prevention and preemption are also politically controversial concepts and, as strategist Colin S. Gray points out, often misunderstood.¹¹¹ In relation to deterrence theory, preemption has specifically referred to launch-on-warning or launch-under-attack and is intimately related to first-strike considerations. Prevention, or the unwillingness to live with certain conditions, has been considered as a means of dealing with nuclear proliferation and, during the Cold War, debate took place in the 1950s and 1960s over whether the United States should strike the Soviet Union to forestall the growth of its nuclear arsenal. A similar debate was aired over China's nuclear weapons programs, and in 1994, over North Korea's nuclear programs. In each of those instances, U.S. options for conducting preventive warfare were limited, which is why consideration of Global Strike options is so important, especially within a strategic framework that emphasizes nuclear and non-nuclear strike assets.

110 British scholar Colin Gray has described the differences and relationships between preemption and prevention. According to his view, "The option of a preventive war, or of a preventive strike, must express a guess that war, or at least a major negative power shift, is probable in the future." Preemption, on the other hand, "refers to the first use of military force when an enemy attack already is underway or, at the least, is very credibly imminent." From Gray's perspective, "To preempt is to launch an attack against an attack that one has incontrovertible evidence is either actually underway or has been ordered ... [It] is about self-defense." In contrast, "Prevention, preventive self-defense, has at its core the proposition that the preventor, if one may coin that term, is able to detect, and to anticipate, deadly menace in the future." Preventive war, according to Gray, is obedient to former Secretary of State Elihu Root's logic (propounded in 1914) in which a "state is determined to prevent 'a condition of affairs in which it will be too late to protect itself,'" raising questions about the use of force in certain circumstances. Colin S. Gray, *The Implications of Preemptive and Preventive War Doctrine: A Reconsideration* (Strategic Studies Institute, U.S. Army War College, July 2007), esp. 8–14.

111 *Ibid.*

Considering an aggressive Iran, it might be necessary to checkmate the Iranian leadership in a crisis by presenting a credible threat of attack. Plans to strike Iran would, by necessity, rely overwhelmingly on the use of U.S. air and naval assets, supported by the use of Special Operations Forces for preparation of the battlefield, targeting, intelligence, reconnaissance and surveillance (ISR), and selected counter-WMD missions. However, the use of special forces will be challenging, as most of the sites that would be targeted are located deep within Iran, some of them over two thousand miles from any border or coastline. Planning assumptions with respect to over-flight of Turkey or the use of Turkish (or other European bases to which the United States has access via bilateral agreements) would be uncertain, even in circumstances where Allied leaders support the notion of a U.S. operation against a nuclear Iran. For this reason, it is most likely that the United States would be forced to rely on CONUS-based assets (B-2s) and other global strike assets (e.g., B-52s flying in and out of Diego Garcia and *Tomahawk* cruise missiles), supported by tactical naval aviation strike packages. Here, a conventional *Trident* capability would have immense potential importance, and as noted earlier in this report, this missile should be considered as a priority U.S. funding objective in Department of Defense budgets.

Assuming Iran will have taken considerable precautions to defend highly prized nuclear and other WMD-related facilities, perhaps with their Russian-purchased S-300 SAMs, B-2s armed with direct-attack weapons, strategic *Tomahawks*, and conventional *Trident*, if available, would likely be the choice in the opening hours of any military campaign to degrade and destroy Iran's nuclear infrastructure and related delivery capabilities.¹¹² Once the B-2s had taken out key air defense and communication nodes, and the cruise and/or conventional ballistic missiles and bombers had disrupted military units that may have fielded WMD weapons, and minimized (with airfield attacks) the potential for Iranian air operations, carrier air and non-stealthy bombers could then follow up against production and R&D sites for which the time-urgency of attacks would not be as great. B-2s and additional *Tomahawk* and conventional *Trident* strikes could also be used in follow-on attacks against heavily fortified and larger scale nuclear/WMD sites, which would likely require more than one strike to ensure that normal operations would be brought to a halt.

Depending on whether the strike entailed substantive and consecutive raids or a one-shot attack, the United States might be able to degrade Iran's nuclear inventory and infrastructure, but it probably would not result in their complete destruction, given the regime's practice of hiding and dispersing elements of its nuclear programs. In all likelihood, a U.S. attack aimed at destroying Iran's nuclear weapons and capacity for retaliation against Israel, the Gulf Arabs, and possibly even against targets in NATO Europe and the United States (using IEDs in major cities, for example) could prompt Iran's

112 In June 2006, defense journalist Robert Kaplan spent time with a B-2 squadron in Guam. From his perspective, "As countries like North Korea and Iran put more and more of their critical facilities deep underground, in places that cruise missiles launched from such off-shore platforms as submarines lack the kinetic energy to penetrate, the B-2's ability to drop heavier (non-nuclear) bombs becomes ever more important. If the United States ever attacks Iran, expect to be reading a lot about the B-2. And if we never do, the B-2 will have been a hidden hand behind the muscular diplomacy that made an attack unnecessary," as, according to Colonel Robert Wheeler, USAF, the Guam Squadron's Group Commander of Operations, "The deterrence effect of this airplane may be as important as its destructive capability." Robert D. Kaplan, "The Plane That Would Bomb Iran," *Atlantic Monthly*, September 2007. <http://www.theatlantic.com/doc/print/200709/b2>.

leadership to disperse its weapons and fissile material to third parties, possibly to Syria but more likely to Hezbollah, although that, too, would depend on how successful the attack was, what was actually destroyed, and the nature of the regime itself. Were the collateral damage to Iran relatively small, popular support could coalesce against the regime, or it could come together in support of Persian nationalistic sentiments and create a national opposition to an external attack. In either instance, the United States would be forced to plan for a wider military campaign, to include troops on the ground, either to support and shore up a friendly resistance or to counter the likelihood of a wider regional war. Escalation control would still remain a concern in this contingency, but at least the NCA would have a means of responding to Iranian intimidation and of taking the initiative when it came time for crisis management.

Implementing a strike option against Iran is more than likely going to result in Iranian retaliation, probably using terrorism as a tool in each of the three cases under study. In the instance of an aggressive Iran, where nuclear weapons are viewed as important to the state's foreign policy aspirations, and amid efforts to develop a more diversified nuclear force posture, Iran could also consider nuclear retaliation against the United States directly, either through the detonation of a dirty bomb on U.S. soil or by means of a ship-borne (either a container or military platform) attack using a nuclear-tipped cruise missile or a tactical ballistic missile. A more likely option would be for Iran to escalate to target regional capitals (Riyadh and/or Tel Aviv) and to activate Hezbollah to strike Israel. Focused terrorist attacks would also likely emerge as an important aspect of an Iranian response to a U.S. attack against Iran's nuclear forces, as would small-boat swarm attacks against shipping in the Persian Gulf region. In this context, it is also very likely that Iran would attempt to retaliate by closing down traffic in the Persian Gulf, though in doing so, it would face the overwhelming naval power of the United States. However, depending on the particular scenario, the U.S. Navy may find itself in the unenviable position of having to fight its way back into the Persian Gulf, in the event that in preparing for the attacks it had repositioned American naval forces outside of the Gulf to avoid Iranian small boat and underwater attacks.

In any confrontation with Iran, the United States should not fail to appreciate that while Iran may have relatively less hard power in the region than does the United States, it has immense soft power, and that influence facilitates its options vis à vis the utilization of Shia minorities in the region, the leveraging of anti-U.S. and anti-Israeli sentiments on the "Arab street," and the possible use of proxy organizations, including Hezbollah, Hamas, and even (when it suits their purposes) the Taliban. Given this reality, U.S. officials involved in Iranian contingency planning need to devote much greater consideration to IW planning, as is discussed in Chapter 6, including Iran's potential to use proxies to strike at soft and asymmetric targets and, once it has crossed the nuclear threshold, its willingness to transfer WMD components and systems to state and non-state allies (Syria and Hezbollah), depending on the perceived direness of the situation.¹¹³

113 As noted earlier, in July 2007, SOCOM released a version of its draft joint operating document for irregular warfare. Considered version 1, this document focuses on people and not platforms, but in so doing, it downplays the role of nuclear weapons in attaining operational or strategic goals in IW settings. This document needs to incorporate the overall mission of combating WMD more thoroughly, or at least to relate IW planning to that of deterrence and countering WMD.

