



M A Y
2 0 1 3

If All Else Fails
*The Challenges of Containing
a Nuclear-Armed Iran*

Colin H. Kahl, Raj Pattani and Jacob Stokes



Center for a
New American
Security

Acknowledgements

“If All Else Fails” is part of a broader project at the Center for a New American Security (CNAS) analyzing the consequences of Iranian nuclearization. CNAS gratefully acknowledges the Ploughshares Fund, the United States Institute of Peace and the Carnegie Corporation of New York for their generous financial support.

The authors would like to sincerely thank our colleagues at CNAS for their support of the project and their critical feedback on the report. We are especially grateful to Shawn Brimley and Nora Bensahel for their guidance and insights, Kelley Sayler and Eve Hunter for their research and logistical support and Kay King for media and publication assistance. Outside of CNAS, we would like to thank Richard Betts, Frank Gavin, Paul Pillar, Kenneth Pollack, Daryl Press, Dennis Ross, Caitlin Talmadge and other participants in the April 11, 2013, CNAS Iran working group for their time, insight and candor on the project.

Cover Image

Iran test fires Sejil medium-range ballistic missile,
November 13, 2008.

VAHID REZA ALAEI/ AP Photo/Fars News Agency

TABLE OF CONTENTS

I.	Executive Summary	5	IX.	Denuclearization	56
II.	Introduction	8	X.	Strategic Uncertainties and Dilemmas	59
III.	Pathways to Containment	10	XI.	Conclusions	67
IV.	Designing a Containment Strategy for a Nuclear-Armed Iran	17			
V.	Deterrence	23			
VI.	Defense	34			
VII.	Disruption	43			
VIII.	De-escalation	48			

M A Y 2 0 1 3

If All Else Fails

The Challenges of Containing a Nuclear-Armed Iran

By Colin H. Kahl, Raj Pattani and Jacob Stokes

About the Authors

Colin H. Kahl is a Senior Fellow at Center for a New American Security and an associate professor in the Security Studies Program at Georgetown University's Edmund A. Walsh School of Foreign Service.

Raj Pattani is a graduate student in the Security Studies Program at Georgetown University's Edmund A. Walsh School of Foreign Service.

Jacob Stokes is a Research Associate at Center for a New American Security.



IF ALL ELSE FAILS:
THE CHALLENGES OF CONTAINING
A NUCLEAR-ARMED IRAN

By Colin H. Kahl, Raj Pattani and Jacob Stokes

M A Y 2 0 1 3

If All Else Fails
The Challenges of Containing a Nuclear-Armed Iran



I. EXECUTIVE SUMMARY

By Colin H. Kahl, Raj Pattani and Jacob Stokes

The Obama administration's stated policy is to prevent – not contain – a nuclear-armed Iran, and all indications suggest that the administration means what it says. Given the destabilizing consequences that would ensue if Tehran acquired nuclear weapons – and the uncertainties, costs and strategic trade-offs associated with containment – this is the right approach. Moreover, having issued a “no-containment” pledge, the United States could not walk back from this policy now without damaging the very credibility it needs to effectively address the Iranian nuclear challenge. The commitment to use all instruments of national power, including the possible use of force, to prevent Iran from acquiring nuclear weapons should remain firm.

However, this preference for prevention should not be used as an excuse to avoid thinking through the requirements for effective containment. Although the United States is not likely to acquiesce to the emergence of a nuclear-armed Iran, Tehran may be able to achieve an unstoppable breakout capability or develop nuclear weapons in secret before preventive measures have been exhausted. Alternatively, an ineffective military strike could produce minimal damage to Iran's nuclear program while strengthening Tehran's motivation to acquire the bomb. Under any of these scenarios, Washington would likely be forced to shift toward containment regardless of current preferences.

This report, the third in a series on the implications of Iranian nuclearization, outlines a containment strategy to manage and mitigate the dangers associated with a nuclear-armed Iran if prevention efforts – up to and including the use of force – fail. The strategy would seek to advance 11 core objectives:

- Prevent direct Iranian use of nuclear weapons;
- Prevent Iranian transfer of nuclear weapons to terrorists;
- Limit and mitigate the consequences of Iranian sponsorship of conventional terrorism, support for militant groups and conventional aggression;

- Discourage Iranian use of nuclear threats to coerce other states or provoke crises;
- Dissuade Iranian escalation during crises;
- Discourage Iran from adopting a destabilizing nuclear posture that emphasizes early use of nuclear weapons or pre-delegates launch authority;
- Persuade Israel to eschew a destabilizing nuclear posture that emphasizes early use of nuclear weapons or hair-trigger launch procedures;
- Convince other regional states not to pursue nuclear weapons capabilities;
- Limit damage to the credibility of the Nuclear Non-Proliferation Treaty and U.S. nonproliferation leadership;
- Prevent Iran from becoming a supplier of sensitive nuclear materials; and
- Ensure the free flow of energy resources from the Persian Gulf.

To achieve these objectives, containment would integrate five key components: deterrence, defense, disruption, de-escalation and denuclearization. Each of these “five Ds,” in turn, would entail a number of specific policies, activities and resource commitments.

Deterrence would attempt to prevent Iranian nuclear use and aggression through credible threats of retaliation by:

- Strengthening U.S. declaratory policy to explicitly threaten nuclear retaliation in response to Iranian nuclear use and strengthening commitments to defend U.S. allies and partners;
- Engaging in high-level dialogue with regional partners to extend the U.S. nuclear umbrella in exchange for commitments not to pursue independent nuclear capabilities;
- Evaluating options for the forward deployment of U.S. nuclear forces;

- Providing Israel with a U.S. nuclear guarantee and engaging Israeli leaders on steps to enhance the credibility of their nuclear deterrent; and
- Improving nuclear forensics and attribution capabilities to deter nuclear terrorism.

Defense would aim to deny Iran the ability to benefit from its nuclear weapons and to protect U.S. partners and allies from aggression by:

- Bolstering U.S. national missile defense capabilities;
- Improving the ability to detect and neutralize nuclear weapons that might be delivered by terrorists;
- Improving network resilience to reduce the threat posed by Iranian cyber attacks;
- Maintaining a robust U.S. conventional presence in the Persian Gulf and considering additional missile defense and naval deployments;
- Increasing security cooperation and operational integration activities with Gulf countries, especially in the areas of shared early warning, air and missile defense, maritime security and critical infrastructure protection; and
- Increasing security cooperation with Israel, especially assistance and collaboration to improve Israel’s rocket and missile defenses.

Disruption activities would seek to shape a regional environment resistant to Iranian influence and to thwart and diminish Iran’s destabilizing activities by:

- Building Egyptian and Iraqi counterweights to Iranian influence through strategic ties with Cairo and Baghdad, leveraging assistance to consolidate democratic institutions and encourage related reform;
- Promoting evolutionary political reform in the Gulf;
- Increasing assistance to non-jihadist elements of the Syrian opposition and aiding future political transition efforts;

- Increasing aid to the Lebanese Armed Forces as a long-term check on Hezbollah;
- Continuing to assist Palestinian security forces and institution building while promoting an Israeli-Palestinian accord;
- Enhancing counterterrorism cooperation and activities against the Iranian threat network, including expanded U.S. authorities for direct action;
- Expanding collaboration with partners to interdict Iranian materials destined for proxies such as Hezbollah; and
- Aggressively employing financial and law enforcement instruments to target key individuals within the Iranian threat network.

De-escalation would attempt to prevent Iran-related crises from spiraling to nuclear war by

- Shaping Iran’s nuclear posture through a U.S. “no-first-use” pledge;
- Persuading Israel to eschew a preemptive nuclear doctrine and other destabilizing nuclear postures;
- Establishing crisis communication mechanisms with Iran and exploring confidence-building measures;
- Limiting U.S. military objectives in crises and conflicts with Iran to signal that regime change is not the goal of U.S. actions; and
- Providing the Iranian regime with “face-saving” exit ramps during crisis situations.

Denuclearization activities would seek to constrain Iran’s nuclear weapons program and limit broader damage to the nonproliferation regime by:

- Maintaining and tightening sanctions against Iran; and
- Strengthening interdiction efforts, including the Proliferation Security Initiative, to limit Iran’s access to nuclear and missile technology and stop Iran from horizontally proliferating sensitive technologies to other states and non-state actors.

If these steps are carried out, effective containment is possible. But it would be highly complex and far from foolproof. The residual dangers of a nuclear-armed Iran would be meaningful, and the consequences of a failure of containment would be profound. The success of the strategy would also depend on numerous factors that Washington can influence but not control, including the preferences of the Iranian regime, the decisions of key allies and partners and the degree of international cooperation in support of containment.

Compounding matters, pursuing containment would produce a number of strategic trade-offs with other U.S. national security priorities. By doubling down on U.S. security commitments to the Middle East, containment would make the strategic and military “rebalancing” to Asia more difficult, and it would greatly complicate efforts to promote reform in the context of the Arab Spring. Containment would also increase the role of nuclear weapons in U.S. national security strategy at the very time the Obama administration hopes to move in the opposite direction.

For all of these reasons, this report does not advocate a shift toward containment; the U.S. commitment to using all instruments of national power to prevent Iran’s acquisition of nuclear weapons remains the right policy. If prevention fails, however, it would be imperative to move rapidly and coherently to minimize the damage to vital U.S. interests. In the absence of a well thought-out strategy for the “day after” Iran gets the bomb, strategic improvisation could produce policy responses that are ineffective or even counterproductive. Facing the dangers of a nuclear-armed Iran would be bad enough, but being unprepared for this possible future would be worse. More serious planning and preparation for containment is needed – not because the United States wants to take this path, but because it may eventually become the only path left.

II. INTRODUCTION

During the Cold War, the United States pursued a containment strategy against the Soviet Union. That strategy aimed to deter the Soviet Union from launching a nuclear or conventional war on the West, to defend allies against invasion and subversion, to check the expansion of Soviet influence, to keep superpower competition and crises from spiraling out of control and to moderate Soviet behavior over the long term. Containment also sought to reassure U.S. allies of the American commitment to their security as a means of discouraging them from taking actions that Washington believed would upset the balance of power and contribute to global instability, such as defecting from the Western camp or pursuing their own nuclear weapons.¹

In the face of Iran's bid to become a nuclear power, some analysts have argued that Washington should adopt a similar approach.² Although the United States has pursued elements of containment toward a *conventionally* armed Iran since the 1979 Iranian revolution,³ the Obama administration has explicitly ruled out containment as a policy for managing and mitigating the risks associated with a nuclear-armed Iran.⁴ President Barack Obama has long described the prospect of an Iranian nuclear bomb as an “unacceptable” outcome that the United States is determined to stop. And for more than a year, the president has gone further, explicitly and repeatedly clarifying that U.S. policy is to prevent – *not contain* – a nuclear-armed Iran.⁵ During a March 21, 2013, speech in Jerusalem, for example, Obama stated:

I have made the position of the United States of America clear: Iran must not get a nuclear weapon. This is not a danger that can be contained. As President, I have said to the world that all options are on the table for achieving our objectives. America will do what we must to prevent a nuclear-armed Iran.⁶

In recent months, Vice President Joseph Biden, Secretary of State John Kerry and Secretary of Defense Chuck Hagel have all echoed this “no-containment” policy.⁷

Because a nuclear-armed Iran would be profoundly destabilizing, we believe that prevention, rather than containment, is the right policy. Maintaining a firm commitment to using all instruments of U.S. national power – including the possible use of military force – to prevent Iran's acquisi-

In the absence of a well thought-out plan for the “day after” Iran gets the bomb, strategic improvisation could produce policy responses that are ineffective or even counterproductive. Facing the dangers of a nuclear-armed Iran would be bad enough, but being unprepared for this possible future would be worse.

tion of nuclear weapons improves the prospects for a diplomatic deal by clarifying the stakes for Tehran.⁸ In addition, a commitment to prevention helps to reassure Israel and other U.S. partners in the Middle East, discouraging them from pursuing policies that might otherwise run counter to American interests. At this point, stepping back

from the administration's no-containment pledge could produce the opposite effects: It would signal U.S. acquiescence to a nuclear-armed Iran, damage diplomacy and U.S. credibility and heighten anxieties among already anxious allies.

For these reasons, this report, the third in a series on the implications of Iranian nuclearization,⁹ does *not* argue for shifting from a policy of prevention to a policy of containment. Maintaining the U.S. commitment to use all instruments of national power to stop Iran from developing nuclear weapons remains the correct approach. However, it is still imperative to think carefully about what a containment strategy would look like. This is not because the United States wants to find itself in a situation in which containment becomes necessary, but rather because prevention – up to and including the use of force – could fail, leaving Washington with little choice but to manage and mitigate the consequences of a nuclear-armed Iran. Under these circumstances, it would be imperative to move rapidly and coherently to minimize the damage to vital U.S. interests. In the absence of a well thought-out plan for the “day after” Iran gets the bomb, strategic improvisation could produce policy responses that are ineffective or even counterproductive. Facing the dangers of a nuclear-armed Iran would be bad enough, but being unprepared for this possible future would be worse.

This report outlines a containment strategy to limit the dangers associated with a nuclear-armed Iran if prevention fails. It begins by discussing the possible pathways to containment, suggesting that the United States may find itself having to contain a nuclear-armed Iran despite its preference not to do so. The report then describes the key elements of an effective containment strategy, as well as the uncertainties and strategic dilemmas associated with pursuing it.

III. PATHWAYS TO CONTAINMENT

Although it remains unclear whether the Iranian regime intends to build nuclear weapons, Tehran appears to be pursuing a nuclear “hedging” strategy aimed at putting the relevant pieces in place should Supreme Leader Ayatollah Ali Khamenei decide to eventually go for the bomb. This strategy includes Iran’s well-known efforts to master the science and technology of nuclear fuel production, clandestine and dual-use weapons research and development of advanced ballistic missiles.¹⁰ Left unchecked, Iran’s progress could produce nuclear weapons, requiring a U.S. shift toward a policy of containment.

Iran’s Nuclear Progress

In recent years, Iran has made significant progress in developing its nuclear capabilities. In particular, Iran has accumulated a growing stockpile of low-enriched uranium (LEU) produced at its two enrichment facilities, Natanz and Fordow. According to data from the International Atomic Energy Agency (IAEA), Iran currently has enough 3.5 percent LEU that, if further enriched to weapons-grade level (above 90 percent purity), could fuel perhaps a half-dozen nuclear weapons.¹¹ If Iran’s Supreme Leader were to decide to dash for a bomb using this material, the Institute for Science and International Security estimates that it would take Iran approximately four months to enrich sufficient weapons-grade uranium for its first nuclear device.¹² Iran is also accumulating LEU at the 20 percent enrichment level, ostensibly to produce fuel for the Tehran Research Reactor. As of February 2013, Iran possessed approximately 170 kg of usable 20 percent LEU.¹³ Were Iran to accumulate approximately 250 kg of 20 percent material, which it might accomplish sometime in 2013, Tehran might be able to shrink the time required to produce enough weapons-grade uranium for a single weapon to one or two months.¹⁴

Iran might also pursue nuclear weapons using plutonium. Iran has a heavy-water production plant at

Arak, a once-clandestine facility that was revealed by Western intelligence and Iranian exiles in 2002 (at the same time the Natanz enrichment facility was exposed). The plant is meant to provide heavy water for a nearby heavy-water reactor currently under construction. Once finished, perhaps in late 2014 or 2015, the Arak heavy-water reactor could theoretically produce enough plutonium for at least one nuclear weapon per year. (The existing light-water reactor at Bushehr is poorly suited for this purpose.) To produce weapons-grade plutonium from Arak, however, Iran would have to extract spent fuel rods, a step that would be noticed by IAEA inspectors. Iran would also require a separate reprocessing facility to complete the process, a facility it has not built and claims not to intend to build. Consequently, Iran does not currently have the ability to produce weapons-grade plutonium and is not likely to acquire this capability anytime soon.¹⁵

For the foreseeable future, therefore, the uranium enrichment pathway remains the most likely Iranian route to nuclear weapons. Producing sufficient weapons-grade uranium would be a crucial step in this process, but Iran would also have to design and build the other key components of a bomb. When additional weaponization requirements are factored in, U.S. and Israeli officials estimate that it would take about a year for Iran to produce its first crude nuclear weapon.¹⁶ It would take at least another few years for Iran to produce a sophisticated warhead small enough for delivery by a ballistic missile.¹⁷

None of these timelines start, however, until Khamenei makes the decision to pursue nuclear weapons – a decision that U.S. intelligence officials say he has not yet made.¹⁸ Moreover, such a decision does not seem imminent. Iran’s enrichment facilities at Natanz and Fordow are under IAEA inspection. Inspectors visit these facilities every one or two weeks, on average, and any effort to divert LEU for enrichment to weapons-grade level would probably be detected, even under

the accelerated timeline Tehran may achieve in 2013. Fearing that any such move would prompt a devastating response by the United States or other countries, Iran's leadership is unlikely to produce nuclear weapons until the country can dramatically reduce the timeline to build a bomb and evade detection at declared facilities or construct one completely in secret.¹⁹

It remains uncertain whether Iranian leaders will ultimately decide to develop nuclear weapons, but the motivations to eventually do so could prove compelling. Tehran's quest for robust nuclear capabilities – including the technological wherewithal to rapidly build nuclear weapons, should Khamenei decide to do so – appears partly aimed at ensuring regime survival against external threats. However, Iranian leaders also seem to believe that advanced nuclear capabilities would facilitate several revisionist objectives, including making Iran the preeminent regional power in the Middle East (especially in the Gulf region); advancing resistance against the “injustices” imposed by “arrogant powers” (the West and Israel); enhancing Tehran's leadership role in the Muslim world and the appeal of its particular brand of revolutionary Islam; and reclaiming Iran's “rightful place” among the world's most important political, economic and scientific states. Consequently, Khamenei may eventually calculate that building the bomb would provide Iran with the ultimate deterrent against foreign meddling and attack, enhance Iran's prestige and give Iran a freer hand to advance its hegemonic ambitions in the Middle East.²⁰

Four Pathways

If Iran's current nuclear progress continues, several scenarios could produce a U.S. policy shift toward containment.

ACQUIESCENCE

As Iran approaches the nuclear threshold, Washington could intentionally shift toward containment rather than using military force in an

effort to delay Tehran's program. Given repeated public statements that prevention – not containment – is the policy of the United States, however, this pathway is highly unlikely. President Obama clearly prefers a diplomatic solution to the Iranian nuclear challenge and believes that time remains to achieve such an outcome. But he has repeatedly

The pathway to containment that some administration critics believe is most probable – a secret plan to acquiesce to a nuclear-armed Iran – is actually highly unlikely.

committed to using “all instruments of national power” to prevent Iran from crossing the nuclear threshold, emphasizing that all options – including military force – remain on the table.²¹ Obama views an Iranian nuclear weapon as a threat to vital U.S. interests, and as the administration's aggressive campaign against Al Qaeda demonstrates, he has not been shy about using military force when such interests are at stake. Referring to his specific threat to use force against Iran if it moves toward a weapon, Obama has also made clear that, on matters of war and peace, “I don't bluff.”²²

There are good reasons to believe Obama means what he says. Reports suggest that he has authorized military planning and deployments to make the option of using force viable.²³ And having bluntly stated that he is not bluffing, Obama is likely to conclude that undoing his no-containment pledge would greatly damage U.S. credibility. Thus, the pathway to containment that some

administration critics believe is most probable – a secret plan to acquiesce to a nuclear-armed Iran²⁴ – is actually highly unlikely. Richard Betts astutely observes that “as promises in foreign policy go, this one is chiseled in stone.”²⁵

IRANIAN BREAKOUT CAPABILITY

The United States is not likely to acquiesce to a nuclear-armed Iran, but Iran might be able to develop a nuclear breakout capability before U.S. preventive options, up to and including the use of force, are exhausted. This could present the United States with a *fait accompli*, forcing a U.S. shift toward containment.

Obama has frequently said he would act if the United States detected an Iranian move toward acquiring nuclear weapons. In September 2012, for example, Obama said, “I’ve stated repeatedly, publicly, that red line, and that is we’re not going to accept Iran having a nuclear weapon.”²⁶ Some have criticized drawing the line at weaponization, arguing that the Iranians might eventually be able to move so rapidly or so secretly toward a bomb that it would go undetected.²⁷ The Obama administration is clearly aware of this concern, and the president has publicly clarified that he would not allow Iran to get to this point. In October 2012, Obama suggested that he would not necessarily wait for definitive evidence of weaponization and would act to prevent Iran from crossing a technological threshold that would allow Iran to build weapons without detection. Obama said, “I’ve been very clear to [the Iranians] ... [that] we have a sense of when they would get breakout capacity, which means that we would not be able to intervene in time to stop their nuclear program, and that clock is ticking.”²⁸ In a March 2013 interview with Israeli television, Obama noted that the United States still believed that it would take Iran “over a year or so to actually develop a nuclear weapon” after a decision to do so, but he added that

“obviously, we don’t want to cut it too close.”²⁹ This suggests that he might choose to use force before weaponization occurs.

Yet the administration has neither defined “breakout capability” nor clarified how close to a nuclear weapon is “too close.” Numerous interpretations and timelines for Iranian breakout capability have been advanced by Israeli officials and outside

Iran might be able to develop a nuclear breakout capability before U.S. preventive options, up to and including the use of force, are exhausted. This could present the United States with a fait accompli, forcing a U.S. shift toward containment.

analysts (see Text Box), but it is not clear if the Obama administration shares any of these specific views. Administration officials express confidence that U.S. and Israeli intelligence currently have the means to detect any rapid Iranian move toward nuclear weapons in time to react.³⁰ It thus seems clear that the Obama administration believes that Iran has not yet achieved a breakout capability,³¹ but it is not clear at what point that might change. Across what technological threshold would the intelligence community lose confidence that it could discover an Iranian nuclear breakout in time for the United States to react?

Determining Iranian Breakout Capability

There is no analytic consensus regarding the precise level of Iranian nuclear technological progress that would constitute an unstoppable breakout capability or when Iran might achieve this milestone.

Israeli Prime Minister Benjamin Netanyahu has argued that Iran could achieve a breakout capability sometime in 2013, once Tehran accumulates one bomb's worth of 20 percent low-enriched uranium (LEU). Across this threshold, Netanyahu has stated, Iran would be able to produce weapons-grade uranium so rapidly that it would not be detected, even if the Iranians did so at declared enrichment sites (Natanz and Fordow) currently under inspection by the International Atomic Energy Agency (IAEA). And because the remaining weaponization work (e.g., designing nuclear detonators, preparing the uranium core and assembling the device) might be much more difficult to detect or militarily interdict, the program could become unstoppable once Iran acquires sufficient fissile material for a nuclear weapon.³²

Even if the ability to rapidly produce fissile material is the right benchmark, however, Netanyahu likely drew the line in the wrong place. Nonproliferation experts doubt that Iran would take the extraordinary risk to dash for a bomb with only one weapon's worth of 20 percent LEU. Moreover, because of the frequency of inspections, even a month – the fastest possible

timeline to enrich 20 percent LEU to weapons-grade uranium with existing Iranian enrichment facilities – would likely enable detection and a response. For these reasons, the Obama administration does not appear to share Netanyahu's particular view of breakout capability.³³

Other analysts contend that the combination of significant quantities of 20 percent LEU and advances in the quantity and sophistication of Iranian centrifuges could produce an undetectable breakout capability by mid-2014. Currently, Iran's nuclear program overwhelmingly relies on approximately 12,000 relatively inefficient IR-1 centrifuges. But the installation of thousands of additional IR-1 machines or the industrial-scale installation of next-generation IR-2M centrifuges (which are reportedly three to five times more efficient) could theoretically shrink the time needed to produce weapons-grade uranium to as little as one or two weeks, potentially facilitating a breakout even at declared facilities by mid-2014.³⁴ Iran's recent moves to significantly expand the number of IR-1 centrifuges at Natanz and Fordow, acquire banned materials for thousands of additional IR-1s³⁵ and install 180 IR-2M centrifuges (with the intent to install 2,800 more) at Natanz provide some credence to these fears.³⁶

Another scenario would involve Iran using its existing LEU stockpile to produce 60 percent highly

enriched uranium. Although the United States, Israel and other countries have expressed considerable concern over Iran's accumulating supply of 20 percent LEU, and the Obama administration has implied that any move to enrich weapons-grade material would prompt military action, little has been said regarding Iranian enrichment above 20 percent but below the 90 percent threshold of weapons-grade uranium. In recent months, however, Iranian officials have suggested that they might begin enriching uranium up to the 50 or 60 percent level, using the dubious justification of producing fuel for future nuclear submarines or other naval propulsion. Tehran has not yet taken this step, but such a move could potentially shrink the timeline to weapons-grade uranium to the point that IAEA inspectors would have difficulty detecting such a move.³⁷

Still others have warned that the completion of the Arak heavy-water reactor next year and the acquisition of a plutonium reprocessing capability could also lead to an unstoppable breakout scenario. Iran would have to expel IAEA inspectors from Arak in order to extract and reprocess spent fuel rods into weapons-grade plutonium, but once the heavy-water reactor becomes operational, an outside attacker might judge that the environmental consequences of attacking the nuclear reactor were too great.³⁸

Without adequate understanding or agreement among U.S. policymakers, or sufficient intelligence on the precise nature of Iran's technological progress, Tehran could at some point develop the technical ability to rapidly produce sufficient fissile material for a nuclear weapon even at declared sites under regular inspection. Once Iran had achieved this capability, the prevention game might be over. If Iran produced enough fissile material for a bomb, it could be removed to a secret location, and the chances of successfully destroying it or interdicting other, harder-to-detect elements of the weaponization process would greatly diminish.³⁹

Regardless of whether the Iranians *actually* decided to break out at this point, the United States might be “self-deterred” from taking military action out of the fear that Iran might already possess – or could rapidly assemble – a nuclear weapon for use in retaliation.⁴⁰ At this juncture, Iran would become a de facto (or “threshold”) nuclear weapons state, and the United States would likely be forced to adopt a containment policy. In 1993, for example, the U.S. intelligence community reportedly assessed that North Korea had sufficient weapons-grade plutonium for one or two nuclear bombs, although it was unsure whether North Korea had any actual weapons.⁴¹ From that point forward, the Clinton and Bush administrations treated North Korea as a de facto nuclear-armed state, greatly complicating their willingness to engage in preventive military action, even though more than a decade passed between that assessment and Pyongyang's first “fizzled” nuclear test in 2006.⁴²

IRANIAN “SNEAK-OUT”

Washington might also be forced to adopt a containment policy if Iran were able to build nuclear weapons completely in secret. Regardless of the degree of Iranian technological progress, any decision to quickly develop fissile material at declared facilities would require the Supreme Leader to accept some risk of detection.⁴³ For this reason, if Iran decides to produce bomb-grade material, it is

probably more likely to do so at undeclared, secret facilities.

According to press reports, U.S. intelligence officials express confidence that Iran does not currently have such facilities and that they would be discovered if Iran tried to construct them – just as the once-secret Natanz and Fordow facilities were discovered.⁴⁴ Still, Iran's stated intent to build as many as 10 additional enrichment facilities, combined with its history of constructing clandestine sites, is troubling.⁴⁵

Although it may be extremely difficult for Iran to secretly develop nuclear weapons, the possibility exists. For this reason, even staunch opponents of containment admit that the United States must be prepared for this possibility.

Furthermore, as Iranian centrifuge technology advances, Tehran may be able to build a smaller facility, potentially hidden within an urban area, that could be more difficult to detect.⁴⁶ It is also conceivable that Iran could eventually construct a completely parallel program in secret – including sources of uranium ore, as well as uranium conversion and enrichment facilities – although the technical and resource constraints would be significant.⁴⁷

Another secret route to a bomb would be to acquire an operational nuclear weapon, fissile material or a parallel supply of LEU that could be diverted (without IAEA detection) to a clandestine Iranian

enrichment site from North Korea. Such collaboration would be extraordinarily risky for both parties, and there is no publically available evidence suggesting that Iran intends to go this route. However, the two countries do have a history of ballistic missile cooperation, and in September 2012, they signed a technical and scientific cooperation accord – the same type of agreement that enabled North Korea’s past assistance to Syria’s nuclear program.⁴⁸ Furthermore, in the wake of Pyongyang’s February 2013 nuclear test (which some suspect involved a weapon using highly enriched uranium, as opposed to plutonium), some analysts worry that Iran may have established connections to North Korea’s nuclear testing program.⁴⁹ While the two countries have previously worked together on missiles, there does not appear to be evidence yet of a nuclear connection.⁵⁰ Regardless of the level of existing nuclear ties, however, the possibility of future cooperation between Tehran and Pyongyang cannot be ruled out.

Thus, although it may be extremely difficult for Iran to secretly develop nuclear weapons, the possibility exists. For this reason, even staunch opponents of containment admit that the United States must be prepared for this possibility. As one recent report states: “Iranian acquisition of nuclear weapons would be dangerous for several reasons, none of which would be adequately addressed by containment. Nonetheless, since intelligence can be imperfect, we must take steps now to prepare for the possibility that we will wake up one morning and discover that Iran has acquired a nuclear weapon despite the United States’ best efforts.”⁵¹

INEFFECTIVE MILITARY ACTION

Preventive military action is often presented as an alternative to containment. There are at least two ways, however, in which a military strike on Iran’s nuclear infrastructure could prove ineffective, thereby becoming a prelude to containing a nuclear-armed Iran rather than a substitute for containment.

First, if the attacker lacks sufficient military capabilities or the strike is poorly executed, it could prove *operationally* ineffective. Senior U.S. defense officials, for example, have regularly stated that Israel only possesses the conventional military capability to set Iran’s program back one to three years, with the lower estimate more likely.⁵² Given significantly greater American capabilities,

A military strike on Iran’s nuclear infrastructure could prove ineffective, thereby becoming a prelude to containing a nuclear-armed Iran rather than a substitute for containment.

including the 30,000-pound Massive Ordnance Penetrator and the ability to conduct a sustained air campaign as opposed to a one-off raid, the United States could almost certainly set the program back further. But it is not clear how much further.⁵³ A strike may also operationally fail if, unbeknownst to the attacker, Iran possessed additional clandestine (and thus untargetable) nuclear facilities.

The use of force might therefore produce only a minimal delay to Iran’s existing program. Worse still, a strike would likely empower hardliners in Tehran to redouble Iran’s efforts to develop a nuclear deterrent to prevent another attack. Iran would be likely to describe the attack as an “act of aggression,” play the victim and leave the Nuclear Non-Proliferation Treaty (NPT) – or, at the very least, substantially decrease cooperation with IAEA inspectors.⁵⁴ Such a move would complicate

the international community's ability to detect Iran's efforts to rebuild its program.⁵⁵

A strike could also prove *politically* ineffective if it fails to garner sufficient international support. Preventing Tehran from reconstituting its program after a strike would require extensive international cooperation to continue to isolate and sanction Iran. An Israeli preventive strike would be highly unlikely to enjoy such widespread international support under any circumstances. A modicum of support among key European, Asian and Gulf states, as well as the possible acquiescence (as opposed to outright opposition) of Russia or China, is conceivable if the United States takes military action, but only if diplomatic options have been exhausted first. If the international community believes that Washington is taking precipitous action before diplomacy has run its course, it will be very difficult to hold together the type of coalition necessary to prevent Iran from re-energizing its program.⁵⁶

None of these pathways to containment are inevitable. Indeed, many of them are quite unlikely. But the possibility that one may occur requires the United States to think hard about what a containment strategy might involve, even if it hopes never to have to put such a policy in place.

IV. DESIGNING A CONTAINMENT STRATEGY FOR A NUCLEAR-ARMED IRAN

Current U.S. policy toward Iran seeks not only to prevent Iranian acquisition of nuclear weapons but also to deter Iranian aggression and counter Tehran's destabilizing influence in the Middle East. As such, Washington already pursues some measures toward a *conventionally* armed Iran that could be described as "containment." The containment strategy outlined here would bolster and supplement current policies with measures specifically designed to manage and mitigate the dangers associated with a *nuclear*-armed Iran. This strategy is informed by U.S. containment efforts during the Cold War, which aimed to alter Soviet behavior and defend vital U.S. interests without resorting to the extremes of either appeasement or war.⁵⁷ Yet we do not simply graft U.S. policy toward the Soviet Union onto the very different situation with Iran. The Soviets were a conventional and nuclear superpower, and containment provided an overarching framework for Washington's global competition with Moscow. In contrast, Iran is a much weaker state, with or without nuclear weapons, and although Tehran is increasingly active around the globe, the principle challenges it poses are regional. Consequently, although the strategy we outline is robust and complex, its scale and scope are inherently more limited than the Cold War model.

Assumptions

For the purposes of designing a containment strategy, we assume that Iran openly possesses a relatively modest arsenal, similar in size to that of North Korea (perhaps a dozen weapons),⁵⁸ deliverable on medium-range ballistic missiles (MRBMs) that can reach targets throughout the Middle East and perhaps portions of Europe.⁵⁹ This is not the only form a future Iranian arsenal and nuclear posture could take. Even if Iran desires a nuclear deterrent, the regime could choose to stop just short of constructing actual weapons, calculating

that an ambiguous threshold capability is sufficient to dissuade foreign attack. Tehran could also choose to cross the threshold, but instead of declaring and testing its weapons – as India, North Korea and Pakistan have done – it could adopt an opaque, undeclared posture akin to Israel's current nuclear stance.⁶⁰ Moreover, if Iran builds an actual arsenal, there is no way to know for sure whether it would settle for a small regional capability composed of a few dozen nuclear weapons aimed at producing a "minimal deterrent" against the United States, Israel and other states or would seek to build hundreds of weapons and expand its capabilities to include intercontinental ballistic missiles (ICBMs), electromagnetic pulse (EMP) weapons or other advanced nuclear capabilities meant to hold the U.S. homeland at risk.

Nevertheless, we assume here a modest, declared Iranian nuclear arsenal with regional capabilities for two reasons. First, threshold-capability scenarios that fall short of full weaponization should be easier to contain using the tools we describe. Second, a containment strategy would be adopted immediately after Iran emerges as a nuclear power, when its arsenal would be small; a larger deployed arsenal would have to pass through this more modest phase of development, and a containment strategy would seek to stunt further development of Iran's nuclear capabilities.

Strategic Objectives

A strategy of prevention seeks to stop Iran from developing nuclear weapons; containment, by contrast, aims to manage and mitigate the consequences of Iran acquiring these weapons. Analysts have identified five interrelated dangers associated with a nuclear-armed Iran: nuclear fanaticism, emboldened Iranian adventurism, crisis escalation, cascading proliferation and energy shocks. Although some of these dangers are likely exaggerated, we initially describe them without assessing their probability in order to identify the range of strategic objectives that containment would seek to

advance. (We spell out these objectives and their relationship to the posited dangers of a nuclear-armed Iran in Table 1).

NUCLEAR FANATICISM

A major concern is the prospect of Iran intentionally using nuclear weapons, either directly or by transferring them to terrorists. Some commentators argue that the Iranian regime is so reckless and irrational that it might be willing to use nuclear weapons against the United States or Israel, even if such actions risked national suicide. According to this view, Iran’s religious glorification of national martyrdom makes it nearly impossible to deter.⁶¹ As Bernard Lewis observes, for the “religious fanatics” in Tehran, “mutually assured destruction is not a deterrent – it’s an inducement.”⁶² Moreover, even some commentators who believe that the current Iranian government is rational argue that leaders subscribing to a particularly apocalyptic variant of Shiism (sometimes referred to as the “cult of the Mahdi”), including extremist elements within the Islamic Revolutionary Guard Corps (IRGC), might eventually seize control.⁶³ Given the long history of Iranian-backed terrorism committed by the IRGC-Qods Force (the Guard’s covert action wing), Hezbollah, Palestinian groups, Iraqi militants and other violent Iranian proxies against U.S. and Israeli targets, the possibility that a highly risk-acceptant or irrational Tehran might sponsor a nuclear terror attack is a particular concern.⁶⁴

The danger of nuclear fanaticism produces two related containment objectives:

Objective 1: Prevent direct Iranian use of nuclear weapons.

Objective 2: Prevent Iranian transfer of nuclear weapons to terrorists.

IRANIAN ADVENTURISM

Iran currently sponsors terrorist groups, supports militancy, encourages subversion and engages in

TABLE 1: POTENTIAL DANGERS AND ASSOCIATED CONTAINMENT OBJECTIVES

Potential Dangers	Containment Objectives
Nuclear Fanaticism	Prevent direct Iranian use of nuclear weapons
	Prevent Iranian transfer of nuclear weapons to terrorists
Iranian Adventurism	Limit and mitigate the consequences of Iranian sponsorship of conventional terrorism, support for militant groups and conventional aggression
	Discourage Iranian use of nuclear threats to coerce other states or provoke crises
Crisis Escalation	Dissuade Iranian escalation during crises
	Discourage Iran from adopting a destabilizing nuclear posture that emphasizes early use of nuclear weapons or pre-delegates launch authority
	Persuade Israel to eschew a destabilizing nuclear posture that emphasizes early use of nuclear weapons or hair-trigger launch procedures
Proliferation Cascade	Convince other regional states not to pursue nuclear weapons capabilities
	Limit damage to the credibility of the Nuclear Non-Proliferation Treaty and U.S. nonproliferation leadership
	Prevent Iran from becoming a supplier of sensitive nuclear materials
Energy Shocks	Ensure the free flow of energy resources from the Persian Gulf

political coercion throughout the Middle East. Tehran does so partly to demonstrate its ability to inflict pain on its adversaries should they threaten Iran, but it also engages in these destabilizing activities to intimidate others and advance its revisionist and hegemonic agenda. Equipped with a nuclear deterrent to shield Iran from large-scale retaliation, Iranian leaders might pursue these activities more aggressively, contributing to more violence and instability in an already tumultuous region.

Emboldened adventurism could take many forms. Tehran might increase the frequency and scale of Iranian-sponsored conventional terrorism or cyber terrorism against the United States, Israel and Iran's regional rivals in the Gulf. A nuclear-armed Iran might also provide Hezbollah and Palestinian

Emboldened Iranian adventurism would be consistent with the historical tendency for new nuclear states to become more aggressive at lower levels of violence, at least for some period of time.

militants with more sophisticated, longer-range and more accurate conventional weaponry for use against Israel, and Iran might give its proxies greater leeway to use the advanced weapons systems they already possess instead of keeping them in reserve.⁶⁵ Iran might become more assertive in backing subversion in Iraq or among Shiite populations in Bahrain, Kuwait and Saudi Arabia. Iran might also extend its nuclear umbrella – or at least

a nuclear shadow, if it chooses not to make explicit guarantees – over “resistance” groups across the region, emboldening militant allies to be more assertive while limiting the freedom of threatened states to respond.⁶⁶ And Tehran might feel freer to deploy Iranian forces more assertively in conflicts in the Levant, engage in coercive diplomacy to cow weaker neighbors in the Persian Gulf or blackmail the world by threatening to close the Strait of Hormuz (through which 20 percent of the world's tradable oil passes).⁶⁷

The growing influence of “principlist” hardliners in Tehran – most notably, elements of the IRGC – adds to the danger. Principlists share an ideological conviction of the inevitability of U.S. decline, Israeli defeat and Iranian ascendance. They see the competition with the United States, Israel and Arab rivals such as Saudi Arabia as a zero-sum game.⁶⁸ If Iran obtains nuclear weapons, these hardliners may see it as a confirmation of their convictions and push the Iranian government further toward risk taking and provocation.

Emboldened Iranian adventurism would be consistent with the historical tendency for new nuclear states to become more aggressive at lower levels of violence, at least for some period of time. North Korea's track record of provocations⁶⁹ and Pakistan's emboldened support of anti-India terrorism and militancy⁷⁰ are only the most recent examples.⁷¹ Such behavior would also be consistent with the Cold War dynamic known as the “stability-instability paradox,” in which nuclear deterrence at the strategic level coincided with numerous disputes, crises, interventions and proxy wars at lower levels of violence.⁷²

Two containment objectives emerge from this discussion:

Objective 3: Limit and mitigate the consequences of Iranian sponsorship of conventional terrorism, support for militant groups and conventional aggression.

Objective 4: Discourage Iranian use of nuclear threats to coerce other states or provoke crises.

CRISIS ESCALATION

A nuclear-armed Iran may trigger a series of actions and reactions that would make the Middle East even more prone to violence and crisis. In this context, as Richard Kugler notes, “the main risk of nuclear war may not stem from Iran’s intention to start one, but instead from unwanted and unforeseen escalation of political crises that spin out of control.”⁷³ During a crisis, Tehran might misjudge the capability and will of its adversaries to respond to Iranian provocations. A nuclear-armed Iran could overplay its hand in an indirect confrontation between Iranian proxies and Israel in the Levant or a future clash between Shiite militants and U.S. partners in the Gulf. Or Iran could overreach and directly confront the United States in the Strait of Hormuz. And once Iran was committed, the strong religious and cultural predispositions of regime hardliners to resist threats and dictates from “arrogant powers” such as the United States or Israel might make it difficult for Iran to back down. The concern here is less that Iranian leaders would suicidally seek their own destruction; instead, a combination of risk acceptance and miscalculations could trigger a series of events that inadvertently spiral to a nuclear exchange.⁷⁴

Analysts also worry that nuclear escalation could emerge from the particular dynamics of a future Israeli-Iranian nuclear rivalry. One challenge would be the inherent crisis instability resulting from Israeli and Iranian nuclear vulnerabilities – vulnerabilities that could generate circumstances in which a nuclear first strike might seem like the “least bad” option. During an Israeli-Iranian crisis, reciprocal fears of surprise attack could produce incentives for either side to launch a deliberate preemptive attack.⁷⁵ Despite Israel’s presumed nuclear superiority, it lacks strategic depth and may fear that its political leadership and command-and-control systems are vulnerable to a decapitating

The concern is less that Iranian leaders would suicidally seek their own destruction; instead, a combination of risk acceptance and miscalculations could trigger a series of events that inadvertently spiral to a nuclear exchange.