These challenges need to be addressed more systematically, if not by the United States, then by NATO, even as there is growing skepticism about U.S. operations under alliance frameworks. Alliance operations in Afghanistan have soured many in the U.S. military on NATO, and the inability to get Alliance members to meet existing defense spending commitments does not auger well for Congressional support for future Alliance operations. Still, two questions remain: what would a world without NATO look like, and how might NATO's unraveling affect America's capacity to operate overseas? It is not within the purview of this report to assess the pluses and minuses of the NATO framework; it is, however, within the scope of this assessment to consider the impact of Iran's nuclear development on allied/coalition partner reassurance and for the prospect of onward proliferation.

Allied/Coalition Partner Reassurance in the Face of Iranian Proliferation

Over the last decade, U.S. thinking about deterrence has evolved, in part as a result of the non-state actor threat and in part because of the need to dissuade potential adversaries who may regard the world very differently than the United States does. Deterring an adversary from attacking the United States and/or its vital interests has focused on the punitive threat of overwhelming force against a state-centric enemy. While deterring an enemy attack remains a central focus of U.S. planning, other considerations are perceived to be just as important, including the need to dissuade leaderships from deciding to proliferate and to reassure anxious allies and coalition partners. In the past, the extended deterrence concept has played a key role in reinforcing U.S. alliance partnerships. In today's world, the extended deterrence notion has the potential to play an even greater role in U.S. non- and counter-proliferation strategy, especially in the context of providing credible security guarantees to friends and allies who otherwise may seek to develop their own nuclear weapons for defensive purposes. Extended deterrence considerations will remain at the center of U.S. reassurance strategies, and they will be central to U.S. and allied planning for escalation control in contingencies involving Iran, both in the near and longer term.

If Iran crosses the nuclear threshold, its actions could well become a catalyst for wider regional and global proliferation. It probably will not matter what form an Iranian proliferation might take, or if Iran's leadership justifies crossing the nuclear threshold on the basis of defensive considerations, as posited in our first model. Nations such as Egypt, Syria, Turkey, and Saudi Arabia may conclude that the best way of countering the political power of a nuclear-armed Iran is to develop or acquire a minimum deterrent capability, probably missile based, of their own. Even if the A.Q. Kahn network has been disabled, elements of it continue to operate, and through them or via state-brokered weapons or component sales, states may calculate that their power and prestige depend on nuclear technologies, and in some cases, actual weapons deployments. This is counter to what the Iranians have in mind, as reflected in Ahmadinejad's 2007 speech in Dubai where he essentially told his Arab neighbors that once the Americans have been expelled from Iraq, the UAE can rely on Iran to provide a nuclear umbrella for protection against external threats.¹¹⁴ If anything, Ahmadinejad's remarks indicate an ethnocentric

114 In May 2007, President Mahmoud Ahmadinejad made the first visit to the United Arab Emirates by an Iranian head of state since 1971. During his visit, Ahmadinejad delivered a harsh speech to a rally of Iranian expatriates living in Dubai, in

worldview in which Iran's importance overshadows all other considerations. This view obscures tensions between Iran and its Persian Gulf neighbors, allowing the regime in Tehran to believe that it is the United States and not Iran that is regarded as the imperial power in the region. Numerous factors reinforce Iranian self-confidence on this score: the overwhelming unpopularity on the "Arab street" of America's interventions in Iraq and Afghanistan; the rising price of oil and Iran's vast oil reserves which are so important to the global economy; problems in Lebanon with the ascendance of Hezbollah; the glacial pace of the Palestinian peace process; growing problems between Russia and the United States, whose collaboration on sanctions is the key to developing broad support for sanctions against Iran;¹¹⁵ and, finally, the emergence of strong anti-American trends throughout the region and the world.¹¹⁶

Even without testing or demonstrating in tangible fashion an operational weapons capability, Iran already is casting a nuclear weapons shadow over the Persian Gulf region and the Arab world, based on its presumed and potential capacity, and regional states across the Gulf area are beginning to deal with this new state of affairs. The issue for them, and indeed for the United States, is to organize and develop capabilities to deal with this new reality, and, more importantly, to ensure that they are not "self-deterred" when it comes to dealing with future Iranian initiatives. The U.S. Gulf Security Dialogue remains the focus of American operational planning in this regard, although this initiative is based on the assumption that America's Gulf allies can bridge their historic differences and work together in a multilateral framework. Of the Persian Gulf states, Saudi Arabia is the one most likely to react to Iran's proliferation, perhaps by trying to acquire its own nuclear capability, if it no longer feels confident about U.S. willingness to protect American oil interests in the kingdom. This is why, for example, the former Saudi ambassador to the United States was dispatched to Washington in the fall of 2007 to gauge the potential for getting a formal treaty commitment (like NATO's Article 5) from the United

which he declared, "We are telling you [the United States] to leave the region." The message asking the United States to leave the Middle East was notable since Ahmadinejad's visit followed by only days a visit by U.S. Vice President Dick Cheney, who sought to strengthen ties with U.S. regional allies. Ahmadinejad countered the U.S. strategy, saying, "The nations of the region can no longer take you forcing yourself on them. The nations of the region know better how to create peace and security." The Iranian president also warned against a possible U.S. military strike against Iran, cautioning that, "(t)hey [the United States] cannot strike Iran. The Iranian people are able to retaliate. They are able to protect and defend themselves well." Jim Krane, "Iranian President Holds Anti-U.S. Rally in Dubai," Associated Press, May 13, 2007; and Lydia Georgi, "Ahmadinejad Warns U.S. Against Military Action," *Agence France Presse*, May 14, 2007.

115 According to former U.S. national security advisor Dr. Zbigniew Brzezinski, "Russia is an increasingly revisionist state, more and more openly positioning itself to attempt at least a partial reversal of the geo-political losses it suffered in the early 1990s. In that context, the outbreak of a political conflict in the Persian Gulf may not be viewed by all Moscow strategists as a one-sided evil. The dramatic spike in oil prices would harm China and America while unleashing a further wave of anti-American hostility... The stakes of a serious crisis in the Persian Gulf are thus far-reaching. They could cause a more dramatic shift in the global distribution of power than even the one that occurred after the Cold War ended." Zbigniew Brzezinski, "A Partner for dealing with Iran?," *Washington Post*, November 30, 2007.

116 In March 2008, University of Maryland professor and holder of the Anwar Sadat Chair for Peace and Development, Shibley Telhami conducted his annual Arab public opinion survey (with Zogby International). This year, he found that in countries surveyed (Egypt, Jordan, Lebanon, Morocco, Saudi Arabia, and the UAE), only 4 percent of those polled held a "favorable" view of the United States. Moreover, between 8 percent and 11 percent held a "somewhat favorable" view, while between 57 percent and 64 percent held a "very unfavorable" view. Between 19 percent and 21 percent held a "somewhat unfavorable" view of the United States.

States.¹¹⁷ While controversial to be sure, such a proposal could strengthen U.S. counter-proliferation efforts, as it might reassure jittery Persian Gulf allies enough to put off considering proliferation as an option. However, it would be difficult to gain support for this type of commitment for countries whose human rights records are at best suspect, and the effort would attract great political controversy. Balancing these concerns against the need to prevent a cascade of countries from following Iran's nuclear example will be a complex and difficult calculus, the outcome of which will depend on the shape and nature of the Iranian breakout and the way in which Iran chooses to deal with the consequences of its actions.

At a minimum, at the strategic level, it will probably be necessary to update the Nixon and Carter Doctrines with a new declaratory policy aimed at containing Iran and assuring allies, to blunt the psychological edge of Iran's nuclear programs and aspirations. The Nixon Doctrine, also known as the Guam Doctrine, was enunciated by former U.S. president Richard Nixon on July 25, 1969. As articulated by President Nixon, the United States was prepared to honor its treaty commitments and to provide a deterrence shield over nations allied with the United States or considered to be important to U.S. vital interests. At the same time, however, the president also made it clear that the United States expected its friends and allies to assume the primary responsibility for their own defense, with material and training support from the United States. In arguing for "the pursuit of peace through partnership," the Nixon Doctrine helped set the stage for the Carter Doctrine, which was announced on January 23, 1980, as part of President Jimmy Carter's last State of the Union address. While the Nixon Doctrine was applied, during the Nixon administration, to the Persian Gulf region, with military aid going to the Shah's Iran and to Saudi Arabia, the Carter Doctrine, coming after the Soviet invasion of Afghanistan, explicitly stated that the United States would use military force if necessary to protect its interests in the Persian Gulf region.¹¹⁸ During the Reagan administration, President Ronald Reagan proclaimed, in October 1981, that the United States was also prepared to intervene to protect Saudi Arabia, in the event that the Iran-Iraq War threatened Saudi interests.¹¹⁹ From this very specific reference to Saudi Arabia, the intellectual and policy basis was established for Operation *Desert Storm*, and even, arguably, for Operation *Iraqi Freedom* in 2003, although in recent years, and especially after September 11, 2001, the U.S.-Saudi relationship has been plagued by a lack of mutual trust. This has created a crisis of confidence¹²⁰ in what had been a strong partnership, and this, in turn, has pushed the Saudis to consider other options, including reconciliation with Tehran. Toward that

117 This idea was also the subject of considerable discussion during an IFPA trip to the region in late October 2007. For Saudi Arabia and possibly other GCC states, the idea would be to try to get a U.S. commitment in the context of the Gulf Security Dialogue, and if that is not feasible, then to broach the subject with the United States on a bilateral basis.

118 The precise wording, found in President Carter's 1980 State of the Union address is: "Let our position be absolutely clear: An attempt by any outside force to gain control of the Persian Gulf region will be regarded as an assault on the vital interests of the United States of America, and such an assault will be repelled by any means necessary, including military force."

119 Commonly known as the "Reagan Corollary," President Reagan proclaimed, in October 1981, that, "We cannot permit Saudi Arabia to become another Iran."

120 Joshua Teitelbaum, (and edited by Bruce Maddy-Weitzman), "Has the Shiite Crescent Disappeared? Saudi Arabia and the U.S. Alliance against Iran," Tel Aviv Notes, An update on Middle Eastern Developments by the Moshe Dayan Center, January 26, 2007.

end, the Saudis did not object publicly to Iranian President Ahmadinejad's participation in the 2007 GCC summit in Doha, and they were willing hosts of his pilgrimage to Mecca in December 2007. From the Saudi perspective, the United States has been weakened by Iraq, while Iran is a neighbor in the Gulf, "which is a small lake."

With the growing rift between U.S. and Saudi security perspectives, unless the United States can put sufficient meat on the U.S. Gulf Security Dialogue's bones, the Gulf Arabs will seek other options, including possibly their own weapons capability. As described by the late Dr. Peter Rodman, the former U.S. official tasked by the Department of Defense with dealing with the Gulf Security Dialogue, the content of our current declaratory policy involves: (1) a political commitment to the Gulf states, not a treaty commitment; (2) a statement that acquisition of nuclear weapons by a hostile power is dangerous; (3) the understanding that the United States is prepared to offer a missile shield to protect friends and coalition partners; and (4) no mention of nuclear weapons retaliation should a coalition partner be attacked by an Iranian nuclear weapon. From his perspective, and indeed, from the vantage point of the future of U.S. deterrence planning, the United States must be very explicit about its interests, intentions, and capabilities for protecting non-treaty coalition partners in the face of Iranian nuclear intimidation. Failure to do so might encourage the very proliferation that U.S. policy hopes to contain and/or open a door to GCC accommodation of Iranian desires, notwithstanding the apparent contempt with which the current regime in Tehran has displayed toward its Arab neighbors.

Assuring and Dissuading Israel in the Face of an Iranian Nuclear Breakout

Assuring allies and coalition partners of America's interest in their security remains a cornerstone of U.S. non-proliferation policy and of U.S. efforts to mitigate the consequences of an Iranian nuclear strike, should that eventuality ever come to pass. Central to American efforts in this regard is the establishment of the U.S. Gulf Security Dialogue and security cooperation to build GCC partner capacities in the areas of missile defense and consequence management planning, and with respect to intelligence sharing and niche-area capabilities. Just as important, however, is maintaining a tight defense relationship with Israel, not just because we face a common threat from Iran's nuclear development, but because Israel is a democracy whose survival is deemed an important U.S. interest. To be sure, Israel has proven to be a difficult partner at times, and there is no doubt that on some issues U.S. and Israeli interests are not symmetrical. Nevertheless, Israel is an unacknowledged nuclear power in the Middle East, and a democracy, and a state that despite its troubled history and contested establishment, cannot be allowed to be "wiped off of the face of the earth," as Iran's president so crudely has suggested.

Israel is assessing its options in the face of Iran's nuclear developments. Some options will require American support, others will not. With Iran's nuclear proliferation heralding a new deterrence dynamic in the Middle East, the Israelis have already determined the need to diversify their nuclear holdings and to create and deploy a survivable second-strike force. Despite an official policy of ambiguity sur-

rounding Israel's nuclear programs,¹²¹ no one doubts that Israeli officials are embarking on a strategic modernization program to augment and improve their second-strike capability and to diversify their options for retaliation against an Iranian first-strike attack. In concrete terms, this means an ability to punish Iran and to deny the regime access to specific military options. Notable in this regard are Israeli efforts to modernize its submarine fleet,¹²² probably preparing the way for its use to deploy submarine-launched ballistic missiles (SLBMs) in order to increase the survivability of its deterrent force. There are also indications that Israel is working on electro-magnetic weapons and on updating the Begin Doctrine, which provided the strategic context for Israel's preemptive action against Iraq in 1981.

However, reliance upon military power to force Iran to give up its nuclear weapons programs is fraught with difficulties, the main problem being the lack of precise intelligence about where all of Iran's WMD infrastructure is located or in some cases even the extent of Iran's nuclear program. As with America's experience in Iraq, inadequate, unreliable human intelligence assets, coupled with active Iranian programs of deception and covert operations, have made it virtually impossible for outsiders to understand the full scope of Iranian nuclear programs. Also, ever mindful of Israel's 1981 preemptive strike against Iraq's nuclear power plant at Osirak, Iranian authorities have deliberately dispersed the elements of Iran's nuclear programs and have taken out additional insurance by pursuing both the uranium enrichment and plutonium reprocessing paths toward nuclear power, creating redundant capabilities and using duplicative infrastructure which, in many cases, houses as well other legitimate technology and manufacturing processes. In this way, the Iranians, and others who may aspire to nuclear weapons possession, are leveraging dual-use technologies, capabilities, and development processes to deceive and cover up illegal, covert activities. This is why, as discussed in the Introduction, renewed efforts to update the NATO-era COCOM framework for assessing technology transfers are warranted and an important priority in the post-9/11 world.¹²³

The second approach being pursued by Israel involves covert measures. A survivable Israeli second-strike force may be enough to contain and deter a direct Iranian attack against Israel under circum-

121 This policy was recently challenged by former U.S. President Carter's exposure of Israel's nuclear holdings. In response to a question about how to deal with Iran's nuclear threat, Carter said, "The U.S. has more than 12,000 nuclear weapons, the Soviet Union has about the same, Great Britain and France have several hundred, and Israel has 150 or more." Reuters, "Israel Has '150 or More' Nuclear Weapons, Carter says," *Boston Globe*, May 27, 2008.

122 Israel intends to purchase two more *Dolphin*-class submarines from Germany. There is also considerable Israeli interest in tying together *Arrow* deployments with the THAAD architecture, and in integrating the Israeli littoral combat ship (LCS)—which is likely to be purchased from the United States, in conjunction with a U.S. Navy buy—with the American link (11/16/32) technologies and *Aegis* detection sensors and networks.