Iranian first strike. This could drive Israeli leaders to preemptively launch a nuclear attack if they see an Iranian strike as imminent. And *because* of Israel’s overwhelming nuclear superiority, Israeli leaders may believe that such an attack would be effective. For Iran, the small size of its initial nuclear arsenal may create an intense fear of being disarmed by the Israelis, inclining leaders toward a “use them or lose them” doctrine that could produce Iranian preemption during a crisis.⁷⁶

Israeli and Iranian nuclear postures could also lead to inadvertent escalation. Reciprocal fears of a decapitating first strike, coupled with extraordinarily short flight times for incoming nuclear missiles, could lead Israel and Iran to adopt hair-trigger launch procedures. They may also pre-delegate launch authority for their nuclear arsenals to subordinate commanders – a danger that seems particularly likely in Iran, given the IRGC’s deep involvement in the country’s nuclear and missile programs.⁷⁷ During a future Israeli-Iranian crisis, the lack of direct lines of communication and decades of distrust and hostility could lead each side to assume the worst. And with nuclear forces

at a high state of alert, false warnings, bad intelligence, miscommunications or rogue actions could trigger an accidental nuclear war.⁷⁸

These potential dangers suggest three additional containment objectives:

Objective 5: Dissuade Iranian escalation during crises.

Objective 6: Discourage Iran from adopting a destabilizing nuclear posture that emphasizes early use of nuclear weapons or pre-delegates launch authority.

Objective 7: Persuade Israel to eschew a destabilizing nuclear posture that emphasizes early use of nuclear weapons or hair-trigger launch procedures.

CASCADING PROLIFERATION

Numerous commentators and officials have warned that if Iran defies the international community and develops nuclear weapons, it could fatally undermine the NPT. First, as the National Intelligence Council noted in December of 2012, Iranian nuclear acquisition “could trigger an arms race in the Middle East, undermining the nonproliferation regime.”⁷⁹ Many fear that Saudi Arabia, which views Iran as its principal threat and rival for regional influence, would quickly follow Iran into the nuclear club (perhaps by acquiring nuclear weapons from Pakistan) and that Turkey, Egypt and possibly other Middle Eastern states would not be far behind.⁸⁰

Second, the failure to prevent Iran from developing nuclear weapons could undermine international respect for the NPT and gut the credibility of U.S. counterproliferation efforts. The United Nations (U.N.) Security Council has passed six resolutions since 2006 demanding that Iran comply with its NPT obligations. Three successive American administrations have also described Iranian nuclear weapons acquisition as “unacceptable,” pledging to do whatever it takes to stop Iran before it gets the bomb. If Iran nevertheless succeeds

in developing nuclear weapons, other states may conclude that the NPT is toothless and that Washington, in particular, lacks the capability and the will to enforce member states’ nonproliferation obligations.⁸¹

Finally, a nuclear-armed Tehran could itself become a supplier of proliferation materials. Even if Iran does not give operational nuclear weapons to allied states or non-state actors, it might consider providing others with sensitive nuclear assistance, such as centrifuge components or warhead designs. In this way, Tehran could pass sensitive technology to Hezbollah or help jump-start nuclear programs in allied countries such as Sudan or Venezuela, much as Pakistan’s AQ Khan network allegedly facilitated proliferation efforts in Iran, Iraq, Libya and North Korea.⁸²

Any of these scenarios could spark a wave of additional proliferation, leading to the emergence of multiple nuclear rivals in the Middle East or other volatile regions. Such multipolar nuclear competitions, in turn, could greatly complicate stable deterrence by making attribution for nuclear attacks trickier, creating difficulties for calculating the sufficiency and vulnerability of nuclear arsenals and multiplying the scenarios for crisis miscalculation. Even if all the relevant parties were rational, the prospects for inadvertent, unauthorized or accidental use leading to nuclear war would increase.⁸³

Three containment objectives follow from this discussion:

Objective 8: Convince other regional states not to pursue nuclear weapons capabilities.

Objective 9: Limit damage to the credibility of the NPT and U.S. nonproliferation leadership.

Objective 10: Prevent Iran from becoming a supplier of sensitive nuclear materials.

ENERGY SHOCKS

Some analysts also contend that the direct and indirect consequences of a nuclear-armed Iran could be profoundly unsettling to global oil markets, creating a profound threat to the world economy. Although much has been made of the discovery of new sources of oil and gas in North America and the possibility of U.S. “energy independence,” worldwide demand for oil and gas will continue to increase, and key countries in Europe and Asia will remain dependent on Middle East supplies. Moreover, because energy markets remain global, the price that U.S. and global consumers pay at the pump will continue to be affected by the security situation in the Persian Gulf for the foreseeable future.⁸⁴

In this context, the heightened risk of regional war and cascading proliferation in the Middle East associated with a nuclear-armed Iran could add a significant “risk premium” to oil prices. So too could growing doubts regarding Washington’s ability to secure Gulf oil, especially the oil passing through the Strait of Hormuz, in the face of a more assertive and capable Iran. Concerns that an emboldened Tehran could more effectively subvert stability in Saudi Arabia and other Gulf monarchies would further compound market fears.⁸⁵ Taking all of these factors into account, some analysts believe that an embedded increase of \$20 to \$30 per barrel of oil is likely, with prices spiking by as much as \$100 per barrel in the event of an actual conflict. And if a conflict escalated to a nuclear exchange or Iranian use of a radiological “dirty bomb” against key oil facilities in the Gulf, an even more catastrophic price shock could occur, potentially causing a severe and protracted global recession.⁸⁶

Because the prospect of energy shocks is largely a second-order consequence of the other dangers discussed above, the containment objectives already enumerated apply here as well. However, one additional objective would follow:

Objective 11: Ensure the free flow of energy resources from the Persian Gulf.

Key Strategic Components: The Five Ds

To achieve these objectives, the containment framework we describe would employ a combination of five key strategic components: deterrence, defense, disruption, de-escalation and denuclearization. Deterrence would attempt to prevent Iranian nuclear use and aggression through credible threats of retaliation. Defense would aim to deny Iran the ability to benefit from its nuclear weapons and to protect U.S. partners and allies from aggression. Disruption activities would seek to shape a regional environment resistant to Iranian influence and to thwart and diminish Iran’s destabilizing activities. De-escalation would attempt to prevent Iran-related crises from spiraling to nuclear war. And denuclearization activities would seek to constrain Iran’s nuclear weapons program and limit broader damage to the nonproliferation regime.

The sections that follow outline each of these “five Ds” in detail, including both the underlying logic and the specific policies, activities and resource commitments they would entail. The discrete elements of the strategy are meant to complement each other, creating a holistic approach to managing and mitigating the dangers of a nuclear-armed Iran.

V. DETERRENCE

Deterrence would be the centerpiece of any containment strategy, serving as its foundation and reinforcing every other major element. In the broadest sense, deterrence is a form of preventive influence that primarily (although not exclusively) manipulates negative incentives to alter an adversary's decision calculus. It aims to dissuade an opponent from engaging in hostile behavior by conveying that the associated costs will exceed the benefits if the adversary acts, while simultaneously assuring the adversary that the costs can be avoided (or the benefits accrued) if it does not act.⁸⁷

Despite the annihilationist rhetoric employed by some Iranian leaders, the actual behavior of Iran over the past three decades suggests that the regime is sufficiently rational for nuclear deterrence to operate.

Deterrence comes in two basic forms: “Deterrence by punishment” involves a credible threat to impose unacceptable damage to an adversary by retaliating for an attack, whereas “deterrence by denial” seeks to defeat the adversary's actions by denying it the benefits of aggression while still leaving it with the costs of its efforts.⁸⁸ This section focuses on deterrence by punishment, because nuclear deterrence traditionally emphasizes credible threats of retaliation. Deterrence by denial is discussed in the next section on defense.

Deterrence would aim to prevent a nuclear-armed Iran, or Iranian-backed groups, from attacking the

United States (“direct deterrence”) and U.S. allies and partners (“extended deterrence”). It would seek to dissuade Iran from initiating nuclear threats under peacetime circumstances (“general deterrence”) and from initiating a nuclear war in the midst of military crisis (“immediate deterrence”).⁸⁹ Beyond checking Iranian aggression, deterrence would aim to reassure U.S. allies and partners of the American commitment to their security, thus discouraging them from responding to a nuclear-armed Iran by pursuing their own nuclear capabilities or, in the case of Israel, adopting a destabilizing nuclear posture.⁹⁰

Can Iran Be Deterred?

Effective deterrence would hinge on credibly raising the costs and denying the benefits of Iranian use of nuclear weapons and threats. Success assumes that Iranian leaders are sufficiently rational to assess these costs and benefits.⁹¹ The historical record suggests that they are.

Despite the annihilationist rhetoric employed by some Iranian leaders, the actual behavior of Iran over the past three decades suggests that the regime is sufficiently rational for nuclear deterrence to operate.⁹² Although Iran's revolutionary leadership has repeatedly supported Islamic militancy and used violence abroad to promote their ideological agenda, Iran has also demonstrated a degree of caution, a sensitivity to costs and an ability to make strategic calculations when the regime's survival is at risk.⁹³ There is no credible evidence for the claim that Iran is a suicidal state that would be willing to incur the massive retaliation that would inevitably result from the use of nuclear weapons against the United States or its allies. Although the founder of Iran's revolution, Ayatollah Ruhollah Khomeini, often called Iran “a nation of martyrs,” he also established the principle of the “expediency” of the regime in the late 1980s. As Michael Eisenstadt notes, this pragmatism had the effect of formalizing “the supremacy of *raison d'état* over the tenets of Islam as the precept

guiding Iranian decisionmaking.⁹⁴ As a result, Iranian foreign policy has blended revolutionary agitation with prudent adjustments, especially when confronting severe threats to the regime's survival.⁹⁵

Iran is a risk-acceptant revisionist state, but not to a suicidal extreme. Iran has a long history of sponsoring brazen terrorist attacks abroad, leading some observers to conclude that the regime is willing to run excessive risks and thus might contemplate using nuclear weapons against its enemies.⁹⁶ However, the nature of Iranian-sponsored attacks actually reveals some caution. Tehran has historically employed covert action and terrorism abroad – instead of overt strikes and conventional aggression – precisely to maintain a degree of plausible deniability that shields the regime from direct confrontation with the United States and Israel.⁹⁷

For these reasons, American and Israeli intelligence officials judge that the current Iranian regime is rational, focused on regime preservation and keen to avoid a direct military clash with more powerful countries.⁹⁸ The priority the regime gives to survival is unsurprising, as it is a prerequisite for achieving every one of its material *and* ideological objectives, including the success of the revolution at home and the spread of Iran's Islamist model abroad. None of this precludes a nuclear-armed Tehran from making veiled nuclear threats in an attempt to enhance coercive diplomacy and bargaining leverage during crises. Nor does it rule out the risk that, because of Iran's conventional military weakness, the regime might contemplate the use of nuclear weapons under extraordinary circumstances to stave off imminent and total defeat. But history strongly suggests the regime would only use nuclear weapons if the regime's survival were at stake.

Iran's conventional military doctrine reinforces the assessment that it would not use nuclear weapons for *offensive* purposes. Tehran's military doctrine

seeks to deter attack by threatening to unleash a mix of proxy and terrorist violence, ballistic missile strikes and various other asymmetric capabilities aimed at holding adversaries' high-value targets at risk. When and if deterrence fails, Iranian doctrine calls for absorbing the first blow and then retaliating in a way that raises the costs for opponents through attrition and exhausting their forces.⁹⁹ Iran's unconventional forces and proxies have committed terrorist acts overseas, but Iran's overall military tendency regarding strategic weapons systems is reactive and retaliatory. In this context, a July 1998 statement by Iranian Defense Minister Ali Shamkhani following the first test launch of the Shahab-3 missile may be telling regarding how Tehran would conceptualize the role of nuclear weapons: "We have prepared ourselves to absorb the first strike so that it inflicts the least damage on us. We have, however, prepared a second strike which can decisively avenge the first one, while preventing a third strike against us."¹⁰⁰ In the face of recent Israeli threats to strike Iran's nuclear infrastructure, Iranian leaders have similarly emphasized their intention to retaliate against Israeli cities, hoping that the prospect of unacceptable costs would deter such an attack.¹⁰¹

Even if the current regime is unlikely to intentionally initiate a suicidal nuclear war, might a nuclear-armed Iran eventually come to be dominated by less rational, and thus less deterrable, forces? Since 2005, the power of ultraconservative principlists, including the IRGC, in Iranian politics has grown, and it is conceivable that the IRGC could take power someday.¹⁰² This could make a nuclear-armed Iran more risk acceptant, recalcitrant and difficult to deter.¹⁰³ Nevertheless, the chief goal of the IRGC is preserving the revolution, the state and its own parochial political and economic prerogatives – all of which could be put at risk by the threat of massive retaliation.¹⁰⁴

More apocalyptic voices also exist in Iran, including some associated with outgoing Iranian

president Mahmoud Ahmadinejad. But adherents to the so-called “cult of the Mahdi” are a distinct and increasingly marginalized minority and are not likely to dominate the Islamic Republic. They largely include ultraconservative lay people who claim direct access to God and are reviled by the traditional clerical establishment, including Supreme Leader Khamenei.¹⁰⁵ Apocalyptic thinking does not appear to represent the predominant view within the IRGC, and individuals accused of holding such “deviant” views have been systematically harassed and arrested.¹⁰⁶

Strengthening U.S. Declaratory Policy

Iran is sufficiently rational for deterrence to operate, but it would not happen automatically. Effective deterrence must start with a strong U.S. declaratory policy, publicly articulated by the president and reinforced through private messaging, that clearly identifies the stakes involved in Iranian nuclear use and associated threats. To be credible, deterrent threats must combine sufficient capabilities with the political will (or “resolve”) to use those capabilities. But communicating one’s capabilities and intent to the adversary is equally important. Public statements would therefore help set Iranian expectations and, by putting Washington’s reputation on the line, create “audience costs” to backing down, enhancing the credibility of U.S. retaliatory threats.¹⁰⁷ In the absence of clear statements about U.S. commitments, a nuclear-armed Iran would likely jump to its own conclusions. Ambiguity can sometimes be helpful for deterrence; with revisionist and risk-taking adversaries, however, ambiguity may be perceived as opportunity, and nuclear deterrence is better served by spelling out clear red lines.¹⁰⁸

U.S. declaratory policy must therefore carefully delineate Washington’s response to certain Iranian behaviors and the circumstances under which the United States would contemplate using nuclear weapons to defend American interests.¹⁰⁹ It should seek to bolster both direct and extended deterrence by explicitly warning Iran about the U.S. reaction

to any use of nuclear weapons against U.S. territory or personnel, or against friendly states. And it should seek to dissuade an emboldened Iran from employing force below the nuclear threshold. This would require the United States to strengthen its declaratory policy beyond the statements in the 2010 Nuclear Posture Review (NPR). The NPR carefully distinguishes between the role of nuclear weapons in U.S. strategy toward countries that are complying with their nonproliferation obligations and those, like Iran and North Korea, that are not. The NPR bolsters America’s long-standing “negative security assurance” by stating that “the United States will not use or threaten to use nuclear weapons against non-nuclear weapons states that are party to the NPT and in compliance with their nuclear non-proliferation obligations.” However, “proliferating states must understand that any attack on the United States, or our allies and partners, will be defeated, and any use of nuclear weapons will be met with a response that is effective and overwhelming.”¹¹⁰

For a containment strategy, this declaratory policy should be amended to explicitly threaten U.S. nuclear retaliation in the event that Iran uses nuclear weapons or transfers nuclear weapons to terrorists and to provide stronger assurances to defend allies and partners against Iranian nuclear threats. U.S. declaratory policy should also strengthen the existing U.S. regional commitments described by the 1969 Nixon and 1980 Carter Doctrines¹¹¹ to signal a commitment to respond to emboldened Iranian coercion and aggression below the nuclear threshold. The United States should explicitly state that any Iranian aggression against U.S. forces, interests, allies or partners would be defeated, through the use of military force if necessary. Furthermore, Washington should make clear that any attempt to threaten the free flow of commerce in the region or the territorial integrity of American allies and partners, including the provision of material assistance to terrorist

organizations, would be viewed as a challenge to vital U.S. interests (see Text Box).

Washington should pair this general declaratory policy with tailored public and private deterrence messages aimed at key Iranian leaders at multiple levels of Tehran's decisionmaking process. This would require a robust intelligence effort to identify, map and profile key Iranian leaders and military commanders, including a careful assessment of what they value, what they perceive, their capacity to receive information and their risk propensity.¹¹³ It would also require a comprehensive strategic communications plan to integrate public affairs, public diplomacy, intelligence activities and military information operations to reinforce perceptions of U.S. capabilities, interests and resolve to both Tehran and U.S. partners.¹¹⁴

The Credibility of Retaliatory Threats

American capabilities and resolve would make threats to respond to any Iranian nuclear attack against the United States inherently credible. The

United States possesses a highly potent nuclear arsenal. By 2018, even after implementing the New Strategic Arms Reduction Treaty (New START), the United States will be allowed to deploy 1,550 nuclear warheads.¹¹⁵ In fact, the 1,550 legal limit underrepresents the actual number of deployable nuclear warheads allowed under the treaty because of counting rules that, for example, assign one weapon per bomber instead of the actual number of weapons that a bomber can carry.¹¹⁶ Washington's nuclear arsenal includes a "triad" of strategic capabilities: ICBMs (Minuteman III), submarine-launched ballistic missiles (Trident II SLBMs) and heavy bombers (B-2 stealth bombers capable of delivering B-83 bombs and B-52H bombers capable of delivering both B-83s and W-80 air-launched cruise missiles). The United States also maintains "nonstrategic" nuclear weapons (a variant of the B-61 bomb) deliverable by tactical dual-capable aircraft (DCA), including F-15E and F-16 fighter-bombers and eventually the stealth F-35 Joint Strike Fighter.¹¹⁷

An Illustrative Declaratory Policy Toward a Nuclear-Armed Iran

In response to a nuclear-armed Iran, the president should unequivocally state:

It remains the policy of the United States to refrain from using or threatening to use nuclear weapons against nonnuclear states that are party to the Nuclear Non-Proliferation Treaty and in compliance with their nonproliferation obligations. Iran no longer falls in this category. The United States will respond to any use of nuclear weapons by Iran or its allies against the United States or

*U.S. allies and partners with effective and overwhelming means, including, if necessary, nuclear weapons. The transfer of nuclear weapons or material by Iran to states or non-state entities would also be considered a grave threat to the United States, and the United States would hold Iran fully accountable for the consequences of such action.*¹¹²

The United States has a vital interest in, and a longstanding and enduring commitment to, the security of the Middle East. Any

attack on the United States, U.S. forces or U.S. allies and partners will be defeated. The United States will also regard any action by Iran that threatens the free flow of commerce or the independence or territorial integrity of U.S. allies and partners, including efforts to provide material assistance to terrorist organizations, as a challenge to the vital interests of the United States. In such circumstances, the United States is prepared to respond with all necessary means, including the use of military force.

American capabilities and resolve would make threats to respond to any Iranian nuclear attack against the United States inherently credible.

These unmatched capabilities ensure a robust “second-strike” capability to retaliate against any conceivable Iranian nuclear attack. Moreover, Iran is exceptionally vulnerable to U.S. nuclear retaliation; 20 percent of Iran’s population, 45 percent of its industrial base, 50 percent of its economy and most of its governmental apparatus resides in Tehran alone.¹¹⁸

Given the vital interest that every nation has in defending its territorial integrity, and America’s history of overwhelming responses to large-scale attacks (e.g., Pearl Harbor and 9/11), there should be little doubt in Tehran that the United States would massively retaliate to any Iranian nuclear strike on the U.S. homeland. This would be the case both for emotional reasons – the profound desire for revenge – and because of the need to demonstrate the credibility of U.S. retaliatory threats to other potential adversaries. And even if Iran somehow doubted Washington’s willingness to respond with nuclear weapons, the United States possesses sufficient conventional military capability to severely punish Iran even without resorting to nuclear retaliation. Therefore, if the Iranian regime is rational, it will quickly realize that any nuclear attack on the United States would result in its total destruction.

A strengthened declaratory policy might also be sufficient to deter Iran from using nuclear weapons against U.S. regional allies, partners and military

facilities. The countries at greatest risk are Israel, the Gulf Cooperation Council (GCC) states and perhaps Turkey. All have long-standing security commitments from the United States, and in the conventional domain, Tehran likely already believes that the United States would retaliate if it directly attacked any of them. A revised declaratory policy would reinforce that belief in the nuclear context.¹¹⁹

Nevertheless, all nuclear extended deterrence arrangements face a fundamental credibility challenge: Because the state providing the nuclear umbrella invariably values its own homeland more than the security of its allies, it seems inherently implausible that it would risk massive retaliation from a nuclear-armed adversary to defend its allies’ territory.¹²⁰ During the Cold War, this was the “Boston-for-Berlin” problem; in the case of a nuclear-armed Iran, it might be the “Tampa-for-Tel Aviv” or “Raleigh-for-Riyadh” problem.

Extended deterrence becomes somewhat more credible if the country being protected has intrinsic value to the vital interests of the state providing the nuclear umbrella.¹²¹ This is the case for the states most plausibly threatened by Iranian nuclear attack, so Tehran would likely take declarations that Washington would risk war with a nuclear-armed Iran to defend its friends seriously. In the case of Israel, the long-standing U.S.-Israel alliance and the likelihood of extraordinary political pressure inside the United States to respond in the aftermath of an Iranian nuclear strike on Israel would likely be sufficient to give Iran pause.¹²² Indeed, the Iranian conspiratorial tendency to see the American “Great Satan” and the Israeli “Little Satan” as inextricably linked would only deepen Tehran’s perception that an attack would produce an overwhelming U.S. response. Turkey, another long-time ally, falls under the American nuclear umbrella via NATO’s Article V commitment. Iran would have little doubt that a nuclear

strike on Turkey would prompt an overwhelming response from the United States, not only because of Turkey's intrinsic importance but because a failure by Washington to fulfill its NATO guarantee would call into question the credibility of every other global U.S. commitment. And for Saudi Arabia and the other Gulf states, Tehran knows that the United States has a vital interest in preventing any attacks that risk crippling the global economy – an interest that has underpinned the American commitment to the Gulf region for decades.

Nuclear Security Guarantees

America's intrinsic interests in defending key allies would mitigate, but not completely resolve, the credibility problems associated with extended deterrence. Under some circumstances, a nuclear-armed Iran might still doubt Washington's willingness to risk a nuclear exchange to defend its allies and partners. And even if Iran believed U.S. commitments, U.S. friends might not; paradoxically, it might take more to reassure Washington's allies and partners – and therefore prevent their destabilizing reactions to a nuclear-armed Iran – than it would take to deter Iran.¹²³

Historically, nuclear guarantees have played a particularly important role in preventing insecure allies from pursuing their own nuclear capabilities.¹²⁴ The prospect of a proliferation cascade in response to a nuclear-armed Iran is probably exaggerated, but prompt U.S. action to provide credible security guarantees would still be required to head off the temptation of some states, especially Saudi Arabia, to follow Tehran into the nuclear club.¹²⁵ It would be imperative for the United States to immediately engage in high-level dialogue with its regional partners and allies to explore what additional measures would be required and would be politically feasible. But Washington should also make clear to allies and partners that enhanced security guarantees come with reciprocal expectations. Nonnuclear states would be expected to

refrain from pursuing their own nuclear weapons, and all regional allies and partners would be expected to support U.S. regional initiatives and act prudently in confrontations with Iran.¹²⁶

These guarantees could come in a wide variety of forms. A handful of states might seek formal U.S. nuclear guarantees through a bilateral or

Paradoxically, it might take more to reassure Washington's allies and partners – and therefore prevent their destabilizing reactions to a nuclear-armed Iran – than it would take to deter Iran.

collective defense treaty. Others might seek executive agreements that publically affirm common interests and close security ties with the United States. Still others might find Washington's general declaratory policy, combined with robust security cooperation and private assurances, sufficient. The United States would need to carefully tailor the arrangements with each partner, factoring in both operational and political considerations, and resist a one-size-fits-all approach.

Extending the U.S. nuclear umbrella to Israel via a bilateral defense treaty is conceivable, although it is unclear whether Israel would desire such a formal arrangement. On the one hand, there would be significant potential deterrence benefits. Although Israel is widely assumed to have its own robust retaliatory capabilities, it lacks strategic depth. Israeli leaders may fear that their command-and-control systems would be potentially vulnerable to

an Iranian nuclear first strike, thus putting Israel's retaliatory capability (and its deterrent) at risk. A backstopping nuclear guarantee from the United States could provide Israel with crucial reassurance. Yet Israeli leaders might be hesitant to sign any agreement perceived to limit their freedom of action and may fear that a U.S. defense treaty would somehow imply that Israel's national deterrent was insufficient.¹²⁷ Consequently, Israel may ultimately prefer a less formal arrangement including enhanced U.S. public assurances and expanded security assistance and cooperation. Still, as noted above, Iran is likely to perceive a credible U.S. umbrella over Israel regardless of the precise form of an enhanced security guarantee.

Formal nuclear security guarantees are less likely for America's Arab partners because of political realities in regional capitals and in Washington. Although the level of anti-Americanism varies among Arab countries, few Arab leaders would be willing to sign a formal security treaty with the United States. Despite close U.S. ties to the Egyptian military, for example, it is difficult to imagine a Muslim Brotherhood-dominated Egypt seeking a formal arrangement with the United States beyond the country's current major non-NATO ally status.¹²⁸ Nor, for the foreseeable future, is Iraq likely to risk Iran's ire by seeking an accord with Washington that goes much beyond the general statement of partnership and cooperation in the 2008 U.S.-Iraq Strategic Framework Agreement.¹²⁹ Moreover, given Congressional concerns over human rights, political freedom, regional media and anti-Israeli positions in the Arab world, formal treaty guarantees would be no easier to sell in Washington.¹³⁰

Gulf states are also unlikely to seek formal treaties, but they are likely to seek some form of enhanced security assurances from Washington in reaction to a nuclear-armed Iran. This would provide the United States with an opportunity to offer expanded protection in exchange for commitments

by these states not to pursue their own nuclear capabilities. The two most hawkish and militarily capable Gulf states – Saudi Arabia and the United Arab Emirates – are especially likely to move toward a closer embrace of Washington,¹³¹ as are Bahrain and Kuwait, which fear Iranian-backed subversion among their Shiite populations. Disagreements among GCC states, however, make bilateral arrangements more likely than multilateral ones. Bilateral executive agreements to deepen formal defense ties are conceivable with some GCC states, such as the United Arab Emirates, but domestic sensitivities could make even these types of arrangements politically difficult in Saudi Arabia and some other Gulf countries. Ultimately, a combination of broad U.S. declaratory statements and private high-level assurances, nested within expanded security cooperation activities, may have to suffice for most Gulf states.¹³²

Forward Nuclear Deployments

Strategic nuclear forces based in the continental United States and at sea are capable of meeting the direct and extended deterrence requirements necessary to contain a nuclear-armed Iran. *Operationally*, U.S. nuclear forces do not need to be deployed to the Middle East, and ideally, they would not be. Yet, *politically and symbolically*, forward-deployed forces may be needed to reassure anxious allies. The United States must therefore be prepared to explore a number of ways to display nuclear weapons in the region to enhance extended deterrence.¹³³

One option would involve taking steps to more credibly bring U.S. strategic forces into play in the region. Nuclear-capable B-2s or B-52Hs could periodically deploy to Diego Garcia in the Indian Ocean as part of nuclear assurance exercises, for example. The United States no longer has sea-launched nuclear cruise missiles on its surface vessels or submarines, so it cannot station nonstrategic nuclear weapons off-shore. But the United States still possesses nuclear submarines with Trident II SLBMs. Although these strategic assets

need not be near Iran to be used in an Iran-related contingency, the United States could advertise periodic deployments closer to Iran, both for symbolic reasons and, during a crisis, to provide flight paths that do not have to cross Russian or Chinese territory.¹³⁴ The United States could also consider designating some of its ICBM, SLBM, strategic bomber or Europe- or United States-based DCA for Iran-related nuclear contingencies.¹³⁵

Operationally, U.S. nuclear forces do not need to be deployed to the Middle East, and ideally, they would not be... Yet, politically and symbolically, forward-deployed forces may be needed to reassure anxious allies.

Another option would be to deploy DCA, under either sole U.S. control or the type of “dual key” arrangements the United States has with NATO nations, on an enduring basis in the region. However, at least as it relates to America’s Arab partners, it is difficult to imagine such enduring deployments being politically feasible, either in the region or in Washington.¹³⁶ Moreover, even proposing to permanently station such forces in the region immediately after Iran acquires nuclear weapons could be highly destabilizing, potentially creating a kind of Cuban-missile-crisis-in-reverse dynamic with Tehran. However, even if DCA were not deployed on an enduring basis, the United States could consider constructing the infrastructure

required for such deployments in selected partner states and then deploy DCA forward for periodic exercises or during crises to demonstrate resolve. Maintaining the viability of this option would mean ensuring that F-35s are capable of replacing aging F-15E and F-16 DCA.¹³⁷ The United States would also have to follow through on current commitments to the full scope life extension of the B-61 tactical nuclear bomb.¹³⁸

Other Steps to Bolster Israel’s Deterrent

Israel has long adopted a strict policy of nuclear “opacity,” but it is widely assumed to have a robust nuclear arsenal. It is impossible to confirm the extent and nature of Israel’s alleged nuclear program, but public estimates of the arsenal’s size range from 60 to 400 warheads, with the most credible estimates putting the number at between 100 and 200 atomic weapons (Israel may also have thermonuclear weapons).¹³⁹ The nature and quantity of potential Israeli nuclear delivery systems is equally murky, but Israel possesses dozens of road-mobile, solid-fuel Jericho II MRBMs and is reportedly developing a Jericho III missile (potentially with intercontinental range), both of which are theoretically capable of delivering nuclear weapons.¹⁴⁰ Israeli air force F-15 and F-16 fighter-bombers are also believed to be capable of delivering small-yield nuclear warheads.¹⁴¹ The Israeli navy currently possesses four Dolphin-class diesel-electric submarines, and has two more on order from Germany; some sources suggest that these submarines may be capable of launching Popeye Turbo nuclear-capable cruise missiles.¹⁴² Israel’s presumed mix of nuclear forces thus provides a viable second-strike capability, enabling it to massively retaliate against Iran’s major cities, military facilities and economic infrastructure after any Iranian attack.¹⁴³ However, as noted above, Israeli leaders may still fear that Iran could eventually develop the capability for a disarming decapitation strike against Israeli command-and-control systems.

Therefore, in addition to offering to formally extend America's nuclear umbrella over Israel, Washington should pursue other steps to bolster Israel's deterrent. For example, the United States could offer to provide Israel with technical assistance and "lessons learned" to help improve the resilience of its military command-and-control systems against a potential Iranian nuclear attack. Washington would need to be careful, however, to ensure that such assistance was consistent with U.S. obligations under the NPT not to directly support Israel's nuclear capabilities.

It would also be imperative to engage Israeli leaders on their nuclear posture. If Iran's program remains ambiguous, the United States should encourage Israel to maintain its current policy of nuclear opacity. However, if Iran declares its nuclear capabilities, there would likely be significant pressure on Israeli leaders to follow suit. After all, credible deterrent threats rest on more than capabilities; they also depend on the adversary *knowing* those capabilities and understanding a nation's intentions.¹⁴⁴ For this reason, a growing number of commentators, including Israeli security experts, argue that Israel needs to clarify its nuclear doctrine so that Iranian leaders "understand the horrific price Iran will pay if it uses these weapons."¹⁴⁵ Israel might be able to do so without coming completely out of the nuclear closet. For example, officials could specify the conditions under which Israel would use its "strategic retaliatory capabilities" without explicitly referencing nuclear capabilities, thereby splitting the difference between the current policy of opacity and the need to communicate intentions to Tehran.¹⁴⁶

Although some argue that the United States should encourage Israel to maintain nuclear opacity regardless of Iran's nuclear posture,¹⁴⁷ it would be unwise for Washington to stand in the way of a more open Israeli nuclear policy. Iran undoubtedly assumes that Israel has nuclear weapons, but moving away from opacity would allow Israel to

better communicate its capabilities, especially its invulnerability to an Iranian first strike, as well as its nuclear red lines.¹⁴⁸ Given decades of Israeli-Iranian mistrust and the absence of direct communications, stable deterrence would likely require such steps. Clarity is especially crucial for risk-acceptant opponents like Iran that might otherwise misinterpret ambiguity as a lack of resolve. Although an Israeli decision to move toward a more open nuclear posture could increase political pressure on Arab states and further strain the NPT, deterrence considerations should take precedence over proliferation-related concerns in this case. Iran's emergence as a nuclear-weapons state would likely be the key determining factor in Arab calculations, especially for countries such as Saudi Arabia, regardless of Israel's posture. Moreover, Arab states and publics *already* assume that Israel has nuclear weapons, so the incremental increase in political pressure for additional regional proliferation associated with Israel's policy would probably be modest. Israel could also consider pairing its public nuclear declarations with pledges aimed to blunt proliferation concerns, including a commitment to consider future constraints on its arsenal in exchange for reciprocal and verifiable limitations on Iran's program.¹⁴⁹

Deterring Iranian-Sponsored Nuclear Terrorism

Given Iran's track record of supporting terrorism, concerns about Iran sponsoring a nuclear terror attack are understandable. Nevertheless, it should be possible to deter Tehran from passing a nuclear device to terrorists to use against the United States, Israel or other states falling under the U.S. nuclear umbrella. As noted above, the Iranian regime has historically calibrated its support of terrorist activities to minimize the risks of direct retaliation and confrontation. Whatever risks it might have been willing to run in the past by launching attacks against U.S. or Israeli targets would pale in comparison to the gamble that Tehran would be

taking by using a terrorist organization to deliver a nuclear attack. Nothing in the regime's past behavior suggests that it would run such risks of annihilation. Indeed, U.S. intelligence officials note that Iran already has the capability to produce and weaponize some chemical and biological agents.¹⁵⁰ Yet despite having these capabilities, there is no documented case of the IRGC or other Iranian entities transferring weapons of mass destruction (WMD) to proxies or terrorist organizations.¹⁵¹

Moreover, Iran has varying degrees of influence over Hezbollah, Hamas, Palestinian Islamic Jihad (PIJ), and other Iranian-backed proxies, and controls none of them completely.¹⁵² It is hard to believe that Tehran would provide its ultimate weapon to sub-state groups without certainty about how it would be deployed – especially because the fate of Iranian civilization could hang in the balance.¹⁵³ For some time, this reluctance would be compounded by the small size of the Iranian nuclear arsenal, which would require Iran to maintain possession and tight control to maximize deterrence. The proxy organizations most likely to engage in terrorism on Iran's behalf – particularly Hezbollah – also have significant political objectives and investments of their own and therefore much to lose. Even if individuals within some of these groups are willing to martyr themselves, the organizations have a self-interest in survival and achieving their political goals, and they have a territorial “return address.” As such, they are deterrable.¹⁵⁴

The baseline risk of Iran transferring nuclear weapons to terrorists is therefore low, but additional steps should be taken to enhance deterrence further. Improving attribution capabilities – and Tehran's perceptions of those capabilities – would be especially important.¹⁵⁵ All else being equal, the more that Iranian leaders believe that any nuclear use by terrorists on their behalf would be traced back to the regime, the less likely they will be to

take such a gamble. Therefore, the United States should make additional investments in nuclear forensics aimed at identifying the “isotopic signatures” of interdicted nuclear materials and devices, as well as detonation signals and post-detonation debris, so that it will be easier to trace fissile material back to its point of origin.¹⁵⁶ Although the United States has made significant advances in this area in recent years, more attention, funding, policy coordination and operational planning is required.¹⁵⁷ Work to better understand and characterize the full range of potential nuclear threat devices should also be expanded.¹⁵⁸ And the United States should capitalize on a growing international recognition of the need to improve nuclear forensics capabilities to push for greater collaboration, information sharing and development of technology and human capital.¹⁵⁹

These technical and scientific activities, however, are only one aspect of attribution, which also includes traditional law enforcement and intelligence activities.¹⁶⁰ Indeed, part of deterring Iran from sponsoring nuclear terrorism would involve making the regime understand that it would not be likely to get away with such attacks even if nuclear forensics proved imperfect. Recent research shows that attribution would not depend on significant advances in forensic capabilities. Historically, there has been a strong positive relationship between the number of fatalities in conventional terrorist attacks and the likelihood of attribution, and attribution rates have been particularly high for attacks on the U.S. homeland or the territory of a major U.S. ally. In the case of a nuclear terrorist attack, the very small number of suspects would also make traditional forms of attribution easier. Few countries sponsor terrorism; few terrorist organizations have state sponsors; each sponsored group has few sponsors (usually only one); and the number of potential nuclear sponsors of terrorism is very small. Moreover, given the enormous risks

involved, even an extraordinarily risk-acceptant state would only contemplate transferring a device to a group with a record of unwavering loyalty and sufficient operational competence to carry out a complex operation across international lines – and this level of trust implies pre-existing ties.¹⁶¹ In short, absent a shred of evidence, if Hezbollah, PIJ or Iraqi-based Kataib Hezbollah uses a nuclear weapon against the United States, Israel or any other nation, there will be only one suspect: Iran.¹⁶² Part of reinforcing deterrence will be ensuring that Iranian leaders understand this. This can be done

Absent a shred of evidence, if Hezbollah, PIJ or Iraqi-based Kataib Hezbollah uses a nuclear weapon against the United States, Israel or any other nation, there will be only one suspect: Iran. Part of reinforcing deterrence will be ensuring that Iranian leaders understand this.

through private messages to Tehran stating that if any group with known ties to Iran carries out a nuclear attack, the United States will presume that Iran is the source and respond accordingly.¹⁶³ Convincing Iran of the high likelihood of attribution would likely prove sufficient for deterrence or, under the exceedingly low-probability scenario that Tehran still decides to go forward, force Iranian operatives to rely on a completely untested organization – a move that would significantly increase the likelihood of failure.¹⁶⁴

VI. DEFENSE

Defense would be the second major component of a containment strategy. Robust defenses against nuclear, conventional and irregular threats would aim to produce deterrence by denial. These defenses need not be 100 percent effective to dissuade Iranian attacks. They just need to alter Tehran's cost-benefit calculation, making the expected costs of aggression high and the expected probability of achieving the benefits low. Beyond their value in aiding deterrence, defensive measures would also mitigate the effects of Iranian aggression and adventurism if deterrence fails and would be essential to reassure allies and partners of Washington's commitment to their security.

National Missile Defense

Defense against a nuclear-armed Iran would need to begin at home. Defending the U.S. homeland against Iranian nuclear weapons would enhance deterrence by denial, an especially important component of deterrence when confronting a risk-acceptant adversary. Moreover, by reducing U.S. vulnerability to Iranian reprisals, improved homeland defenses would greatly bolster the credibility of extended deterrence commitments, in the eyes of both Tehran and America's partners.

Bolstering national missile defense (NMD) would be especially important. The U.S. intelligence community assesses that ballistic missiles would be Iran's preferred delivery platform for nuclear weapons, and Iran's ambitious space program suggests that it may eventually be able to field an ICBM capable of striking the United States.¹⁶⁵ For years, U.S. intelligence officials have offered heavily caveated estimates that Iran could test an ICBM as soon as 2015, given substantial foreign assistance from countries such as China, Russia or perhaps North Korea.¹⁶⁶ However, Iran does not appear to have had sufficient levels of outside help, and sanctions have limited Iranian access to key foreign components and materials. Thus far, Iran's flight

test program has also fallen short of the requirements necessary to produce an ICBM. Remaining technical challenges suggest that Iran is not likely to field an ICBM before 2020.¹⁶⁷ Even this estimate may prove optimistic, especially for the development of a long-range nuclear ICBM that could reach the United States. When the rotation of the Earth is factored in, an Iranian ICBM would need to be able to carry a one-ton payload (the approximate weight of a nuclear warhead) for a nominal range of 11,000 km to strike the East Coast of the United States. Because of its lighter weight and faster launch times, a solid-fuel ICBM is a much more attractive option than a liquid-fuel variant to achieve this kind of range, but Iran is struggling to indigenously build solid-fuel engines because of sanctions.¹⁶⁸ Thus, Washington should have adequate time to expand its NMD capabilities to counter a nuclear-armed Iran.