123 The Coordinating Committee for Multilateral Export Controls, commonly known as COCOM, was established in 1947 by NATO (with the exception of Iceland and Spain) and Japan, and it provided a basis for regulating exports to Eastern-bloc nations until its disestablishment in 1994, with the dissolution of the Soviet empire. In 1996, the so-called Wassenaar Arrangement on Export Controls and Dual-Use Goods was created and signed by some thirty-three nations. Its creation was viewed as the post-Cold War equivalent of COCOM, although disagreements about language and interpretation of its provisions have undermined its effectiveness. Moreover, the problem of constraining the applications of so-called dual-use technologies remains a considerable challenge, complicating efforts to reform the COCOM regime and to control the spread of nuclear weapons-related technologies.

stances in which Iran really aspires only to build a defensive deterrent.¹²⁴ However, an aggressive Iran that is emboldened by its possession of nuclear weapons might not be so readily contained and deterred from at least the prospect of using proxy forces to terrorize Israel. Based on interviews with Israeli officials, it is clear that numerous covert options are under consideration, including the targeting of key Iranian scientists, information operations (IO) against Iran's power grid, and other efforts that would have the effect of compromising Iranian confidence in its weapons development programs. It is in this context, too, that Israeli officials are interested in developing an enhanced PSI framework in which it would collaborate with the United States, Turkey, and other partners in disrupting the delivery of nuclear weapons-related materials and components for their delivery systems. Iran's nuclear programs are alleged to be highly susceptible to sabotage, and there are options in this regard that are being considered today, before Iran actually crosses the nuclear threshold and/or weaponizes its nuclear capability.

The third option that Israel is pursuing is missile defenses. Through cooperative U.S.-Israeli programs, Israel has developed and deployed the *Arrow* and *Patriot* anti-tactical ballistic missile (ATBM) systems. Now, Israeli officials would like to acquire more advanced and layered capabilities to improve the chances of intercepting enemy ballistic and/or cruise missile attacks. The higher-altitude, theater-oriented THAAD capability is at the top of the Israeli shopping list, although other, more exotic missile defense solutions are also being pursued in Israel and with the United States. Israel is also seeking to expand its missile defense cooperation with partner countries, such as Turkey, and to participate in the U.S. Navy's *Aegis* architecture, which is one reason why the Israeli navy has agreed to purchase the littoral combat ship (LCS). Optimally, Israel would like to join NATO, but as this is not a realistic political option—indeed, most NATO members would oppose Israel's membership—Israel's leadership, at a minimum, is seeking to link its defense capabilities to the emerging U.S. ground-based missile defense architecture in Europe.

Missile Defenses and Consequence Management Considerations

Until the Bush administration's Nuclear Posture Review, U.S. strategic analysts widely assumed that the range of possible nuclear threats to U.S. security interests could be deterred using a sub-set of high-end American strategic nuclear forces. The worse-case threat posed by Russia's nuclear deployments was regarded as sufficient for providing a baseline for planning for other, less pressing contingencies, including those emanating from China's rising strategic power and from North Korea's nascent nuclear force. Because China's strategic force posture requires that the United States deploy an array of capabilities, including survivable second-strike forces and so-called prompt-response capabilities, the strategic force structure that it had developed to deter the former Soviet Union and to reassure U.S. allies was generally seen as having an intrinsic capacity to deter China's greatly inferior strategic forces. However, when considering a smaller adversary force and one oriented to support a deliberately aggressive foreign policy or a radical (religious) cause, the threat of a massive U.S. retaliatory

124 Israeli historian and strategist Martin Van Crefeld has said (in a BBC interview, broadcast on July 8, 2008, after the Iranian's test-fired their *Shehab* missiles) that, "Israel has more than enough capacity to deter Iran."

strike might not be sufficient to deter a determined adversary who might believe that it had little to lose and much to gain from either striking first with nuclear weapons or escalating to nuclear use in the course of a conventional attack that was not gaining any ground. While far from certain, it is still quite conceivable that a “use them or lose them” mindset might influence Iranian calculations at some point, and depending on the perceived stakes at risk, considerations relating to collateral damage might be less important than those relating to regime survival.

Clearly, against a nuclear-armed Iran, U.S. defense and deterrence planning must integrate missile defense concepts into a broader deterrence framework. Mutual assured destruction (MAD) must be replaced by a deterrence posture that puts greater emphasis on prevention, dissuasion, crisis management, and damage limitation. Missile defenses—anti-cruise and ballistic missile capabilities—and passive techniques, including consequence management, “render-safe” technologies, and Chemical-Biological Incident Response Force (CBIRF) units, have major roles to play in this regard, including in shaping the level of confidence a nuclear-armed adversary may have in its ability to attain desired outcomes from either threatening or actually using nuclear weapons.

For Israel, the GCC, NATO, and the United States, missile defenses have emerged as an important element of twenty-first century deterrence planning, especially with respect to Iran’s nuclear breakout in either a defensive Iran or an aggressive Iran. They also have a role to play in the unstable-Iran model, but in this case, so too would consequence management capabilities, especially those directed at recovery after a “dirty” bomb explosion, the detonation of a small-yield nuclear device (such as a suitcase bomb), or a missile strike against Europe, Israel, or the United States. In addition to declaratory policy and strategic communications, missile defense development, as identified throughout this study, remains an important operational, political, and psychological option for influencing the Iranian nuclear debate and Iran’s weapons operationalization. Operationally, missile defense technologies have the important potential to influence enemy attack calculations, and they have even greater potential to degrade the effectiveness of missile-based attacks. Politically, they can contribute to crisis management and enhance the potential for escalation control in a regional scenario. Psychologically, by their deployment, missile defenses may influence enemy thinking about offensive operations and the end-game with respect to nuclear escalation and the ultimate destruction of Persian territory, peoples, and culture. Even in IW settings, the deployment of missile defenses, either on board U.S. Navy *Aegis* platforms in Persian Gulf or Mediterranean waters or more advanced capabilities, could profoundly affect the deterrence dynamics between the United States and Iran.

Washington will also have to set priorities and synchronize policies in a way that has not been done for quite some time—perhaps not since Cold War days, when containment provided the strategic framework for U.S. and allied policies. If it can do so while also setting in place stronger deterrent and defensive options within the Persian Gulf region, it will significantly enhance the prospects for denying Iran the opportunity to achieve regional predominance via the acquisition of a nuclear weapons capability. If it can not, then the more worrisome scenarios involving a future nuclear Iran outlined in this report are more likely to materialize, bringing with them the requirement for an even more robust

and diverse set of diplomatic and military initiatives on the part of the United States and its regional allies and partner states.

However Washington ultimately chooses to deal with Iran's proliferation, it must realize that America's behavior will have global and regional implications, beyond Iran. Even as the United States has placed much of its credibility on the line in dealing with North Korea's nuclear proliferation by moving "red-lines" and possibly rewarding bad behavior,¹²⁵ North Korea's breakout from the NPT might eventually be seen as a far less significant development in comparison to the regional and global consequences of a future Iranian nuclear breakout. Iran could emerge as *the* test case for breakout from the NPT, and the way in which the U.S. government deals with Iran will have far-reaching implications. As noted already, there is a danger of nuclear cascading, especially among Turkey, Egypt, and Saudi Arabia in the Near East, and among Taiwan, Japan, and the ROK in Northeast Asia. In this context, regional actions will have global consequences, and while we tend to view Iran as a bilateral issue, Iran views its actions as part of a larger tapestry designed to promote Iranian power and influence on the global stage. With this in mind, the need to re-energize the Middle East peace process seems central to dealing with Iran. So, too, is the development of a strategic framework for the greater Middle East/Persian Gulf region—one that reassures allies and coalition partners and that takes seriously the task of building partner military capacity, especially in niche areas. The U.S. Gulf Security Initiative is a good first start, but more needs to be done, especially to persuade the Persian Gulf states to work together and with Jordan and Egypt.