Since 1999, the United States has pursued a "limited" NMD architecture aimed at preventing rogue states, such as North Korea and Iran, from using long-range missiles to threaten the U.S. homeland; these systems also provide some protection from an accidental nuclear launch by Russia or China. The Bush administration devoted significant resources to build two Ground-based Midcourse Defense (GMD) system sites – one with 26 Ground-based Interceptors (GBIs) at Fort Greely, Alaska, and another with four interceptors at Vandenberg Air Force Base, California. The Bush administration had intended to build a third GMD site, but given the costs involved and trend lines in the Iranian missile threat, the Obama administration shifted resources to a four-stage European Phased Adaptive Approach (EPAA) to provide ballistic missile defense for European allies.¹⁶⁹

On March 15, 2013, Pentagon officials announced that the United States would procure 14 additional GBIs and install them at the Alaska GMD site, bringing the total number of installed GBIs to 44 by 2017. The administration made this decision

to “stay ahead” of long-range missile capabilities being developed by North Korea and Iran.¹⁷⁰ As part of the announcement, however, the administration scrapped the final phase (Phase 4) of the EPAA, which originally envisioned deploying a new generation of interceptors – the SM-3 Block IIB – in Europe to provide early intercept of future Iranian ICBMs launched toward the United States.¹⁷¹ Although U.S. and NATO officials insist that this will not weaken European defenses against Iranian missiles,¹⁷² Phase 4 of the EPAA would have potentially allowed the United States to fire a forward-deployed SM-3 Block IIB missile at an Iranian ICBM, assess whether interception occurred and then, if the early intercept failed, fire a GBI from the continental United States.¹⁷³ In the absence of the forward-deployed portion of this system, the United States may get fewer shots at an incoming Iranian ICBM. As a result, pressure to construct a third GMD site on the East Coast of the United States will likely grow.¹⁷⁴ Perhaps for this reason, when it announced the restructuring of the missile defense program, the Obama administration confirmed that it was initiating an environmental impact assessment for three potential GMD sites, including two possible locations on the East Coast.¹⁷⁵

Although the recent GBI announcement was framed in terms of the evolving threat from both North Korea and Iran, the current number of GBIs seems pegged largely to the North Korean threat. If Iran develops nuclear weapons, the United States should consider further interceptor purchases (provided technical specifications are reached) and move forward on constructing an East Coast GMD site. To address criticisms of existing GBI performance, the United States should also consider developing a more effective interceptor kill vehicle, improving sensor integration and enhancing midcourse discrimination capabilities.¹⁷⁶ At the same time, given the costs involved in expanding the GMD system (each GBI costs \$70 million¹⁷⁷),

the Pentagon should continue to review whether alternative means of defeating ballistic missiles before launch (e.g., forward deployed unmanned systems and advanced cyber capabilities) could provide more cost-effective defense.

Sufficient investments in a viable NMD system would provide important defense against the low-probability, but high-impact, scenario of an intentional, inadvertent or accidental Iranian nuclear attack against the United States. So long as Iran’s arsenal remains relatively small, U.S. NMD systems would likely provide reasonable protection. They would also greatly enhance the credibility of extended deterrence by mitigating the question of American resolve to risk trading Tampa for Tel Aviv or Raleigh for Riyadh in a potential nuclear exchange with Iran. And they would enable the United States to run more risks to defend its friends and cause the Iranians to back down during crises.¹⁷⁸ Nevertheless, barring a game-changing technological leap, missile defense will never be a complete solution. A nuclear-armed Iran could eventually seek to overwhelm NMD systems by launching missiles in salvos, releasing in-flight decoys, maneuvering missiles mid-flight or attacking sensors that enable missile defense.¹⁷⁹ This would put a premium on not only advancing U.S. NMD but also limiting the size and sophistication of Iranian missile capabilities (see the Denuclearization section below).

Defending Against Nuclear Terrorism

As noted above, improving prospects of attribution is one way to help prevent an Iranian transfer of nuclear weapons to terrorists; more effective defense is another.¹⁸⁰ This would involve providing adequate resources to stop nuclear terrorist plots at every step in the “event pathway,” including measures to detect and interdict an Iranian hand-off to non-state actors or the transportation of a device to a target site, as well as improved capabilities to “render safe” a found device and manage the consequences of a successful detonation.¹⁸¹

Investments in improved cargo scanning and port security would be particularly important to defend against the prospect that Iranian covert operatives or Iranian-backed terrorists could deliver a nuclear device to the United States via a container vessel.¹⁸² Better interagency coordination and more extensive international intelligence and technical cooperation would also be required to push the defensive perimeter outward from the U.S. homeland, multiplying the opportunities to detect and thwart an attack.¹⁸³

Defending Against Other Strategic Threats

As a nuclear-armed Iran's capabilities evolved, Washington would have to continuously assess whether its critical military systems were sufficiently resilient to Iranian attack.¹⁸⁴ This would be especially important if a nuclear-armed Iran eventually managed to field antisatellite weapons or developed the capability to produce a high-altitude EMP that could disrupt essential U.S. command-and-control systems.¹⁸⁵

In the near term, however, the bigger Iranian challenge to U.S. military and civilian systems would likely be in cyberspace. U.S. intelligence officials have noted that Iran's cyber capabilities, while still lagging substantially behind the most advanced states, have dramatically increased in depth and complexity in recent years.¹⁸⁶ Recent attacks, allegedly launched by Iran, against several U.S. banks, may also suggest a growing willingness to initiate offensive cyber operations against American targets.¹⁸⁷ Iran's cyber capabilities are likely to grow over time, and if Iran believed that its nuclear weapons shielded it from retaliation, it might become bolder in initiating cyber attacks against the United States. Defending against this threat would require continued steps to increase U.S. network resiliency, build cooperation on international standards, improve attacker attribution and develop active cyber defenses aimed at discouraging Iranian attacks.¹⁸⁸ The United States would need to finally pass meaningful cyber security

legislation.¹⁸⁹ Collaboration with the private sector and other states threatened by Iranian actions should also be expanded.¹⁹⁰

U.S. Conventional Force Posture

Homeland defenses would help to bolster the credibility of extended deterrence, but additional steps would need to be taken to directly defend the regional states most directly threatened by Iran. U.S. conventional forces deployed in the frontline states of the Persian Gulf would play an especially important role in reinforcing extended deterrence, containing the prospect of emboldened Iranian conventional or irregular aggression and reassuring anxious regional allies and partners.

The United States currently deploys approximately 50,000 forces in the Gulf.¹⁹¹ Around 15,000 troops are stationed in Kuwait to hedge against the unlikely prospect of an Iranian land incursion against GCC states and reinforce other U.S. regional operations.¹⁹² At any given time, the United States also deploys 20 to 40 naval vessels in the Persian Gulf and the Gulf of Oman, including one or two aircraft carriers, amphibious assault ships and vessels with robust minesweeping capabilities. And the United States bases advanced strike aircraft (including F/A-18s, F-15s, B1-Bs and F-22s), aerial tankers and intelligence, surveillance and reconnaissance (ISR) systems in a number of Gulf countries.¹⁹³ These naval and air assets protect shipping passing through the Strait of Hormuz and provide extensive capabilities to strike Iranian coastal weapons systems and other targets deeper inside Iran. Furthermore, Washington's existing defense access agreements with most GCC states ensure sufficient infrastructure and pre-positioned equipment to enable a rapid surge of additional conventional forces to the Gulf at the request of partner nations in the event of a future contingency.¹⁹⁴

To counter the growing Iranian missile threat, the United States also deploys an array of ballistic

missile defense (BMD) capabilities in the region. These include U.S. Patriot batteries – using a mix of Patriot Advanced Capability 2 and 3 (PAC-2 and PAC-3) interceptor missiles – for the defense of facilities in Bahrain, Kuwait, Qatar and the United Arab Emirates. Washington supplements these land-based capabilities with regular deployments of two or more Aegis missile defense ships at all times in the Gulf. The ships can provide protection from ballistic missiles, cruise missiles and aircraft for several hundred miles in all directions.¹⁹⁵ The United States also fields three AN/TPY-2 X-band radars in the region – one in Qatar, another in central Turkey and a third in Israel’s Negev desert – providing extensive ability to track and target ballistic missile launches from northern, southern and western Iran.¹⁹⁶ Moreover, Washington may soon have sufficient Terminal High-Altitude Area Defense (THAAD) missile defense batteries, complete with their own X-band radars, to deploy one to the Gulf on a rotational or enduring basis.¹⁹⁷ THAAD could expand existing defensive coverage, working alongside Aegis systems to provide a layered “upper-tier” midcourse and terminal-phase interception capability, while Patriot systems provide “lower-tier” terminal defense for U.S. forces. Even if THAAD is not sent to the region in the near term, the system is designed to be rapidly deployable on C-17 aircraft and thus could be rapidly deployed to the Gulf in the event of an emerging contingency.¹⁹⁸ All told, these systems provide the United States with an expanding ability to defend high-value targets against Iranian short-range ballistic missiles and MRBMs.

Effective containment of a nuclear-armed Iran would require the United States to maintain a robust conventional force presence in the Gulf, at least until regional partners’ capabilities and collective security arrangements have significantly strengthened. This presence would be crucial to check the prospect that an emboldened Iran would engage in conventional aggression and increased

political coercion and to reassure nervous regional partners of U.S. security commitments. U.S. conventional forces would serve an important “tripwire” function, signaling to Iran that the host nation could not be attacked with conventional or nuclear forces without attacking the United States. Placing troops in harm’s way and investing U.S. prestige in a partner’s defense would increase the prospect of an American response to aggression by a nuclear-armed Iran, blurring the distinction between direct and extended deterrence and thus

Effective containment of a nuclear-armed Iran would require the United States to maintain a robust conventional force presence in the Gulf, at least until regional partners’ capabilities and collective security arrangements have significantly strengthened.

making extended deterrence more credible.¹⁹⁹ Robust forward deployments would also provide the United States with flexible responses below the nuclear threshold during a fast-moving crisis to help control escalation.²⁰⁰

Current U.S. force levels would likely prove sufficient for containment purposes. Tehran’s military capabilities – in particular its missile forces and its coastal and naval anti-access/area-denial (A2/AD) capabilities – give the regime the ability to inflict pain, hold the interests of the United States and

its partners at risk and provide a potential means of coercion. But Iran is not capable of large-scale conventional aggression or territorial conquest (see Text Box). As senior U.S. defense officials have noted on numerous occasions, existing U.S. force levels allow the United States to execute a full range of Iran-related contingencies.²⁰¹ If the U.S. and Iranian militaries come to blows, there is no doubt who would “win,” in the narrow

operational sense. Indeed, analysts suggest that the U.S. military could destroy all key elements of Iranian conventional military power in virtually any scenario “in a matter of weeks.”²⁰² Even if Iran succeeded in getting nuclear weapons, and became more assertive or risk-acceptant, this would only increase the *probability* of a conventional contingency, not the fundamental nature of U.S. force requirements for such a contingency. Thus,

Iranian Conventional Military Capabilities

The 523,000-man Iranian military is the largest in the Middle East, but Iran lacks substantial power-projection capabilities. It has 350,000 army forces and approximately 100,000 additional Islamic Revolutionary Guard Corps (IRGC) ground troops. Yet it does not possess modern tanks and armored vehicles, it fields antiquated artillery and its army aviation assets are outdated and poorly maintained. Its land forces rely on numerical superiority and a layered internal defense of regular and paramilitary forces, rather than advanced technology, to thwart an invading opponent. The army and IRGC have the size and capability to slow an invading force, but, as Anthony Cordesman observes, “they are neither organized nor trained for power projection or sustained combat outside Iran.”²⁰⁴

Iran’s air force is in even sorrier shape. The country has 336 combat aircraft, of which 40 to

60 percent have limited or no mission capability at any given time. Because of age and lack of maintenance, many of Iran’s U.S.- and European-origin fighter aircraft cannot sustain a high sortie rate and are of limited value. The Iranian air force has limited air-to-air capability but cannot conduct a sustained, long-range air campaign. Iran has spent little to correct these problems, choosing instead to build a large and diverse ballistic missile arsenal controlled by the IRGC.²⁰⁵ Iran possesses the largest inventory of ballistic missiles in the Middle East, including hundreds of short-range ballistic missiles with ranges of 500 km or less, and fields a smaller, but increasing, number of medium-range ballistic missiles (MRBMs) with ranges up to around 2,000 km. These MRBMs include the liquid-fuel Shahab-3/Ghadr-1 and the solid-fuel Sejil-2/Ashura (under development), which are capable of striking targets throughout the Middle East

and could theoretically deliver a nuclear payload.²⁰⁶

Iran’s 18,000-man regular navy and 15,000-strong IRGC navy are more capable. They lack modern surface-combat vessels, but they have extensive asymmetric “anti-access/area-denial” (A2/AD) capabilities designed to threaten advanced navies operating in the shallow waters of the Persian Gulf and through the Strait of Hormuz. Iran’s A2/AD systems integrate coastal air defenses, shore-based long-range artillery and antiship cruise missiles, Kilo-class and midget submarines, remote-controlled boats and unmanned aerial vehicles, as well as more than 1,000 small attack craft equipped with machine guns, multiple-launch rockets, antiship missiles, torpedoes and rapid mine-laying capabilities. The entire 120-mile-long Strait of Hormuz sits along the Iranian coastline, within short reach of these systems.²⁰⁷

maintaining the current forward U.S. presence in the region would likely prove adequate to defend against conventional aggression or harassment by an emboldened nuclear-armed Iran.²⁰³ Indeed, because some U.S. forces in the Gulf primarily support ongoing efforts in Afghanistan, the end of the Afghan campaign could potentially enable a modest reduction without undermining preparedness for Iran-related contingencies.

Although the total number of U.S. forces deployed to the region need not change much to contain a nuclear-armed Iran, the mix of forces would likely need to evolve along with Iranian capabilities. Given the implausibility of Iranian land attacks and the ability to flow U.S. ground forces forward under such circumstances, the enduring U.S. presence in Kuwait could be reduced. At the same time, additional maritime capabilities may need to be deployed to account for further improvements in Iranian A2/AD capabilities and the potential for a nuclear-armed Iran to act more assertively in the Strait of Hormuz.²⁰⁸ Protecting against Iranian nuclear threats would also likely require Washington to expand its already-extensive BMD commitments to the region. Assessments of current U.S. BMD capabilities in the Middle East have generally concluded that they provide adequate coverage to defend against *limited* ballistic missile attacks.²⁰⁹ But if Iran develops nuclear weapons, and if Tehran's ballistic missile and cruise missile capabilities evolve, the consequences of failed intercepts will increase dramatically. To address this enhanced threat, the United States would likely have to deploy additional Patriot and sea-based Aegis systems, as well as an enduring THAAD presence. In addition, the United States should explore the possibility of developing air-launched "boost-phase" interceptors that could target Iranian missiles shortly after launch using platforms such as fifth generation F-22 and F-35 fighters or unmanned aircraft deployed to the region.²¹⁰ The United States should also enhance

ISR capabilities to detect Iranian nuclear force movements and launch preparations and should expand the range of nonnuclear response options that could be used under extreme circumstances to destroy missiles before launch.²¹¹

Furthermore, effective containment would require Washington to work closely with partners to ensure continued base access, adequate supplies of pre-positioned equipment and secure lines of communication to facilitate a rapid surge of forces in the event of a future contingency.²¹² To supplement regional deployments on very short notice, and to hedge against the possibility of diminished access, the U.S. military should also continue to explore nonnuclear "prompt global response" capabilities.²¹³

Security Cooperation and Operational Integration in the Gulf

Enhanced U.S. security cooperation with Gulf partners – and American assistance in better integrating Gulf defense efforts – would be another major component of containment. Closer security cooperation would help to demonstrate Washington's continued political commitment to defending regional partners against a nuclear-armed Iran and would enable regional states to confidently defend themselves and act jointly to counter Iranian threats. More capable partners and improved operational integration would facilitate general deterrence by reducing the value of Iranian aggression and by demonstrating collective resolve.²¹⁴ And in the event of a contingency, this would bolster immediate deterrence by freeing up U.S. forces from defensive assignments to focus on imposing costs against Iranian military and irregular forces.²¹⁵

Although Iran enjoys numerical superiority over all the GCC states combined, it is massively outspent by its Gulf neighbors. In 2012, for example, Iran spent approximately \$23.9 billion on defense, compared with Saudi Arabia's \$52.5 billion and

an estimated GCC total of approximately \$77.7 billion.²¹⁶ Moreover, these totals actually understate the relative disparity in military technology between Iran and other Gulf countries because the GCC states have recently been investing in cutting-edge fighter aircraft, precision-guided munitions, missile defense systems and other military modernization programs. Saudi Arabia, the largest customer for U.S. defense articles and services in the world, possesses hundreds of advanced U.S. F-15 and UK Typhoon fighter aircraft, airborne refueling capability, AH-64 Apache attack helicopters, M1-A2 Abrams tanks and 16 Patriot (PAC-2) missile defense batteries.²¹⁷ In December 2010, in a move widely interpreted as reflecting growing Saudi concerns over Iran, Riyadh announced its intention to move forward on a record-setting \$60 billion dollar U.S. arms deal, including the purchase of Apache and UH-60 Blackhawk helicopters for the Saudi Land Forces and National Guard, 84 cutting-edge F-15SA fighter aircraft, upgrades to 70 existing Saudi F-15 fighters and an associated package of advanced air-to-air and air-to-ground weaponry. The formal contract was signed in December 2011, and the deal was followed shortly thereafter with an agreement to purchase additional multirole Typhoon fighters from the British.²¹⁸ The United Arab Emirates also ranks among the world's leading purchasers of advanced U.S. military hardware, including Apache helicopters, the world's most sophisticated variant of the F-16 fighter-bomber and advanced attack munitions.²¹⁹ In 2009, then-U.S. Central Command commander General David Petraeus remarked, "The Emirati air force can now take out Iran's air force."²²⁰ The Kuwaitis have procured major weapons systems as well, including M1A2 tanks, F/A-18 fighter aircraft and five Patriot (PAC-2) systems.²²¹

Given Iran's growing ballistic missile arsenal, the appetite among GCC states for BMD systems is increasing. The Saudis, for example, intend to modernize their eastern naval fleet, including the

possible purchase of BMD-capable Aegis missile defense ships from the United States.²²² They also have plans to upgrade existing Patriot batteries to the PAC-3 configuration and are reportedly contemplating purchasing THAAD.²²³ The United Arab Emirates has already begun to deploy Patriot batteries (PAC 3)²²⁴ and will become the first non-U.S. recipient of THAAD (likely in late 2015).²²⁵ In 2012, Qatar, which already hosts a U.S. AN/TPY-2 X-band radar, requested the sale of Patriot (PAC-3) and THAAD missile defense batteries as well.²²⁶

Despite these expanding GCC capabilities, effective containment would require U.S. efforts to help Gulf partners address a number of lingering operational shortcomings, including significant challenges in defense planning and sustainment.²²⁷ Increased joint planning, training and exercises could improve interoperability between the U.S. and GCC militaries. Beyond the operational benefits, these activities would help to increase confidence among Gulf partners about American commitments and, by actively involving Gulf states in the day-to-day practice of extended deterrence, would help to signal collective resolve to a nuclear-armed Iran.²²⁸

Containment would also require enhanced efforts to promote Gulf-wide defense integration, especially in the areas of shared early warning, air and missile defense and maritime security.²²⁹ As GCC states acquire advanced BMD capabilities such as PAC-3 and THAAD, their defense against Iranian missiles will grow. But to counter a nuclear-armed Iran, it would be imperative for the United States and Gulf states to greatly accelerate efforts to integrate early-warning and command-and-control systems and to pool available interceptors (which will always be hard pressed to keep up with the number of Iranian missiles), with the eventual goal of creating a Gulf-wide missile defense network.²³⁰ Furthermore, countering an emboldened Iran's maritime A2/AD systems would require expanded coalition activities. These collective efforts should

build off the experiences of Combined Task Forces 151 and 152 – multinational antipiracy and maritime security activities – currently operating out of Bahrain,²³¹ as well as large-scale multilateral exercises such as the 29-nation mine-clearing exercise conducted in the Persian Gulf in September 2012.²³²

The GCC states have historically been reluctant to better integrate their military activities, even when confronting common challenges, but this seems to be gradually changing as perceptions of the Iranian threat increase. The multilateral U.S.-GCC Strategic Cooperation Forum has recently supplanted annual bilateral “Gulf Security Dialogues” between the United States and GCC states. The concept was launched in September 2011 on the margins of the U.N. General Assembly meeting. The inaugural ministerial-level forum was held in Riyadh in March 2012 and was followed by another at the U.N. General Assembly meeting in September 2012. Although still embryonic, the initiative aims to deepen multilateral U.S.-GCC cooperation on counterterrorism, nonproliferation, maritime security and missile defense cooperation.²³³ If Iran crosses the nuclear threshold, leveraging such initiatives would be essential to accelerate defense integration.