Chapter 6: Irregular Warfare and Dealing with an Unstable Iran

Iran's military modernization and support for proxy forces give it a growing ability to wage irregular warfare against the United States, as well as against its regional allies and partners. As described in the Joint Staff's operational concept for irregular warfare, IW is directed at populations and uses military and non-military tools. Direct action, with its use of military force, is only one avenue for waging IW. Typically, proponents of IW emphasize building trust and confidence among local populations as a means of influencing and shaping perceptions of the United States and of the strategic choices that countries may be facing. When military operations are necessary to eradicate insurgents, non-linear,

125 In February 2007, the Bush administration signed, with its partners, an agreement with North Korea mandating, it was said, the dismantlement of North Korea's nuclear weapons program. Even after North Korea's failure to meet the agreement's first deadline requiring a transparent declaration of its nuclear programs and holdings, the Bush administration held to the outlines of the Six-Party framework agreement and moved forward in late 2007 to begin the process of removing North Korea from the State Department's terrorist watch list and to normalize relations. While the jury is still out on North Korean compliance and its intentions, there were worrisome indications during the summer of 2007 that the regime in Pyongyang may have tried to transfer either fissile material or missile technologies to Syria or Iran. Israel subsequently chose to strike a "facility in Syria," presumably to eliminate whatever may have been shipped from Pyongyang. In August 2008, North Korea missed its first chance of being removed from the State Department's terror watch list because of "incomplete" information about its nuclear programs and its unwillingness to allow outside verification of its nuclear declaration, turned over in June as part of an agreement reached at the Six-Party Talks. Even as North Korea physically destroyed a cooling tower at its Yongbyon facility, in compliance with the agreement reached at the Six-Party Talks, it still has failed to answer specific questions about suspected nuclear activities, including how many weapons it has and the details of its involvement with Syria.

innovative tactics are favored, as America's adversaries increasingly adopt asymmetric approaches designed to strike at weakly defended and oftentimes unlikely targets to achieve surprise and to erode public support for resistance.

IW seeks to break the will of an enemy, while also striving to influence perceptions and political activity. The nature of IW is that it is protracted and involves all elements of power, including the ballot box, as Hezbollah has done in Lebanon. A nuclear Iran, under all three of the models posited here, can be expected to practice irregular warfare, as Tehran is "adept at intermingling aggressive operations and diplomacy."¹²⁶ Iran is combining asymmetric operations, the use of proxies to strike at soft targets, and covert financial and political campaigns to enhance its influence and undermine that of the United States in key theaters in the Middle East. As this is a strategy to maximize Iran's opportunities and reduce its risks, covert activities and reliance on multiple allies to promote Tehran's agenda are the preferred means of engaging the United States.

Beyond asymmetric considerations, Iran is prepared to use Hezbollah to conduct asymmetric operations against Israel, U.S. coalition partners in the Arab world, American forward-based forces, or even against the United States itself. For example, Hezbollah has a presence in the United States, and an even larger one in South America, particularly in the tri-border region where Brazil, Uruguay, and Argentina converge. While much of Hezbollah's activity in this region has been focused on fund-raising, money laundering, and both drug and human trafficking (at times for Hamas as well as for itself), U.S. Southern Command officials say that there are indications that the organization is building an operational presence in the area, including terrorist training camps, though this has not been substantiated.¹²⁷ In 1994, Hezbollah was identified as being behind the bombing of a Jewish community center in Argentina, and there are fears that Hezbollah or other terrorists groups could infiltrate the southern border of the United States, booking passage in Brazil and moving through Mexico on tourist visas. Hezbollah has prospered in the tri-border region because of the sizable community of Lebanese (and, to a lesser extent, Syrian) immigrants who have settled there, many through forced migration after the 1948 Arab-Israeli war and after 1985, during the Lebanese civil war. A younger generation of disaffected, radicalized Arab immigrants in South America is now actively being recruited by Hezbollah and, according to reports even al-Qaeda, to undertake missions against the United States. (To be sure, Columbia's Revolutionary Armed Forces (FARC) and Peru's Shining Path terrorist groups, as well as drug smugglers, also operate in this region, and according to some this is the reason that Hezbollah, Hamas, and al-Qaeda may have landed here.)¹²⁸ Hezbollah also maintains support and an infrastructure in the

126 David Ignatius, "Spy Games in Iran," *Washington Post*, July 2, 2008.

127 According to J. Cofer Black, a former State Department official and CIA operative, during operation *Enduring Freedom* in Afghanistan, U.S. forces found literature about the tri-border area in the caves used by al-Qaeda. Some analysts continue to contend that al-Qaeda is using this area to raise money to procure arms. See, for example, Rachael Ehrenfeld, *Funding Evil: How Terrorism is Funded and Financed* (Santa Monica, CA: Bonus Books, Inc., 2005).

128 Columbia's FARC may be in the throes of defeat, after the successful Hostage rescue of French-Columbian human rights activist, Ingrid Betancourt, three American aid workers, and 11 Colombian police and soldiers on July 2, 2008. The liberation of the 15 hostages was a Colombian special forces operation, with some American support, which was built up and established

United States, and, depending on the perceived stakes, Iran could use those Hezbollah assets to strike directly at the heart of the United States, thereby complicating traditional deterrence planning paradigms and placing the onus for retaliation in a crisis or conflict contingency on the United States itself.

Deterring an unstable Iran will be much more difficult than dealing with a state-centric Iran, as postulated in the defensive-Iran and aggressive-Iran models, simply because we do have at least some knowledge about Iranian leadership and government structures. The problem in this regard, however, is that what deters a U.S. or Western leadership may not deter an Iranian leadership, especially one that adheres to extremist views. Even so, we can assume that Iran's leaders, for the most part, would not recklessly risk the destruction of their country; the concern is that they may fail to understand U.S. "red-lines" or have in mind an exit strategy (war termination plan) to de-escalate in a crisis situation. This is where, at some point in the future, and depending on the nature of the Iranian regime, consideration of threat reduction initiatives, similar to those put into place between the United States and the former Soviet Union and between India and Pakistan, could be useful and important to pursue, if and when the United States and Iran decide to engage in confidence-building and stability discussions.¹²⁹ In the meantime, however, the problem of

Considerations Affecting Iranian Military Planning

- Iran-Iraq war formative experience for this generation of leaders
 - U.S. tanker operations
 - Saddam's chemical weapons use
- (Shi'a) apocalyptic vision is an element of strategic thinking
 - "Managed chaos"
 - "Slow motion" escalation
- Proxy forces and terrorist tactics
 - EFPs to Iraq and Afghanistan
 - Technology transfers (e.g., C-802s to Hezbollah)
 - Non-attribution and low-threshold attacks
- Maintain (at all costs) Iran's territorial integrity
 - Strategic deterrence
 - C⁴ ISR redundancy (to overcome "decapitation")
 - Create tribal outreach
- Capacity to influence oil exports and traffic through the Strait of Hormuz
 - U.S. may have to fight its way into Persian Gulf
 - UAE, Qatar, and Kuwait oil/gas exports

under the U.S.-funded *Plan Colombia*. Earlier, on March 1, 2008, a Colombian military strike killed the FARC's second-in-command, Paul Reyes, and the raid on his camp yielded a trove of computer information about FARC activities, funding, and safe havens. In mid-March, another member of the FARC leadership, Iván Rios was killed, and on March 27th, one of the organization's founders, Mauel Marlulanda Vélez died, apparently of natural causes. The Reyes raid also yielded evidence of Venezuelan President Hugo Chávez's involvement with the FARC, and once that information was made public, Chávez was forced to "denounce" the terrorist organization, drying up an important source of FARC funding.

129 The Nunn-Lugar Cooperative Threat Reduction (CTR) program began in 1991 as the result of legislation sponsored by former Senator Sam Nunn of Georgia and Senator Richard Lugar from Indiana. Initially, the legislation directing this program was centered on Russia and was designed to help Russia meet its START obligations to reduce its strategic nuclear weapons inventory. Over time, however, the emphasis of the program changed to focus on securing Russian fissile materials from

detering a nuclear Iran depends on Washington's ability to convey to the leadership in Tehran the capacity and willingness of the United States to protect its vital interests in a crisis, and if necessary, to use military force to secure those interests. With this in mind, and against a rogue state and/or a non-state actor, human-terrain mapping considerations and an understanding of what an adversary values¹³⁰ emerge as critical elements of modern-day defense and deterrence planning. It is only on this basis that the United States can respond more effectively to emerging security challenges and begin to operationalize a deterrence planning framework, tailored to specific twenty-first century threats, including that of a nuclear Iran.

In the case of an unstable Iran, the stakes for nuclear use might be higher if leadership elements believed themselves to be in a "lose them or use them" situation. Alternatively, an unstable Iran would be more likely to transfer weapons systems or components than would a defensive or aggressive Iran, especially if competing regime elements stood to gain from doing so. Operational control of Iran's nuclear weapons is thought to reside in the IRGC. The IRGC exerts enormous influence over the Iranian government and has extensive economic interests throughout the country and abroad. Its Qods Force has been instrumental in training Hezbollah terrorists and it has facilitated the Shia insurgency in Iraq. While the Arab-Persian enmity continues to influence Iran's regional relationships, Qods Force elements are known to be working with Hamas. Furthermore, despite conventional wisdom that says that Iranian Shias would never collaborate with Sunni groups, this in fact has been the case, raising the prospect that in a contingency in which rival factions were vying for power in Iran, IRGC elements could seek to move weapons out of Iran, or, in the event of a regional war, detonate a nuclear device either to escalate a conflict deliberately or to provoke a reaction from the United States or Israel. In the latter scenario, radical Islamists may hope to provoke Israel or the United States into attacking Iran, as a means of unifying domestic Iranian opinion in support of their cause or certain leadership elements.

To be sure, this is an unlikely contingency, but it does represent one possibility, if we accept Noah Feldman's thesis, described earlier, that Orthodox Shia ideology might support the notion of nuclear

potential terrorist threats and on initiatives for ensuring acceptable employment for Russian nuclear scientists, many of whom had suddenly found themselves disenfranchised and without salaries. Eventually, CTR programs were initiated in the former Soviet states of Kazakhstan, Belarus, and Ukraine, and today there is debate centered on expanding Nunn-Lugar initiatives beyond the former Soviet Union to other geographic areas, including in relation to the Six-Party Talks and North Korea's hoped for nuclear dismantlement. In 2003, the Bush administration announced that it had extended the scope of CTR activities to include support to the global war on terrorism (GWOT), and in 2004, the Nunn-Lugar Expansion Act was passed by Congress, obligating funds to "assist the United States in resolution of critical emerging proliferation threats and to permit the United States to take advantage of opportunities to achieve long-standing proliferation goals." The expansion of Nunn-Lugar has proved to be somewhat controversial. Debate exists over CTR's globalization, at a time when so much still needs to be done in Russia. That said, there is support for using some Nunn-Lugar funding to support projects limited in scope or those that are central to achieving the de-nuclearization of former adversaries, as in the case of Libya, and perhaps in the current context of dealing with North Korea's dismantlement.

130 Human-terrain mapping has emerged as an integral aspect of counter-insurgency planning. Essentially, it deals with the identification of key players and their societal relationships. Understanding these connections is central to forging alliances and developing actionable intelligence.

war to further fundamentalist principles.¹³¹ The idea that defensive jihad requires extreme measures was also suggested by Mohsen Garavian, a cleric and disciple of Ayatollah Mesbah-Yazdi, who remains closely associated with President Ahmadinejad.¹³² Nuclear weapons are the ultimate in asymmetric warfare, and their use on behalf of proxy groups—Hezbollah or perhaps even Hamas, or in extremis al-Qaeda—remains an intriguing prospect that cannot be rejected out of hand when considering “fourth generation” warfare.¹³³ Terrorists, after all, would not need nuclear-tipped missiles to alter the balance of power and to incite terror in indigenous populations. They could use more mundane delivery means, such as via shipping containers, or even radioactive improvised nuclear devices (INDs). The psychological impact of nuclear weapons use, much more than the destructive potential that a dirty bomb or small nuclear weapon might yield, would result in denial or disruption of essential services and cause chaos among indigenous populations. By exploiting the vulnerabilities of modern-day societies, non-state actors or state-sponsored regime elements could impose tremendous costs with very little effort. It is logical to assume that these same considerations might be at play in a scenario where regime elements in Iran seek to attract support for their cause by demonstrating their prowess outside of Iran. Alternatively, they might also consider using nuclear weapons to somehow force a political solution to the problem of Lebanon’s division or in support of Hamas efforts directed against Israel. In essence, regime elements in an unstable Iran or even an aggressive Iran, can be expected to give much greater consideration to regional initiatives as a means of influencing both external audiences and domestic opinion.

Despite the complexities associated with deterring rogue elements or non-state actors, deterring non-state actors may not be such a long shot if two branches of offensive deterrence—deterrence by punishment and deterrence by denial—are combined into a coherent strategic campaign. The United States is already taking steps in this direction via the activities of SOCOM’s Joint Special Operations Command (JSOC), which is spearheading a number of innovative kinetic operations techniques.¹³⁴ From all

131 Feldman, “Islam, Terror and the Second Nuclear Age.”

132 Sherifa D. Zuhur, “Iran, Iraq, and the United States: The New Triangle’s Impact on Sectarianism and the Nuclear Threat” (Strategic Studies Institute, U.S. Army War College, November 2006), 56.

133 Colonel Thomas X. Hammes, USMC, describes fourth-generation warfare as, the use of “all available networks—political, economic, social, and military—to convince the enemy’s political decision-makers that their strategic goals are either unachievable or too costly for the perceived benefit. It is an evolved form of insurgency. Still rooted in the fundamental precept that superior political will, when properly employed, can defeat greater economic and military power, [fourth-generation warfare] makes use of society’s networks to carry on the fight. Unlike previous generations of warfare [which the author identifies as the rise of the nation-state with its massed armies and direct-fire weapons, second-generation firepower, and third-generation maneuver warfare] it does not attempt to win by defeating the enemy’s military forces. Instead, via the networks, it directly attacks the minds of enemy decision-makers to destroy the enemy’s will. Fourth generation wars are lengthy—measured in decades rather than months or years.” Thomas X. Hammes, *The Sling and the Stone: On War in the 21st Century* (St. Paul, MN: Zenith Press, 2006), 2.

134 Joint Special Operations Command, or JSOC as it is commonly known, is a joint headquarters component of U.S. Special Operations Command (SOCOM), located at Pope Air Force Base and Fort Bragg, North Carolina. Its stated purpose is to “provide a unified command structure for conducting joint special operations and exercises.” However, in actuality, since operations *Enduring Freedom* and *Iraqi Freedom*, it has been deployed forward in Iraq and is engaged in counter-terrorism missions, strike operations, reconnaissance in denied areas, and special intelligence missions. It commands the military’s Special Missions Units (SMUs) and is also charged with implementing counter-WMD terrorist taskings, preparation of the battlefield

accounts, in Iraq, the JSOC has been instrumental in degrading al-Qaeda's network and capabilities, and over the past three years it has been responsible for the capture or attrition of key terrorist targets. It has also developed a comprehensive psychological warfare strategy that has succeeded in putting the onus for civilian deaths on al-Qaeda and that has contributed to the so-called "Anbar Awakening."¹³⁵

JSOC's activities in Iraq illustrate the effectiveness of punitive threats. They also indicate that denial as a strategy is feasible, especially if it creates uncertainty about the adversary's "mission success" or if they have the potential to impose additional costs on the terrorists, their networks, and/or the state sponsors. In the case of Iran's support to Hezbollah, or even in the unlikely event of Iran's disintegration, tailored approaches to combining punitive and denial threats may have a deterrent effect, similar to that of the Israeli practice of targeting individuals (and especially their families) identified to be associated with a particular anti-Israeli activity. In this regard, as well, Azeri nationalism and Baluch opposition are growing in Iran, despite the best efforts of the regime to keep these tribal minorities under control. Tribal unrest may provide another opening for U.S. SOF to leverage differences and to create opposition to the regime in Tehran. Such a strategy could only prove useful, however, if implemented in a way that is sophisticated and does not reveal Washington's heavy hand. The point here is that much more creative thought needs to be given to deterrence in specific contexts, and that the requirements for deterring a nuclear Iran may differ considerably from those needed to deter and mitigate rogue or non-state actor WMD use.