Finally, protecting and assuring Gulf partners would require more U.S. assistance to defend against Iranian irregular threats, including terrorism, violent subversion, cyber attacks and other forms of sabotage – all activities that a nuclear-armed Iran may pursue more assertively in the Gulf. Protecting critical infrastructure – oil facilities, desalinization plants, power systems equipment and cyber systems – would be particularly important. Washington should expand efforts to improve the defense of oil infrastructure, both to reduce the likelihood and effect of potential Iranian-sponsored attacks and to calm international markets about the destabilizing consequences of Iran’s nuclear acquisition. This should

The GCC states have historically been reluctant to better integrate their military activities, even when confronting common challenges, but this seems to be gradually changing as perceptions of the Iranian threat increase.

include increased efforts to train facilities protection forces in the Gulf, building on the experience of U.S. efforts in Saudi Arabia to train a 35,000-man force to protect the Kingdom’s oil facilities and desalinization plants.²³⁴ The United States should also encourage the development of new pipelines, infrastructure and alternative routes to lessen the dependence of the Gulf states on transit through the Strait of Hormuz.²³⁵ And Washington should look for opportunities to deepen collaboration with Gulf states on cyber defense to prevent the type of attack, allegedly sponsored by Iran, that recently targeted computer systems at the Saudi state oil company Aramco.²³⁶

Strengthening Israel’s Defense

Israel is by far the most capable military state in the Middle East. The United States already provides Israel with more than \$3 billion in annual security assistance, and U.S.-Israeli military and intelligence cooperation is extensive.²³⁷ But if Iran crosses the nuclear threshold, the United States would likely need to further enhance its security cooperation activities to signal America’s unshakable commitment to Israel – to both more assertive leaders in Tehran and more anxious ones

in Jerusalem. It would be important to continue to provide Israel with cutting-edge technology, sustaining Washington's commitment to ensuring Israel's "qualitative military edge" against any potential regional adversary. At the same, the United States would have to carefully manage the inherent (and perhaps increasingly acute) ten-

If Iran crosses the nuclear threshold, the United States would likely need to further enhance its security cooperation activities to signal America's unshakable commitment to Israel – to both more assertive leaders in Tehran and more anxious ones in Jerusalem.

sion between these commitments to Israel and the growing appetite in the Gulf for advanced aircraft and stand-off precision weaponry, sometimes asking Israel to accept more tactical risk vis-à-vis Arab states for the strategic gain of checking Iran.²³⁸

Expanding and deepening U.S. assistance to Israeli rocket and missile defense would be particularly important to defend against a more adventurous Iran and more assertive Iranian proxies in Gaza and Lebanon. Israel has moved aggressively in recent years to construct a multilayered rocket and missile defense architecture. At the lowest level, it has deployed five Iron Dome batteries to fend

off short-range rockets. At the middle tier, it has deployed six Patriot batteries and is developing David's Sling, a more advanced system meant to intercept cruise missiles and rockets and ballistic missiles with a range of 75 to 400 km. And at the upper tier, Israel currently possesses two Arrow-2 missile defense batteries to counter MRBMs and is developing the more sophisticated Arrow-3 system.²³⁹ The United States has provided substantial financial and developmental support for all these systems; according to one estimate, as much as 60 percent of Israel's total missile defense costs have been paid for by U.S. funds.²⁴⁰

To guard against emboldened threats, additional U.S. assistance may be required to help Israel field at least 13 Iron Dome batteries, the number that analysts suggest is required to defend all of Israel against short-range rockets from Hezbollah or Iranian-backed Palestinian militants (money has thus far only been allocated for eight).²⁴¹ The United States has already bolstered Israel's BMD capabilities by deploying an AN/TPY-2 X-band radar in the Negev, positioning Aegis ships in the eastern Mediterranean capable of intercepting Iranian MRBMs and annually sending thousands of soldiers to Israel for joint BMD exercises with the Israeli Defense Forces.²⁴² In the face of a nuclear-armed Iran, Israel would likely seek additional U.S. BMD coverage, and even greater sharing of early-warning data. Ideally, Israel would eventually be integrated into a wider regional BMD architecture including both Turkey and the Gulf states, but this would likely prove politically infeasible unless there is an Israeli-Palestinian peace accord that would give other regional states threatened by Iran sufficient political cover to cooperate with Israel.

VII. DISRUPTION

At least for a time, a nuclear-armed Iran would likely increase its support for conventional terrorism and regional militancy. Defense would help mitigate this threat, but containment would also require greater efforts to disrupt Tehran's destabilizing influence and the "Iranian threat network" of covert operatives, surrogates and proxies.

Shaping a Regional Political Environment Resistant to Iranian Influence

Disruption should begin with efforts to shape a regional political context in the Middle East that is less susceptible to Iranian influence, reducing the ability of a nuclear-armed Iran to exploit ongoing regional instability and countering the ideological appeal of Iran's particular brand of "resistance." These efforts would seek to exploit a number of opportunities presented by recent trends and emerging dynamics across the region.

The uprisings sweeping the Arab world have created tremendous instability and uncertainty, but they have also created enormous challenges for Iran's regional ambitions. Throughout the Arab Spring, the Iranian regime has tried to cast widespread popular demonstrations and revolutionary fervor as an "Islamic Awakening" inspired by Iran's own 1979 revolution. Yet, Iran's narrative has generally been scorned and ridiculed in the Arab world.²⁴³ The widely held perception of Iranian meddling has decimated the country's "soft power" since the Arab uprisings began. Tehran's support for Syria's brutal crackdown, following soon after the Iranian regime's own repressive response to its 2009 Green Movement protests, has been especially damning to Iran's credibility in the region.²⁴⁴ A recent survey of 17 Arab countries and three other regional Muslim states also showed that majorities in most countries believe that the Middle East would be less stable if Iran developed nuclear weapons, suggesting that Iran's emergence as a nuclear-armed state could compound its problems on the Arab street.²⁴⁵

Iran's struggles to exploit the Arab uprisings will likely persist. As Arab publics increasingly look to their own governments to represent their interests, Iran's ability to leverage regional discontent to influence Arab public opinion will continue to wane. Emerging political actors vying for influence and votes in an increasingly populist landscape will be keen to brandish their Arab nationalist

Throughout the Arab Spring, the Iranian regime has tried to cast widespread popular demonstrations and revolutionary fervor as an "Islamic Awakening" inspired by Iran's own 1979 revolution. Yet, Iran's narrative has generally been scorned and ridiculed in the Arab world.

credentials and reluctant to forge close alliances with Tehran. The rise of the Muslim Brotherhood in Egypt presents a particular challenge to Tehran. The new Egypt is already pursuing a more independent and assertive foreign policy. This policy will not always square with American interests, but a more democratic Egypt, whether dominated by Sunni Islamist or secular parties, is likely to become an important competitor to Iranian leadership in the region.²⁴⁶

The biggest threat to Iran's regional influence, however, is the potential fall of Bashar al-Assad's regime in Syria, Iran's only Arab-state ally and an essential conduit for supporting militancy in the Levant.²⁴⁷ The uprising in Syria has produced a major problem for the integrity of the entire "resistance camp" in the region that Iran claims to lead.²⁴⁸ In Lebanon, Hezbollah has felt compelled to rhetorically and materially back Assad, but this support has exposed Hezbollah as a self-interested, Shiite-sectarian movement, badly damaging its Arab nationalist and resistance credentials at home and abroad.²⁴⁹ Meanwhile, Hamas, another card-carrying member of the resistance camp, has moved its foreign headquarters from Damascus and is increasingly under the political influence of Egypt, Qatar and even Turkey.²⁵⁰

As the resistance camp weakens, and especially if Assad falls, Iran may attempt to compensate by doubling down in Iraq.²⁵¹ But this will be a difficult bet to win, at least over the long term. To be sure, U.S.-imposed regime change, sectarian conflict and the rise of a Shiite-led government in Baghdad have all provided Iran with fresh avenues for influence in Iraq. The susceptibility of Iraq's government to Iranian hegemony, however, is widely exaggerated. Iraqi nationalism is profound, and local distrust of Iran – a country against which Iraq waged the bloodiest war of the late 20th century – runs deep, even among the country's Shiite population. Iraqi leaders across the ethno-sectarian spectrum also continue to desire a long-term strategic partnership with the United States and improved relations with Turkey and Iraq's Arab neighbors – objectives that are ultimately incompatible with Iranian domination. As Iraq's oil wealth and military strength grow over time, it will chart its own course. Iran will likely have more influence with Baghdad than many in Washington and elsewhere prefer, but Iraq will not be a puppet dangling at the end of Tehran's strings.²⁵² And even if it were, Iraq could not replace Syria as an Iranian gateway to the Levant.

These trends provide opportunities to disrupt Iran's regional influence, both today and in a future where Iran develops nuclear weapons. Promoting political and economic reform throughout the region would be important to checking Iran over the long term. In Egypt and Iraq, containment would require sustaining robust ties to civilian and military establishments while leveraging American assistance to support fragile democratic systems and promote much-needed political and economic reforms.²⁵³ Neither country will follow Washington's lead on every issue. However, both want (and need) a strategic relationship with America, and the United States has an interest in helping to stabilize and reinvigorate these historic counterweights to Iranian influence.²⁵⁴ Washington should also find ways to promote evolutionary reform in the Gulf. Although Gulf leaders often fear that domestic political openings will provide opportunities for Tehran to expand its influence with opposition groups, the reverse is more likely to be the case. In the wake of the Arab Spring, the failure to enact genuine political and human rights reforms in Gulf countries with large Shiite populations (Bahrain, Kuwait and Saudi Arabia) is likely to radicalize Shiite parties, pushing them toward, rather than away from, Tehran.²⁵⁵

Steps should also be taken to further weaken the Iranian-backed resistance camp relative to its competitors. In Syria, the United States must find ways to improve the battlefield and political prospects of non-jihadist elements of the opposition. When and if Assad falls, it will be imperative to help consolidate a stable transition of power or, at the very least, gain influence with opposition factions competing in the post-Assad political space.²⁵⁶ In Lebanon, containment would require Washington to significantly increase efforts to train and equip the Lebanese Armed Forces, as a means to both maintain American influence and grow a national, cross-sectarian institution that can counter Hezbollah's power in the long term.²⁵⁷ Similarly, the

United States should continue to provide assistance to Palestinian security forces in the West Bank, along with aid to build other Palestinian Authority institutions, as a long-term check on the power of Hamas and PIJ.²⁵⁸ The United States should also continue to push for a two-state accord between the

Directly targeting the Iranian threat network of covert operatives, surrogates and proxies would also be essential to check an emboldened, nuclear-armed Iran.

Israelis and Palestinians. Although a peace agreement would not resolve every tension in the Middle East, it would weaken Iranian-backed Palestinian militants, further undermine Iran's ability to play the resistance card throughout the region and expand opportunities for quiet anti-Iranian cooperation between Israel and the Gulf states.²⁵⁹

Targeting the Iranian Threat Network

Promoting a regional environment unfavorable to Tehran would be crucial to containment, but it would not be sufficient to disrupt Tehran's destabilizing activities. Directly targeting the Iranian threat network of covert operatives, surrogates and proxies would also be essential.

To check an emboldened nuclear-armed Iran, it would be imperative for the United States to work closely alongside the counterterrorism forces and intelligence services of partner nations to disrupt Iran's lethal covert activities and its support for terrorism, militancy and subversion. These efforts should include additional U.S. training to enhance

partners' counterterrorism capabilities and, likely, an increased regional presence of U.S. special operations forces (SOF).²⁶⁰ American SOF and intelligence professionals should work closely with their regional counterparts, not only to foil Iranian and Iranian-backed plots but also to actively target nodes in the network. This may require providing critical U.S. enablers, such as ISR assets and on-the-ground advisers, to facilitate direct action by partner nations against key network operatives. It would also be important to have adequate domestic legal authorities to allow unilateral operations against high-value targets in the Iranian threat network, perhaps akin to authorities that currently allow the U.S. military and intelligence community to go after al Qaeda.²⁶¹

Furthermore, U.S. partners would need to increase their efforts to interdict Iranian arms shipments to Hezbollah, Iraqi militants, Palestinian groups, Syrian regime forces, Yemeni Houthis and other groups. The United States could help by providing assistance and advice to improve partner surveillance and border control capabilities, sharing real-time intelligence on Iranian activities and networks and applying significant diplomatic pressure on countries such as Iraq and Egypt to crack down on smuggling operations that pass through their territories.²⁶² As we discuss in greater detail below, the United States should also work to expand international legal authorities to interdict arms shipments on the high seas.

Although counternetwork operations are often thought of as inherently "kinetic," some of the most effective tools for disrupting the Iranian threat network fall outside the military domain. Effective containment would require Washington to be much more aggressive in using financial and law enforcement instruments. To begin with, the U.S. Treasury should be more systematic in targeting the IRGC-Qods Force with financial designations for its support to terrorism and proliferation activities. U.S. actions such as travel bans,

asset seizures and criminal prosecutions should also be synchronized and directed against multiple nodes in the Iranian and proxy network (e.g., key facilitators, official companies, front companies, financial institutions and specific bank accounts). Special attention should be paid to “superfacilitators”: the relatively small number of individuals

Demonstrating a willingness to take risks, pay costs and confront Iran and its allies even when the stakes are relatively low may increase U.S. credibility when the stakes are higher.

that Iran, Hezbollah and other groups rely on to operate their financial, logistical and personnel supply lines.²⁶³

Washington should also seize the opportunities presented by the Iranian threat network’s deepening involvement in illicit activities. As the IRGC, the Iranian Ministry of Intelligence and Security (MOIS), Hezbollah and other surrogates and proxies become more involved in sanctions busting, money laundering and even drug trafficking in order to funnel cash to key portions of the network, they become vulnerable to more Treasury and law enforcement efforts.²⁶⁴ In 2011, for example, the Treasury Department designated Lebanese Canadian Bank under Section 311 of the PATRIOT Act for a drug-trafficking and money-laundering scheme linked to Hezbollah. (The Obama administration also accused the bank of providing financial services to Iranian government officials.)

The designation required all financial institutions doing business in the United States to sever ties with the bank and its subsidiaries, effectively locking it out of the global financial system. The \$5 billion bank quickly collapsed, dealing a significant financial and psychological blow to Hezbollah.²⁶⁵ Then in 2012, federal prosecutors seized \$150 million of the defunct bank’s assets held in New York accounts.²⁶⁶ As this example shows, U.S. agencies can act alone where they have adequate financial leverage or jurisdiction. But Washington should also seek to collaborate with other countries whenever possible; indeed, it may be easier to solicit cooperation in “criminal” matters than those framed as “terrorism,” since many countries do not want to admit that terrorist activities occur in, or through, their territories.²⁶⁷

Finally, counter network operations should emphasize “naming and shaming.” Over the past year, for example, U.S. officials have highlighted Iran’s attempt to transfer sophisticated weapons to Houthi rebels in Yemen,²⁶⁸ joint Iranian-Hezbollah efforts to form militias in Syria²⁶⁹ and Hezbollah’s responsibility for a July 2012 bus bombing in Bulgaria that killed five Israeli tourists.²⁷⁰ In a world of containment, the frequent exposure of such lethal activities could greatly facilitate network disruption because Tehran and its allies typically try to deny these violent acts for fear that they would reflect badly on Iran’s international reputation. Highlighting these activities – as well as passing intelligence to partners regarding associates and operatives of the IRGC-Qods Force, the MOIS, and Hezbollah working in their countries – could also force Tehran and its allies to assume a lower profile.²⁷¹

How Disruption Aids Deterrence and Reassurance

Demonstrating a willingness to take risks, pay costs and confront Iran and its allies even when the stakes are relatively low may increase U.S. credibility when the stakes are higher.²⁷² In any

given showdown with a nuclear-armed Iran, the regime's decision calculus will likely be most heavily influenced by assessments of U.S. capabilities and interests at that moment.²⁷³ Nevertheless, some studies suggest that a reputation for resolve in cases involving the same adversary improves the effectiveness of deterrence, especially extended deterrence.²⁷⁴

Although a nuclear-armed Iran would likely grasp America's overwhelming nuclear and conventional superiority, Tehran's current behavior suggests that it believes that its asymmetric capabilities – especially its use of covert and proxy violence – can help to neutralize U.S. advantages. Iran seems to doubt Washington's willingness to directly confront its lethal activities – a perception that would probably be deepened by its successful acquisition of a nuclear deterrent. The United States should therefore assertively combat a nuclear-armed Iran's actions at lower levels of violence – through targeted, direct action against elements of the network and more aggressive interdiction efforts – to enhance the perception of U.S. resolve if Iran crosses *other* stated red lines. This would be especially important to convince Iran of Washington's willingness to defend U.S. allies and partners against all forms of aggression, situations where American credibility might otherwise be questioned.²⁷⁵ The reassurance value for nervous U.S. partners would also be significant, given their pervasive fear that a nuclear-armed Iran would more aggressively support proxies and (in the Gulf context) political subversion.

VIII. DE-ESCALATION

The previous three components of containment – deterrence, defense and disruption – would aim to prevent a nuclear-armed Iran from initiating the use of force, employing threats or successfully engaging in destabilizing activities. If effectively

executed, these components would likely dissuade Iran from initiating nuclear crises to begin with or, if Tehran went down this road, encourage it to back down (see Text Box). The fourth major element of a containment strategy, de-escalation, involves other measures designed to manage the residual risk that military crises, should they occur, would

Getting Iran to Back Down During Crises

In a world where Iran possesses nuclear weapons, the most likely paths to regional nuclear war would involve the escalation of a crisis between Iran and Israel in the Levant or a clash between Iran and the United States in the Persian Gulf. However, if well executed, robust deterrence, defense and disruption efforts should dissuade Iran from transforming local disputes in the Levant or the Gulf into nuclear crises in the first place and, if such crises emerge, encourage Tehran to pull back from the nuclear brink.

In the Levant, Iran would be strongly inclined not to turn proxy conflicts with Israel into nuclear showdowns. Recklessly brandishing nuclear threats in an attempt to gain influence in the Israeli-Palestinian peace process or to defend Hezbollah, Hamas or other allies from Israeli attacks would transform an event with inherently limited stakes for Iran into one that could produce infinite damage to the Iranian regime.²⁷⁶ Tehran would therefore face powerful incentives not to go down this road. Meanwhile,

so long as Iran does not initiate nuclear threats, Israel has no need or incentive to issue its own nuclear warnings to prevail in such disputes.

Moreover, even if a crisis in the Levant begins to slide toward more open Israeli-Iranian confrontation, Tehran is likely to “blink” far short of risking a nuclear exchange.²⁷⁷ Deterrence theorists have traditionally argued that the state with the most at stake in a crisis is usually willing to run more risks and is perceived to have greater credibility to carry out threats. In a crisis between two nuclear powers, therefore, the state with greater resolve is likely to prevail short of all-out nuclear war, forcing the other side to retract its demands and back down.²⁷⁸ In this view, nuclear advantage does not translate into a clear bargaining advantage in a crisis.²⁷⁹ Some recent research, however, suggests that both nuclear superiority and the balance of resolve have mattered in past nuclear crises, and the former contributes to the latter by increasing the costs of a possible war.²⁸⁰ Overwhelm-

ing conventional superiority, especially in the age of missile defenses, can similarly enable states to run higher risks to push nuclear-armed adversaries to back down.