In the run-up to operation *Desert Storm*, U.S. and allied analysts engaged in intensive debate about the relevance of nuclear deterrence to non-nuclear WMD use. Under the presidency of François Mitterrand, the French government issued specific guidance that became the basis for French public policy—namely, that any WMD use against vital French interests would be met by a nuclear response. For its part, the U.S. government of President George Herbert Walker Bush preferred to adopt a posture that was based on maintaining ambiguity regarding the nature of its likely response, believing that such a posture provided a stronger, more convincing deterrent.¹³⁶ While the strategic policies

for Special Operations, and on a case-by-case basis, support for civil authorities. The JSOC was established on December 15, 1980, after the failed hostage rescue mission in Iran.

135 The "Anbar Awakening" refers to the decision by key Sunni tribal leaders in Anbar province in Iraq to distance themselves from al-Qaeda operations in Iraq. In 2005, the Abu Mahals, a tribe that was located near the Syrian border, was being forced across the Syrian border by a rival tribe that was associated with al-Qaeda in Mesopotamia. The Abu Mahals decided to engage with the United States, and broached the idea of forming an alliance to defeat al-Qaeda in this region. For its part, the United States provided arms and training to the Abu Mahals tribe. In the spring of 2006, Sahawah al-Anbar, or Anbar Awakening, was initiated when Sheik Abdul Sattar al-Rishawi and his tribal allies established the Jazeera Council in Ramadi and began to work with coalition forces to pacify and stabilize Ramadi against the al-Qaeda insurgents and foreign fighters. In 2007, the movement was expanded and renamed the Sahawah al-Iraq, or the Iraqi Awakening, a movement to oust and defeat the foreign fighters resident in Salahadin and Diyala provinces. Sheik Abdul Sattar Buzaigh al-Rishawi was killed in a suicide bombing in 2007.

136 In January 1991, before the start of hostilities, U.S. Secretary of State James Baker reflected this policy line when he told the then Iraqi Foreign Minister, Tariq Aziz, "Before we cross to the other side—that is, if the conflict starts, God forbid, and chemical or biological weapons are used against our forces—the American people would demand revenge, and we have the means to implement this," Baghdad INA, January 9, 1991, translated and published by the Foreign Broadcast Information Service (FBIS), under the title, "INA Reports Minutes of Baker-Aziz Meeting," January 14, 1992, FBIS-NES-92-009, 27. During this meeting, held on January 9th in Geneva, Secretary Baker also delivered a private message from President Bush to Saddam

of France and the United States have evolved from *Desert Storm* days, articulating and implementing a response to non-state actor or rogue use of non-nuclear WMD continues to be hotly debated in Washington and in European expert and policy circles. If deterring nuclear and non-nuclear rogue or non-state actor WMD use presents a major challenge for future U.S. strategic and operational planning, it is more than apparent that we must go beyond simplistic punitive threats to embrace a far more sophisticated deterrence framework. Such a framework must tailor deterrence to specific situations and consider a broader array of tools, both kinetic and non-kinetic, including information operations and cyber warfare, nuclear and non-nuclear means, and IW strategies. To the extent that we seek to deter rogue regimes or non-state actors, we need to be able to put at risk those things that those groups value most. For the IRGC, perhaps this would be Iranian territory, or perhaps the high-value military tools that it seeks to use. Hezbollah, on the other hand, may attach greater importance to its leadership and its support networks. In either case, U.S. strategies that employ human-terrain mapping and nodal analysis may have an especially important potential deterrent effect.

Some Concluding Observations and Recommendations for the Way Ahead

Twenty-first century deterrence planning will be far more complex, time consuming, and situation specific than deterrence in the Cold War era. If Iran is on the brink of becoming the world's tenth nuclear power, and we believe that it is, then that suggests the need to understand, to a much greater degree than we do today, Iran's human terrain. Deterring a nuclear Iran will require extensive knowledge of key leaders and institutions and the relationships between them, as well as an intimate understanding of Iranian values, interests, and generational issues. It will also require the capacity to project convincing evidence of the will to act if deterrence fails and the acquisition of capabilities to inflict proportionate, but decisive (i.e., "unacceptable"), damage against Iran, its people, and its cultural and religious icons. In each of the three models posited in this study, missile defenses play a crucial, if uneven, role, and it is our contention that their development should be pursued within a U.S. deterrence construct that emphasizes a spectrum of capabilities from space-oriented to theater ground-based missile defense technologies, and everything in between, especially further development of the Navy's *Aegis* system.

Homeland defense also emerges as a critical aspect of twenty-first century deterrence planning, from the need to protect the United States from enemy ballistic and cruise missiles, to the new and urgent task of considering defenses against nuclear-tipped dirty bombs, INDs, and suitcase bombs smuggled into the country in shipping containers or across illegal border crossings. Because of the potentially devastating consequences of such attacks against the homeland and in key theaters overseas, it will also be important to ramp up U.S. and allied/coalition partner consequence management capabilities, and to leverage in new and different ways general purpose forces (GPFs) for "event mitigation" and "render-safe" missions. The USMC has developed an important capability in this regard in the CBIRF,

Hussein, in which the same deterrence message was conveyed. According to the publication of Bush's own recollections, he wrote: "Let me state, too, that the United States will not tolerate the use of chemical or biological weapons or the destruction of Kuwait's oil fields and installations. The American people would demand the strongest possible response." Cited in George Bush and Brent Scowcroft, *A World Transformed* (New York: Alfred A. Knopf, 1998), 442.

but in recent years it has not received the resources that it should because of more pressing USMC requirements stemming from Iraq and Afghanistan deployments. As the Department of Defense stands up working groups to consider the bin of issues it expects to examine in the next QDR, the one tasked with assessing IW should certainly take another look at the CBIRF as it explores opportunities for expanding general purpose forces to support future IW planning.

Improving U.S. offensive strike capabilities is also central to twenty-first century deterrence planning, and this is true with respect to both nuclear and non-nuclear capabilities, as proposed in the development of the New Strategic Triad and in U.S. Strategic Command's Global Strike construct. RRW modernization is crucial in this regard, as is the streamlining and modernization of the U.S. nuclear weapons (development and production) infrastructure. To argue that RRW will send a hypocritical message to other world powers is disingenuous, as the United States remains the *only nuclear power* that is *not modernizing* its nuclear arsenal, even as it is reducing its numbers unilaterally. For safety and security arguments alone, RRW makes sense, more so as we consider the requirements for "tailorable" deterrence in the post-NPT age (in which proliferators, breaking out of the NPT, open the door to broader cascading). Conventional *Trident* should also be pursued to shore up the U.S. prompt global strike capacity. Both steps are needed to demonstrate U.S. resolve and to telegraph Washington's intention to retaliate convincingly in response to an Iranian nuclear attack upon the continental United States, U.S. forces operating in regional theaters, or against allies and friends, especially Israel.

In this context, too, U.S. deterrence posture would be significantly enhanced were the United States to improve its capacity for nuclear forensics and attribution. While America already supports significant capabilities in this regard, more attention needs to be given to this mission area in funding debates on Capitol Hill, in the context of how such a capability reinforces and strengthens U.S. deterrence planning. This would be particularly important in the case of an unstable-Iran model, where attribution for nuclear weapons use, or a dirty bomb detonation would be necessary to shape the appropriate U.S. response. Indeed, consistent with the Iranian preference for strategic deniability—a policy that has been usefully adopted in the past—the most recent example is the case of Iran's collusion with al-Qaeda in the 1996 bombing of the Khobar towers in Riyadh, Saudi Arabia,¹³⁷ Iranian sponsorship of a nuclear attack would need to be established before the United States crafted a meaningful retaliatory response. Attribution of origin, therefore, facilitated by the maturation of nuclear forensics technologies, would be extremely useful and an important tool to help dissuade nuclear technology transfers. At this point, however, the database that is necessary for comparative purposes may need to be augmented. While promising developments on this front are on the horizon, programs applicable to this task must be given higher priority, as indicated by the gaps in U.S. intelligence about the uranium hexafluoride that

137 According to counter-terrorist experts, the U.S. Federal Bureau of Investigation concluded that the Khobar bombings were "staged by Saudi Hezbollah members," and that "the entire operation was planned, funded, and coordinated by Iran's security services, the IRGC and the MOIS (Iran's Ministry of the Interior), acting on the orders from the highest levels of the regime in Tehran." Cited in Steve Schippert, "IRGC Threat: New 'Punch' Same as the Old 'Punch,'" August 20, 2007, <http://threatswatch.org/commentary/2007/08/irgc-threat-new-punch-same-as/>.

Libya turned over after renouncing its nuclear programs.¹³⁸ Essentially, it was only through a process of elimination that the United States was able to identify the uranium source, not by means of direct attribution, but rather through the elimination of other likely sources. As suggested by a 2002 National Research Council study, “(t)he technology for developing [post-explosion nuclear attribution] exists but needs to be assembled, in an effort that is expected to take several years.”¹³⁹ As this still remains the case, such an effort should be accorded the highest U.S. priority, as it has emerged as an essential element of a deterrence construct aimed at holding state sponsors of terrorism accountable.

Finally, while such a capability may be indispensable in the age of terror, it may be less important to the case of either a defensive-, or an aggressive-, Iran model, both of which, from all indications, seek not the deniability of its nuclear capability, but rather its affirmation in order to attain specific domestic and foreign policy objectives. As noted earlier, Iran’s development of nuclear power and its operationalization of a weapons capability feed into a strategic policy that is designed to check American power in the region, erode Israel’s capacity to attack Iran, and enhance Tehran’s influence throughout the Gulf region and in the wider Muslim world. In this context, and paralleling U.S. national efforts, it is critical that we engage in intensive initiatives to augment and build up partner capacities for consequence management and missile defenses, and that we increase present efforts to enhance security assurances to key U.S. allies and coalition partners, without suggesting commitments that would never be met (i.e., a NATO-type Article 5 commitment) or creating expectations that are politically impossible to secure (such as trading New York for Abu Dhabi). Security assurances can take many forms, and with respect to the threat posed by a nuclear Iran, we need to focus on strengthening the U.S. Gulf Security Dialogue initiatives and on helping Israel build its own capacity for deterring an Iranian attack. This means, at the very least, allowing Israel to participate in the U.S. global missile defense architecture and enhancing U.S.-Israeli collaboration in maritime intercept operations—like that involved in the Israeli interdiction of the *Karine-A*—in support of a wider range of Proliferation Security Initiative (PSI) activities.

With Iran’s proliferation, the NPT is essentially dead, and it will be incumbent upon the United States to explore other means of implementing non- and counter-proliferation objectives. Foremost among these will be the task of ensuring that no nuclear weapons or fissile materials end up in terrorists’ hands. In this sense, efforts to interdict the movement and transfer of fissile materials, weapons components, and delivery systems are critical. For this reason, the next U.S. administration must continue to support and enhance efforts under the Proliferation Security Initiative¹⁴⁰ that has been focused

138 Both U-235 and PU-239 are enriched and purified when exposed to other elements and chemicals. The exact recipe for mixing together the elements with the additives can be used to “fingerprint” the origin of the fissile material. Nuclear forensics provides the ability to “identify a bomb’s source from radioactive debris after it explodes. Building on Cold War techniques, the Pentagon has developed new methods for collecting samples from ground zero, measuring data such as isotopic ratios and the efficiency of the fuel burn in the detonation, and comparing that information to known nuclear data to determine the origin of the materials.” See, for example, Graham T. Allison, “Nuclear Accountability: How to Deter States from Giving Terrorists Nukes,” *Technology Review*, July 2005, <http://www.technologyreview.com/Energy/14597/>.

139 Quoted in Allison, “Nuclear Accountability.”

140 On October 29–30, 2006, under the auspices of the Proliferation Security Initiative, exercise *Leading Edge* was conducted off the coast of Bahrain. The exercise was notable for being the first PSI exercise to include the participation of an Arab state

on naval collaboration and maritime intercept operations, but which is being broadened to consider air transport of illicit materials as well. Also necessary are resources for implementing the Global Initiative to Combat Nuclear Terrorism.¹⁴¹ U.S.-Russian cooperation on this and on Iran's proliferation, more generally, remains important, though difficult in light of events in Georgia. Without a doubt, Putin's Russia is re-asserting its power and position on the world stage, using its "petrowealth" to coerce neighbors and influence partners. Even as Moscow has expressed its own concerns about Iran's nuclear activities, we cannot expect Russia, at this moment in history, to be anything but a difficult partner as we try to come to grips with an approach to deal with Iran's prospective proliferation. In fact, Russia's new prime minister, former President Valdimir Putin, has threatened, in the wake of the "war" in Georgia, to increase Russia's nuclear assistance to Iran, just to poke a finger in the eye of the United States.¹⁴² Yet, despite this current animosity, the United States, without sacrificing its own interests, including with respect to NATO enlargement, must attempt to engage Russia on Iran and broader global security concerns, for example, the GI. At the same time, however, the United States must be clear about what its interests entail and which of those interests may, in fact, require the use of force to protect and preserve them, even in the context of deterrence planning. This will require new thinking about deterrence, as discussed in this report, and creative ideas about its implementation against an array of threats and in contingencies possibly involving a nuclear Iran.

and for the exercise's geographic proximity to Iran. Bahrain acted as the host for the maneuvers and was a full participant, while all the other GCC states except Saudi Arabia joined as observers. Leading Edge was also the first PSI exercise that South Korea observed. The exercise placed pressure on Iran during a crucial point of diplomacy seeking a new UNSC resolution to sanction Iran for refusing to heed earlier resolutions demanding a suspension of uranium enrichment and plutonium separation activity. Leading Edge was the first PSI exercise in the Persian Gulf and was closely watched by the Iranian navy. Guy Dinmore, "WMD Intercept Exercise Set to Begin in the Gulf," *Financial Times*, October 30, 2006.; *Agence France Presse*, "U.S. Leads Gulf Naval Maneuvers Amid Iran Tensions," October 30, 2006; Jim Krane, "Iran Criticizes U.S.-Led Nuclear Interception Naval Exercise in the Persian Gulf," *Associated Press World Stream*, October 30, 2006; Hassan M. Fattah, "U.S-Led Exercise in Persian Gulf Sets Sights on Deadliest Weapons," *New York Times*, October 31, 2006.

141 The Global Initiative to Combat Nuclear Terrorism, hereafter referred to as the Global Initiative or GI, was launched by Presidents Bush and Putin on July 15, 2006, in St. Petersburg, Russia. Its purpose is to expand and accelerate the development of partnership capacity to combat the global threat of nuclear terrorism. The Global Initiative is open to all nations that share these goals and are committed to combating nuclear terrorism. In addition to the United States and Russia, Australia, Bahrain, Canada, China, France, Germany, Japan, Italy, Kazakhstan, Morocco, Turkey, and the United Kingdom signed on to a statement of principles for the Initiative. On April 15, 2008, a meeting was held in Paris, France, to plan for future exercises, a key aspect of which is to test capabilities, develop new operational concepts, and facilitate preparedness.

142 Reportedly, one Russian analysts has said that, since the war with Georgia, everything has changed. "What seemed impossible before, is more than possible now when our friends become our enemies and our enemies our friends. What are American ships doing off our coast? Do you see Russian warships off the coast of America?" Mark Franchetti, "Vladimir Putin Set to Bait US with Nuclear Aid for Tehran," *London Sunday Times*, September 7, 2008, reprinted in the USAF Press Clips (Early Bird), September 8, 2008, No. 28.

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