Regardless of which factor is more important – the balance of resolve or military superiority – both would heavily favor Israel in any conceivable crisis with Iran in the Levant. Because such crises would occur on Israel’s borders or involve proxy attacks that threaten the Israeli homeland, Israel’s stakes in the outcome of these crises would be indisputably greater than Tehran’s. Although uncertainty about the balance of resolve can lead to miscalculation, it is difficult to believe that the Iranian regime would doubt Israel’s willingness or capability to defend itself in these circumstances. Israel’s overwhelming conventional superiority would also give it many options to respond to local Iranian-sponsored threats without attacking the Iranian homeland or resorting to nuclear weapons, and Israel’s robust nuclear capability would

continued on next page

inadvertently spiral to nuclear war. In particular, de-escalation focuses on specific steps to discourage destabilizing nuclear postures by Iran and Israel, mechanisms to keep regional crises from inadvertently escalating and confidence-building measures aimed at stabilizing U.S.-Iranian and Israeli-Iranian relations over time.²⁹¹

Shaping Iran's Nuclear Posture

An important component of de-escalation would involve actions to discourage Iran from adopting a destabilizing nuclear posture that would make early or inadvertent use of nuclear weapons more likely. There is no way to predict what Iran's nuclear posture would be. On the one hand, Iran's

continued from previous page

make Tehran think twice about initiating a nuclear exchange. Therefore, absent a major miscalculation or accident, Iran would likely back down far below the threshold of triggering a nuclear war.²⁸¹

The dynamics would differ in a future crisis in the Gulf between the United States and a nuclear-armed Iran, but the outcome would likely be the same. Given Tehran's long track record of deserting Shiite allies in the region when they get into trouble, Iran is not likely to initiate a nuclear crisis to defend future proxies in Bahrain, Saudi Arabia or other Gulf states.²⁸² A greater danger of a nuclear crisis might emerge from Iranian threats to close the Strait of Hormuz. Blocking oil traffic through the strait today would heavily damage the Iranian economy.²⁸³ But sanctions have taken substantial amounts of Iranian oil off the market and forced Iran toward greater economic diversification.²⁸⁴ If these trends continue, a future nuclear-armed Tehran may have less to lose by threatening the strait. In January 2012, Iran warned the U.S. Navy against passage

through the strait in the hopes of spooking global markets and discouraging the European Union (EU) from moving forward with an oil embargo against Iran. In July 2012, fresh threats to close the strait were made to discourage the EU from implementing its embargo. In both cases, the threats failed.²⁸⁵ In the future, however, Iranian leaders might calculate that nuclear weapons would enable them to more effectively hold the strait at risk, back the Americans down, blackmail the global economy and thereby coerce concessions from regional states or the international community. Compounded by an Iranian propensity to discount costs or underrate the likelihood of U.S. retaliation, especially in extended deterrence situations, this could be very problematic.²⁸⁶

Because crises in the Gulf will occur near Iran, the balance of stakes in a showdown with Washington may favor Tehran.²⁸⁷ Still, the balance of interests would only decisively favor Iran if Iranian territory or the regime were directly threatened; in most other scenarios, it would be a closer call. During any Gulf

crisis, the United States would have a considerable interest in maintaining the flow of oil through the Strait of Hormuz and a significant reputational stake in not backing down, both out of concern that doing so would embolden Iran down the road and because it could damage U.S. credibility with allies around the world.²⁸⁸ Moreover, the United States would have overwhelming nuclear superiority vis-à-vis Iran, and so long as Washington maintains a robust forward deployment of conventional forces in the Gulf, the U.S. military would be able to dominate at every rung on the escalation ladder.²⁸⁹ U.S. conventional capabilities could defend American partners and interests in the Gulf without resort to nuclear weapons, and multilayered BMD systems would enable Washington to run more risks to demonstrate its resolve. Consequently, Tehran would (once again) be the first actor in any crisis to have to contemplate the use of nuclear weapons. And so long as the dispute does not directly threaten the territorial integrity of Iran or the survival of the regime, Iran is likely to back down before risking a nuclear exchange.²⁹⁰

existing military doctrine, its inability to reliably target an opponent's nuclear forces, its lack of sophisticated early-warning technology and regime concerns about accidental or unauthorized use could incline it toward a nuclear posture that emphasizes retaliation rather than preemptive use, eschews rapid-reaction launch procedures and maintains centralized control over Iran's arsenal. On the other hand, the small size of Iran's initial arsenal, coupled with fears of a disarming or decapitating U.S. or Israeli nuclear strike, could incentivize Tehran to embrace a "use them or lose them" doctrine or pre-delegate launch authority to IRGC commanders.²⁹²

Taking strategic steps to reduce Iranian fears of a U.S. first strike would be important to minimize Tehran's inclinations to adopt a destabilizing nuclear posture. In particular, even as U.S. declaratory policy makes clear Washington's willingness to use nuclear weapons in *retaliation* for Iranian nuclear use, it should also include a "no-first-use" pledge. The goal would be to signal to Iran that the United States would not use nuclear weapons to carry out a disarming or decapitating first strike. The United States refused to make such a commitment during the Cold War because it lacked confidence in NATO's ability to repel a Soviet conventional invasion of Western Europe. But Washington would enjoy overwhelming military superiority against a nuclear-armed Iran, providing the kind of flexible response and escalation dominance that it never had during the Cold War.²⁹³ The United States would not need to threaten the first use of nuclear weapons against Iran to achieve containment objectives.

As described in the 2010 NPR, U.S. declaratory policy currently states that the "fundamental" role of nuclear weapons is deterrence. This policy rules out using nuclear weapons against nonnuclear states that comply with their nonproliferation obligations under any circumstances, but leaves open the possibility that the United States might, under

extreme circumstances, be the first to use nuclear weapons to address nonnuclear (conventional, chemical or biological) threats emanating from nuclear weapons states or proliferating states.²⁹⁴ To shape the emergent posture of a nuclear-armed Iran, however, Washington should move toward a clearer policy of no first use. At the very least, the United States should state that the "sole" (rather

Taking strategic steps to reduce Iranian fears of a U.S. first strike would be important to minimize Tehran's inclinations to adopt a destabilizing nuclear posture. In particular, even as U.S. declaratory policy makes clear Washington's willingness to use nuclear weapons in retaliation for Iranian nuclear use, it should also include a "no-first-use" pledge.

than "fundamental") purpose of nuclear weapons is to deter – and if necessary, respond to – nuclear attacks on the United States, U.S. forces and U.S. allies and partners.²⁹⁵ Washington could supplement this language with an explicit pledge that "the United States will not be the first to use nuclear weapons in a conflict." To hedge against possible future changes in Russian and Chinese capabilities, and perhaps discourage Iran from

developing game-changing strategic capabilities, the pledge could also state: “The United States reserves the right to amend this negative assurance in response to significant changes in the strategic capabilities of nuclear-armed adversaries.”

Some analysts might argue that such assurances would not significantly affect Iranian calculations because Tehran is unlikely to believe them,²⁹⁶ or even if it did, the regime would view the remaining possibility of a conventional U.S. first strike as just as threatening. But such claims ignore the fact that foreign leaders closely scrutinize U.S. declaratory policy for signs of American intent.²⁹⁷ The nature of America’s current nuclear arsenal would also enhance the credibility of a no-first-use pledge vis-à-vis Iran. Based on Iran’s existing pattern of military and civilian nuclear activities, a nuclear-armed Iran would likely use a mix of dispersal, concealment in underground facilities and road-mobile missiles to improve the survivability of its nuclear arsenal.²⁹⁸ In the absence of very reliable real-time intelligence, a U.S. first strike against these forces would probably require using high-yield nuclear weapons against numerous targets, including at least some targets in or near densely populated areas. The level of collateral damage produced by such weapons – or even by lower-yield ones used against targets in urban centers – would likely be so immense that it is implausible that Washington would launch such an attack except in retaliation for an Iranian nuclear attack.²⁹⁹ Moreover, although a nuclear no-first-use pledge would not rule out overwhelming conventional force, it would be much easier for Iran to use mobility to undermine reliable conventional targeting and harden its nuclear stockpile against even the largest U.S. conventional munitions. The same holds true for Iranian command-and-control systems. As the 2003 Iraq War demonstrated, even massive U.S. conventional “shock and awe” campaigns are not likely to instantly disable a regime’s command and control.³⁰⁰ So ruling out the first use of U.S. nuclear weapons could meaningfully affect Iranian calculations.

To further influence Iranian nuclear posture decisions, the United States should pair its public assurances regarding first use with private warnings to the Iranian regime clarifying the dangers of adopting arrangements that loosen control over its arsenal. Washington should make clear that it would remain vigilant in monitoring Iranian nuclear activities, noting that any effort to prepare nuclear weapons for use against the United States, U.S. forces, allies or partners would be viewed as extraordinarily provocative, risking escalation that could set in motion events that eventually bring about the regime’s destruction. These private warnings should also reiterate that the Iranian leadership would be held fully accountable for any use of nuclear weapons. The goal of such private messages would be to remind the regime of the stakes involved in any scenario involving an accidental or unauthorized launch. Some analysts go a step further, arguing that the United States should explicitly threaten to respond to any such preparations with preemptive conventional strikes.³⁰¹ But although these actions should not be ruled out under extreme circumstances, such explicit warnings would reinforce the very fears that might lead to destabilizing postures in the first place. It would also draw lines in the sand that would limit U.S. flexibility in controlling escalation.

Taken together, this mix of public assurances and private warnings could help to address the regime’s main motivations for adopting a destabilizing nuclear posture while pointing out the inherent risks *for the regime* of adopting a nuclear posture that loosens control over nuclear weapons. Given crosscutting incentives affecting Iranian posture decisions, reducing first-strike fears while clarifying the stakes of unauthorized or accidental use could help tip the Supreme Leader toward arrangements that eschew early use and decentralization in favor of a classic retaliatory posture and tight centralized control over Iran’s nuclear arsenal.

Discouraging Israeli First Use

If Israel declares its nuclear capabilities in response to a nuclear-armed Iran, the United States should also attempt to convince Israeli decisionmakers to adopt their own version of no first use. Given Israel's smaller geographic size and greater vulnerabilities, however, such a declaratory stance probably could not rule out the use of nuclear weapons in response to *all* nonnuclear attacks. But it could significantly shrink the range of contingencies in which nuclear weapons might be used and clarify their fundamental retaliatory – as opposed to preemptive – nature. Israel should be encouraged to declare that the sole purpose of nuclear weapons is to deter – and if necessary, retaliate against – the use of WMD or other attacks that threaten Israel's survival.³⁰² The United States should also strongly urge the Israelis not to adopt launch-on-warning or other hair-trigger nuclear postures.

In making the case to Israeli officials, the United States should advance several arguments. First, a no-first-use policy would appear to be consistent with existing Israeli views on the utility of nuclear weapons. Israeli leaders have long stated: "Israel will not be the first country to introduce nuclear weapons in the Middle East."³⁰³ Israel has never articulated a nuclear doctrine, but specialists on Israel's nuclear capabilities argue that the primary purpose of Israel's nuclear capabilities is to deter an all-out conventional attack or the use of WMD by regional adversaries that would threaten Israel's existence or – should deterrence and defense fail – to provide a weapon of last resort in the face of imminent defeat.³⁰⁴ Given Israel's impressive conventional forces and its close military ties to the United States, there is no chance of Israel being overrun by the conventional forces of *any* other regional state, especially Iran. The combination of Israel's robust deterrence capabilities and Israeli and U.S. ballistic missile defense systems should also give Israeli leaders sufficient confidence

against the prospect or effectiveness of a disarming Iranian first strike to eschew a preemptive doctrine or a risky, accident-prone, launch-on-warning posture.

Second, Israel's lack of strategic depth and low risk acceptance regarding a possible Iranian nuclear attack argue against adopting either a preemption doctrine or rapid-reaction procedures. Even if a future Iranian nuclear arsenal is small, dispersal, concealment and mobility would make it difficult to guarantee a 100 percent effective Israeli first strike. Israel's BMD systems are robust, but they too are unlikely to be 100 percent effective. Thus, paradoxically, if the supposed motivation for Israel to adopt a preemptive nuclear doctrine or launch-on-warning procedures is the danger that even a small number of weapons might reach Israel, the margin of error associated with an Israeli first strike or an accidental Israeli launch that triggers an Iranian nuclear response argues powerfully *against* adopting such destabilizing nuclear postures.³⁰⁵

Finally, although some analysts contend that a stated Israeli willingness to use nuclear weapons upon any sign of an imminent or ongoing Iranian attack would bolster deterrence,³⁰⁶ it would actually make deterrence more likely to break down. An Israeli threat to strike Iran if Jerusalem detects Iranian nuclear preparations or receives warning of an actual Iranian missile launch could theoretically incentivize the regime to adopt tighter centralized control of its nuclear weapons. But the biggest incentive for Iran to adopt a destabilizing nuclear stance – including pre-delegation – is *fear of an opponent's first strike*, and an Israeli preemptive doctrine or hair-trigger procedures would worsen these fears.

Ultimately, Washington should be able to make the case that it is very much in Israel's national security interest to dampen Iranian fears of an Israeli first strike. Because an *intentional* Iranian

Ultimately, Washington should be able to make the case that it is very much in Israel's national security interest to dampen Iranian fears of an Israeli first strike. Because an intentional Iranian nuclear attack on Israel is highly unlikely, whatever incremental deterrent value Israel might gain by adopting an early-use or hair-trigger posture would clearly be outweighed by the much more probable dangers of inadvertent escalation.

nuclear attack on Israel is highly unlikely, whatever incremental deterrent value Israel might gain by adopting an early-use or hair-trigger posture would clearly be outweighed by the much more probable dangers of inadvertent escalation.

Crisis Communications and Confidence-Building Measures

De-escalation should also include adopting crisis management tools, especially those that establish communications channels between the United

States and Iran (and, ideally, Israel and Iran) to coordinate military activities during peacetime, communicate clear threats and red lines before and during crises and reduce the odds of miscalculation and inadvertent escalation.³⁰⁷ This could involve “hotlines” between capitals, such as the U.S.-Soviet system during the Cold War,³⁰⁸ and opening a U.S. liaison office in Tehran to directly pass messages to Iran’s political leadership.³⁰⁹ It should also include military-to-military communications channels such as the ones that exist between U.N. and North Korean forces along the demilitarized zone.³¹⁰ A U.S.-Iran military-to-military channel is especially vital in the naval domain, given the significant risk of miscalculation in the crowded waters of the Persian Gulf.³¹¹

Washington should also push to establish other confidence-building measures to reduce crises with a nuclear-armed Iran. For example, the United States should encourage Israel and Iran to take a page from India and Pakistan. Although nuclear weapons dangerously increased the India-Pakistan rivalry from 1999 to 2002, both countries eventually took steps to defuse tensions by increasing dialogue over Kashmir, signing an agreement to provide advance notice of ballistic missile tests, agreeing to inform each other of nuclear accidents and committing to steps that strengthen command-and-control arrangements to reduce the risk of unauthorized or accidental nuclear use.³¹²

Over time, the United States should try to establish mechanisms for sustained bilateral (United States-Iran, Israel-Iran), trilateral (U.S.-Israel-Iran) and multilateral dialogues on security and arms control issues. Although a direct dialogue between Israel and Iran is difficult to imagine, at least initially, Washington could seek to enter into a bilateral or multilateral dialogue with a nuclear-armed Iran with Israel’s support.³¹³ A sustained diplomatic process would aim to improve mutual understanding among the parties – an important part

of effective deterrence – and contribute to long-term stability by maintaining contact, increasing transparency regarding capabilities and producing a cadre of individuals invested in improving peaceful relations.³¹⁴ At some point, it may be possible to pursue arms-control negotiations aimed at limiting or rolling back the Iranian program, keeping open the possibility of long-term improvements in relations with Iran if Tehran alters its destabilizing behavior.³¹⁵

Limiting U.S. Military Objectives

In the end, these proposed measures might not be wholly sufficient to avoid crises with a nuclear-armed Iran, and once underway, crises could slide toward military conflict. Consequently, it would be important for the United States to think through its approach to direct military confrontations with Iran. Because Iran is a risk-acceptant state with revisionist aims, it would remain important for the United States to demonstrate its willingness to confront Tehran at all levels of violence. Yet even as the United States actively pushes back against emboldened Iranian adventurism and stands firm in defending U.S. allies and partners, it must carefully moderate its ultimate goals and objectives, especially during a crisis. Successful nuclear deterrence requires the ability to hold the regime at risk. But if a crisis escalates to the point of military force, de-escalation can only occur if Washington avoids giving Tehran the impression that the United States is determined to destroy the regime *regardless* of Iranian actions. Intentional Iranian use of nuclear weapons is highly unlikely, but the regime could conceivably contemplate using them if conventional conflict escalated to the point of imminent and total defeat. If Iranian leaders believed that the United States was irrevocably committed to the regime's destruction, Tehran might "gamble for resurrection" by using nuclear weapons directly against U.S. forces or partners in the region, or by engaging in other highly provocative actions such as a high-altitude

Even as the United States actively pushes back against emboldened Iranian adventurism and stands firm in defending U.S. allies and partners, it must carefully moderate its ultimate goals and objectives, especially during a crisis. De-escalation can only occur if Washington avoids giving Tehran the impression that the United States is determined to destroy the regime regardless of Iranian actions.

nuclear explosion designed to produce an EMP that disables U.S. command and control.³¹⁶

Because the United States and its partners can use conventional force to counter aggression by a nuclear-armed Iran in the Levant and the Gulf without extensively targeting Iranian territory or directly threatening the regime's survival, it should be possible to keep escalation below the nuclear threshold.³¹⁷ However, it would be important for the United States and other nations to signal their limited aims to Tehran, both through words and deeds. Washington should avoid publicly espousing regime change and pursue a measured approach to operations, avoiding intensive air campaigns or large-scale invasion aimed at crippling the regime.

Even in a limited campaign against Iran, it should avoid the temptation (often profound within the U.S. military) to attack key leadership targets or command-and-control systems. The regime could easily interpret these actions to “blind” it as a prelude to a nuclear first strike or massive conventional attack, potentially pushing it into an existential corner where nuclear weapons could appear to be a “least bad option.”³¹⁸ Moreover, if Iran pre-delegates launch authority of its nuclear weapons, these are precisely the types of disruptive attacks that could sever communications with local commanders, increasing the prospects for unauthorized nuclear use.

During any crisis, the regime will need an acceptable exit ramp. This goes beyond simply assuring the regime that it will survive if it backs down, although that would be crucial. Even when the stakes are not existential, insisting that Iranian leaders totally capitulate to every demand would risk undermining deterrence. Research in cognitive psychology suggests that people have a high aversion to loss and become increasingly risk acceptant to defend what they already have. Insights from neuroscience also suggest that emotions – including the need for respect – can play a powerful role in conflict situations.³¹⁹ During a crisis, threats must therefore be accompanied by assurance strategies that signal respect and recognition and provide a “face-saving” way out for the Iranian regime. The United States and its partners will need to demonstrate concern for Iran’s reputation and should avoid actions that unnecessarily produce shame and humiliation. This is especially important given the cultural and religious predispositions of many Iranian leaders, which combine a strong sense of national rights and pride with a deep sense of historical grievance and suspicion against outside powers.³²⁰

IX. DENUCLEARIZATION

The final element of a containment strategy would involve specific measures to limit the proliferation consequences of a nuclear-armed Iran. Denuclearization would aim to limit the growth in size and sophistication of Iran's nuclear arsenal ("vertical" proliferation) and incentivize Tehran to eventually freeze or roll back its program. Limiting such advancements, especially the development of ICBMs that can threaten the U.S. homeland or MRBMs with countermeasures to defeat regional missile defense systems, would be especially important to support extended deterrence efforts. Denuclearization would also seek to limit "horizontal" proliferation by limiting damage to the credibility of the NPT and U.S. nonproliferation leadership and by preventing Iran from supplying sensitive materials to other states or non-state actors.

Maintaining Sanctions

Since 2006, the U.N. Security Council has passed six resolutions sanctioning Iran for failing to suspend its uranium enrichment activities and fully cooperate with the IAEA. U.N. Security Council Resolution 1929, the most effective of these resolutions to date, was adopted in the spring of 2010. It banned certain Iranian nuclear and missile activities abroad, expanded a ban on Iranian ballistic missile activities, prohibited sales of missile technology and heavy weapons to Iran and called on countries to inspect any vessel in their territory suspected of carrying prohibited Iranian cargo and to cooperate in such inspections on the high seas. The resolution imposed financial sanctions on entities working with Islamic Republic of Iran Shipping Lines (a government company suspected of financing WMD development) and banned the provision of financial services (including insurance or re-insurance) to Iranian entities suspected of involvement in the nuclear program. Furthermore, it prohibited Iranian banks from opening new foreign branches and put in place asset freezes and

travel bans for a number of companies and individuals associated with the IRGC and Iran's nuclear activities. The resolution also highlighted the potential links between Iran's energy-sector revenues and its nuclear activities, and it stressed the need to exercise vigilance over all Iranian banks – specifically including the Central Bank of Iran – to prevent proliferation-related transactions.³²¹

Building on this foundation, the Obama administration and U.S. Congress enacted additional unilateral measures aimed at Iran's financial, energy and transportation sectors and the IRGC. By forcing countries to choose between doing business with Iran or the United States, U.S. sanctions, including measures aimed at Iran's Central Bank, have completely severed Iran from international financial transactions and limited Tehran's ability to sell oil on the global market.³²² In combination with other international sanctions, including sweeping European financial and oil restrictions, these measures have cut deeply into Iran's oil revenue, devalued the country's currency and contributed to significant inflation.³²³

If Iran defies the international community by building nuclear weapons, these sanctions should remain in place and would ideally be tightened further. This would be crucial for three reasons. First, it would be vital to limit Iran's access to critical weapons-related technology and its financial wherewithal to acquire and expand these capabilities. Although Iran continues to make advances in its missile program, existing sanctions have retarded this progress, especially the development of longer-range ballistic missiles. Since the Iran-Iraq war, Iran has aimed to become self-sufficient across as many defense sectors as possible. But it seems that Iran still depends on foreign suppliers for a number of key ballistic missile components. Although Iran seems to have the capability to manufacture missile airframes, propellant tanks and other inert components, it still relies on foreign-made engines and navigation

guidance units and cannot access the high-quality production materials necessary to improve the effectiveness and precision of ballistic missiles.³²⁴ Importantly, Iran appears to lack the capacity to design, develop and produce more powerful liquid-fuel engines for ICBMs, and analysts believe that this is unlikely to change over the next decade. Sanctions are also causing Iran to struggle with solid-fuel designs. Because of their lighter weight and faster launch preparations, a nuclear-armed Iran would likely prefer solid-fuel missiles that can reach Europe or the United States as the backbone of its nuclear arsenal. But solid-fuel missiles require foreign materials such as aluminum and tungsten powder and oxidizer salts. Continuing to thwart Iran's access to such materials through sanctions and other counterproliferation measures could therefore substantially slow vertical proliferation by forcing Tehran to rely on substandard substitutes.³²⁵

Second, the punitive quality of the sanctions, as well as other measures to maintain Tehran's diplomatic isolation, would continue to signal to other states that they too would face severe economic costs if they violated their nonproliferation commitments. Preventing the sanctions regime from collapsing should Iran get the bomb would be vital to demonstrate that parties to the NPT will not receive a "get out of jail free" card if they manage to cross the nuclear threshold. Sanctions and diplomatic isolation would also help limit whatever benefit nuclear weapons might otherwise provide to Iran's regional and global influence, thus reducing incentives for other Middle Eastern states to pursue nuclear capabilities.³²⁶

Finally, beyond serving as a punitive "stick," maintaining the sanctions regime could potentially provide an essential "carrot": the prospect of eventually lifting sanctions in exchange for changes in Iranian behavior. For example, in consultation with U.N. Security Council members, the United States could offer to suspend or remove sanctions

Preventing the sanctions regime from collapsing should Iran get the bomb would be vital to demonstrate that parties to the NPT will not receive a "get out of jail free" card if they manage to cross the nuclear threshold.

in part or in whole in exchange for Iran rolling back or freezing elements of its nuclear weapons program. This could potentially be combined with other incentives, such as technical assistance, diplomatic normalization and assurances against regime change.³²⁷ This approach has not worked thus far with North Korea,³²⁸ but Iran is not North Korea. The Iranian economy is more integrated with the global economy, and Iranian leaders see their country as one of the world's great nations, not a permanent pariah state. It is thus conceivable, albeit improbable, that an offer of sanctions relief in exchange for verifiable reversals of its nuclear program could moderate Tehran's behavior down the line, even if sanctions did not prevent Iran from acquiring nuclear weapons in the first place.³²⁹

Strengthening Interdiction Efforts

Effective containment would supplement sanctions with much more aggressive interdiction efforts to prevent sensitive nuclear- and missile-related technologies from getting into or out of Iran. The United States should strengthen the Proliferation Security Initiative (PSI), established in 2003 by the Bush administration to stop the spread of WMD,

WMD delivery systems and related materials. The PSI seeks to develop voluntary partnerships and coordination efforts among member states, using existing national and international legal authorities to interdict these items. Participating states also agree to enact domestic measures to ensure that their national facilities are not used to transfer illicit weapon cargoes. Nearly 100 nations participate in the PSI.³³⁰

If Iran becomes a nuclear-armed state, the United States should leverage the inevitable increase in international concern to push for a formal multilateral framework for the PSI. Such a framework should build off provisions of existing U.N. Security Council resolutions prohibiting nuclear- and missile-related transactions with Iran and calling on states to inspect suspicious Iranian cargo. It should also require interdicting all WMD- and missile-related items into or out of Iran and facilitate such interdictions by granting the necessary legal authorities. Ideally, this framework would cover both commercial transportation and items carried by Iranian government vessels and apply to illicit trafficking via air, land and sea.³³¹

In the absence of such a formal structure, the United States should continue to push to expand membership in the PSI and emphasize the importance of cracking down on Tehran. Gaining cooperation from China would be especially important; Beijing is not currently a PSI member and has been criticized for lax implementation of U.N. sanctions prohibiting the transit of proliferation-sensitive items to Iran.³³² The United States should also increase its commitment to training and joint exercises among PSI states, including activities focused on Iran-related scenarios, and look for additional ways to improve coordination among the parties.³³³

A principal challenge to the current PSI is the difficulty of interdicting cargo on the high seas. Under international law, a ship can only be searched if it

is in territorial waters, it is without nationality or the country in which it is registered stops it. If the United States is not able to establish an international framework to address this challenge, it will need to push for additional bilateral ship-boarding agreements with nations with large “open” ship registries (so-called flags-of-convenience countries) to facilitate the ability to stop and search vessels and seek to strengthen existing bilateral agreements to allow for the seizure of cargo.³³⁴ It should also seek to expand cooperation with countries controlling well-trafficked ports and canals, where there is no question of jurisdiction.³³⁵ Lastly, the U.S. military and intelligence agencies would need the unilateral authority to forcibly interdict vessels in extremis, including scenarios involving the imminent transfer of nuclear weapons.

X. STRATEGIC UNCERTAINTIES AND DILEMMAS

Containment of a nuclear-armed Iran could work, but it would be highly complex and far from foolproof. The prospects for Iranian nuclear use, transfer of nuclear weapons to terrorists, emboldened Iranian adventurism, crisis escalation, cascading proliferation and associated risks to energy security can theoretically be significantly reduced with a well-crafted strategy (see Table 2). But the residual risks would not be zero – and even a low probability of a nuclear exchange should be taken very seriously.

Uncertainties

The success and durability of any containment strategy would also hinge on a number of factors that are uncertain or could change dramatically

Successful containment would depend on key decisions made by Washington’s regional allies and partners – especially Israel and the Gulf states – and none of these decisions can be taken for granted.

over time. Successful direct and extended deterrence, for example, presume that the Iranian regime, although dangerous and sometimes reckless, remains fundamentally rational. A strong case can be made that the current regime fits that description, but we have no way of knowing precisely what the character of the regime will be

in the future, especially after Ayatollah Khamenei (currently 73 years old) passes from the scene.³³⁶

Furthermore, successful containment would depend on key decisions made by Washington’s regional allies and partners – especially Israel and the Gulf states – and none of these decisions can be taken for granted. Credible U.S. security guarantees, backed by overwhelming American military superiority and extensive security cooperation, could reassure friendly states and discourage them from taking their own destabilizing unilateral steps, such as pursuing nuclear capabilities or dangerous nuclear postures. But the political feasibility and sustainability of these arrangements, either in regional capitals or in Washington, would be uncertain.³³⁷ Given the U.S. drawdown from Iraq, the impending withdrawal from Afghanistan, growing U.S. fiscal constraints and the desire to “pivot” to Asia, some regional partners may also doubt the credibility or sustainability of any U.S. commitments, no matter what Washington proposes.³³⁸

The effectiveness and durability of containment over time would also require extensive international cooperation to keep Iran politically and economically isolated. In the two decades since North Korea emerged as a nuclear power, the international community has, for the most part, sustained its resolve to politically, economically and militarily contain Pyongyang. But India and Pakistan quickly recovered from international outrage following their 1998 nuclear tests. Similarly, Tehran’s leaders likely believe that the world would eventually reconcile itself to a nuclear-armed Iran, believing that Iran is simply too important, both politically and economically, to be permanently shunned.³³⁹ It is particularly uncertain whether Russia and China, two countries with a long history of military and economic relations with Tehran, would be willing to cooperate with a containment strategy over the long term, even if they did so initially.³⁴⁰

TABLE 2: MANAGING AND MITIGATING THE RISKS OF A NUCLEAR-ARMED IRAN

Potential Dangers	Containment Objectives	Key Strategic Components: The Five Ds				
		Deterrence	Defense	Disruption	De-escalation	Denuclearization
Nuclear Fanaticism	Prevent direct Iranian use of nuclear weapons	✓	✓			
	Prevent Iranian transfer of nuclear weapons to terrorists	✓	✓	✓		
Iranian Adventurism	Limit and mitigate the consequences of Iranian sponsorship of conventional terrorism, support for militant groups and conventional aggression		✓	✓		
	Discourage Iranian use of nuclear threats to coerce other states or provoke crises	✓	✓	✓	✓	
Crisis Escalation	Dissuade Iranian escalation during crises	✓	✓	✓	✓	
	Discourage Iran from adopting a destabilizing nuclear posture that emphasizes early use of nuclear weapons or pre-delegates launch authority				✓	
	Persuade Israel to eschew a destabilizing nuclear posture that emphasizes early use of nuclear weapons or hair-trigger launch procedures	✓	✓		✓	
Proliferation Cascade	Convince other regional states not to pursue nuclear weapons capabilities	✓	✓	✓		✓
	Limit damage to the credibility of the Nuclear Non-Proliferation Treaty and U.S. nonproliferation leadership					✓
	Prevent Iran from becoming a supplier of sensitive nuclear materials			✓		✓
Energy Shocks	Ensure the free flow of energy resources from the Persian Gulf	✓	✓		✓	

Finally, although the components of the containment strategy described above largely complement one another, there are some irresolvable tensions within the strategy. Many of the proposed de-escalation mechanisms, for example, presume the ability to create direct lines of communication with Iran and gradually build confidence over time. Yet the Iranian regime's paranoia would complicate prospects for improved ties or trust,³⁴¹ and this problem could be compounded by other elements of the containment strategy that would likely increase, rather than decrease, mutual hostility. More generally, credibly communicating deterrent threats and carrying out actions that would actively weaken Iran and disrupt its influence, while simultaneously seeking to assure the Iranian regime that U.S. actions have limits, would be a very difficult balancing act to pull off. This tension between the needs to deter and to assure an adversary is not unique to containment in the Iranian context, but that fact makes it no easier to manage.

Dilemmas for U.S. Policy Toward Iran

Executing the containment strategy outlined above would also raise a number of significant strategic dilemmas for U.S. policy toward Iran and national security strategy more broadly.

CONTAINMENT AND REGIME CHANGE

Proponents of containment often argue that regime change is both a key component of the strategy and the only long-term solution to U.S.-Iranian tensions.³⁴² Containment seems like a much more palatable option if combined with an active strategy designed to transform a nuclear-armed Iran into a less hostile actor.

Yet even if the United States could produce regime change in Tehran – which short of invasion and occupation it probably could not – pursuing that goal would likely undermine, not reinforce, effective containment. Actively working for the regime's demise would undermine deterrence, the strategy's

central pillar. Creating incentives for restraint is important for successful deterrence. One way to do this is to communicate that current costs will increase if the adversary takes a hostile action but will not increase if it fails to take the action.³⁴³ For deterrence to be effective against Iran, it must therefore be coupled with a credible assurance to the Iranian regime that it can avoid the threat to its survival if its behavior changes.³⁴⁴ Especially in the midst of a crisis, a regime-change policy would increase the likelihood of deterrence failure, potentially leading the Iranian leadership to believe it had little to lose by launching a nuclear attack.³⁴⁵

An explicit U.S. effort to promote regime change in a nuclear-armed Iran could also backfire in other ways. It could provide Iranian hardliners with useful propaganda opportunities to solidify their power by painting domestic opponents as foreign conspirators.³⁴⁶ And it is possible that any domestic instability produced by regime-change policies could be exploited by the IRGC to initiate a hard or soft coup. Under either scenario, a nuclear-armed Iran would become even more implacably hostile and difficult to contain.

A containment strategy would likely give the United States a vested interest in regime stability, not change. As is the case with North Korea and Pakistan today, the prospect of governmental collapse in a nuclear-armed country would likely conjure fears of “loose nukes” falling into the hands of terrorists, unauthorized launch by rogue actors or nuclear use by a desperate and dying regime.³⁴⁷ U.S. concerns about the reckless behavior of a nuclear-armed Iran would be significant, but fears of a nuclear failed state might be even greater. This would not only caution against an overt policy of regime change but could also complicate the long-term sustainability of crippling sanctions aimed at containing the regime's capabilities and ambitions.

CONTAINMENT AND MILITARY ACTION

Containment and preventive military action are often framed as policy alternatives. In reality, however, these policies are highly intertwined in ways that are frequently ignored by their respective proponents.

On the one hand, prematurely taking the preventive military option “off the table” in favor of containing a nuclear-armed Iran could undermine the ability to effectively execute the strategy. Successfully deterring Iran and reassuring friendly states would depend on the constant application of credible threats to use force against Iran and its proxies in defense of the United States and U.S. national interests, allies and partners. If diplomacy and sanctions fail to prevent Iran from reaching the nuclear brink, abandoning the military option in favor of a containment policy would likely gut the very credibility, both with Iran and U.S. allies and partners, that it needs to succeed. The credible threat of retaliation for a direct attack would likely remain even if Washington was seen to have reneged on its promise to use “all instruments of national power” to prevent a nuclear-armed Iran, but extended deterrence and assurance efforts crucial to effective containment would suffer. Both Tehran and Washington’s regional friends would ask: “If the United States was unwilling to go use force against a nonnuclear Iran to defend U.S. interests and allies, why should we believe that Washington would risk war with a nuclear-armed Iran?”³⁴⁸ The perception that America lacked the stomach to defend its vital interests with force, if necessary, would compound existing complaints among key regional allies about Washington’s overall commitment to the region,³⁴⁹ making it much more difficult to erect and sustain a regional containment architecture.³⁵⁰ It would also risk undermining U.S. credibility in the eyes of other states calculating the expected costs and benefits associated with proliferation and violation of the NPT. In short, one can debate whether the Obama

A containment strategy would likely give the United States a vested interest in regime stability, not change. As is the case with North Korea and Pakistan today, the prospect of governmental collapse in a nuclear-armed country would likely conjure fears of “loose nukes” falling into the hands of terrorists, unauthorized launch by rogue actors or nuclear use by a desperate and dying regime.

administration should have ruled out containment as an option to begin with, but having done so, backing away would risk eroding U.S. credibility in a very damaging way, making a future containment strategy less likely to succeed.

On the other hand, maintaining a willingness to use preventive force does not imply that the United States and its allies should rush to war. Force should remain an option for setting back Iran’s nuclear program, but it should only be executed as a last resort. A nuclear-armed Iran would be highly destabilizing, but preventive military action would be too. In the aftermath of a strike, Iran would

likely retaliate, using ballistic missile strikes and proxy and terrorist attacks against U.S. and Israeli targets, potentially causing substantial casualties and further destabilizing a region already roiling because of the Arab Spring. Retaliatory attacks by Hezbollah or Palestinian groups against Israel could lead to a wider war in the Levant. Attacks by Iranian-backed Shiite militants against U.S. diplomats in Iraq, or a surge in lethal assistance to insurgents fighting NATO troops in Afghanistan, could also escalate the U.S.-Iranian conflict. And despite efforts to dissuade Iran from threatening oil shipping, miscalculation in the Persian Gulf and the Strait of Hormuz could produce a major confrontation with the U.S. Navy. A widening conflict in the Gulf could, in turn, send oil prices skyrocketing. Even in the absence of such escalation, a preventive U.S. or Israeli strike could rattle markets and push oil prices higher at a fragile time for the global economy.³⁵¹

Moreover, even an operationally effective strike would only delay, not permanently end, Iran's program. A strike might substantially degrade Iran's near-term capability to produce nuclear weapons, but it would almost certainly increase Tehran's motivation to eventually acquire nuclear weapons. Stopping Iran from reconstituting its program under these circumstances would require concerted efforts by a broad international coalition to economically, politically and militarily isolate Iran in the aftermath of a strike. Yet the strike itself, if launched before all other options have been exhausted, could easily shatter the very international consensus needed to check Iran's rebuilding efforts. The United States could easily find itself having to contain a re-energized nuclear-armed Iran down the road in a highly unfavorable international environment for doing so.³⁵²

In short, the failure to take military action against Iran if diplomacy and sanctions fail could make containment more difficult, but so too could rushing to use force with insufficient international

legitimacy for the strike. This suggests that the United States should only contemplate the use of force under specific conditions: if other options for slowing or halting Iran's nuclear weapons ambitions fail, if there is clear evidence that Iranian leaders have decided to weaponize their program or are approaching an unstoppable breakout capability that would make such a decision undetectable and if military action could significantly delay Iran's program. Moreover, it would be imperative, in the lead-up to the use of force, to make every effort to build international support (or at least acquiescence) by seeking a diplomatic solution.

A diplomatic deal with Iran...is clearly preferable to the use of military force, containment of a nuclear-armed Iran or a scenario in which the first course of action results in the second under highly unfavorable conditions. Washington's commitment to creative diplomacy must therefore be sustained and sincere.

Thus, a diplomatic deal with Iran – even a highly imperfect one that allows Iran to continue some level of domestic enrichment under stringent safeguards³⁵³ – is clearly preferable to the use of military force, containment of a nuclear-armed Iran or a scenario in which the first course of

action results in the second under highly unfavorable conditions. Washington's commitment to creative diplomacy must therefore be sustained and sincere.

Trade-offs with Other Strategic Priorities

Actively seeking to contain a nuclear-armed Iran would also create significant dilemmas for achieving other national security objectives outlined by the Obama administration. These broader strategic dilemmas point to other reasons that the administration likely favors prevention over containment. Although these policy priorities may or may not be identical to those pursued by future administrations, the inherent trade-offs for U.S. national security strategy would likely persist.

REBALANCING TO ASIA

The Obama administration has made no secret about its strong desire, after more than a decade of perpetual war in the Middle East, to “rebalance” American foreign policy to the Asia-Pacific region.³⁵⁴ Yet implementing an effective containment regime against a nuclear-armed Iran would lock the United States into the Middle East, both politically and militarily, at the very time when the administration hopes to strategically shift America's focus eastward.³⁵⁵ Constructing and managing multiple Middle Eastern extended deterrence relationships, for example, would absorb scarce diplomatic bandwidth and political capital, as would the extensive and sustained international efforts required to maintain Iran's isolation.³⁵⁶

The trade-offs in the military domain are likely to be particular acute. Over the next decade, as the United States seeks to tackle growing debt and entitlement costs and meet domestic investment needs, U.S. defense budgets will continue to face downward pressure. Fiscal austerity has already begun to affect defense spending. On March 1, 2013, the “sequester” triggered an additional \$500 billion in defense cuts over the next decade on top of the \$487 billion in reductions

over the same period mandated by the 2011 Budget Control Act.³⁵⁷ With defense budgets shrinking, the Pentagon will be harder pressed to sustain a large forward military presence in multiple regions simultaneously. Although America's GCC partners currently subsidize much of the U.S. presence in the Gulf, reducing the U.S. fiscal burden for sus-

Implementing an effective containment regime against a nuclear-armed Iran would lock the United States into the Middle East, both politically and militarily, at the very time when the administration hopes to strategically shift America's focus eastward.

taining these forces,³⁵⁸ budget constraints are still likely to complicate the ability of the United States to sustain current force levels. In February 2013, for example, the U.S. Navy delayed the deployment of a second carrier group to the Gulf indefinitely, because of budget uncertainty associated with the sequester.³⁵⁹

Given fiscal pressures to reduce the U.S. presence in the Middle East, any strategic requirement to sustain or increase that presence to contain a nuclear-armed Iran would likely come at the expense of deployments elsewhere. In the years ahead, the administration hopes to shift a majority of U.S. aircraft carriers, cruisers, destroyers, littoral combat ships and submarines to the Pacific, as

well as increasing the presence of theater ballistic missile defenses, tactical fighter aircraft and ISR capabilities.³⁶⁰ Yet the military requirements for containing a nuclear-armed Iran would likely compete for these very same “high-demand, low-density” assets desired by commanders in the Pacific.³⁶¹

THE ARAB SPRING

Although the ultimate trajectory of the Arab Spring remains highly uncertain, the rise in Arab populism and the demand for more accountable government will likely continue, making genuine political and economic reform necessary for long-term stability across the Middle East and North Africa. Helping the Arab world chart a course to a freer future is in America’s interest and, if it were achieved, would help to contain the expansion of Iranian influence.

A containment regime, however, would require the United States to double down on its security commitments to the Gulf monarchies, the least democratic countries in a democratizing region. This would produce a significant dilemma for America’s overall regional strategy. Washington’s need for high-level political cooperation and close security ties with Gulf states, including vital base access, would make it very difficult for the United States to simultaneously pursue containment and use its security assistance relationships as leverage to push monarchies such as Bahrain and Saudi Arabia toward reform. Meanwhile, allowing containment requirements to regularly trump human rights and democracy concerns in the Gulf would likely undermine U.S. credibility to promote reform elsewhere in the region.³⁶²

NUCLEAR POLICY

Pursuing containment against a nuclear-armed Iran would also deeply complicate President Obama’s desire to move the world away from nuclear weapons.³⁶³ Even if containment successfully stemmed additional regional proliferation

Even if containment successfully stemmed additional regional proliferation and limited the broader damage to the NPT arising from Iran’s nuclear acquisition, containment itself would increase the importance of nuclear weapons in U.S. strategy at just the time when the administration hopes to move in the opposite direction.

and limited the broader damage to the NPT arising from Iran’s nuclear acquisition, containment itself would increase the importance of nuclear weapons in U.S. strategy at just the time when the administration hopes to move in the opposite direction. Obama has signaled his desire to reduce the number of deployed nuclear weapons below New START levels, and discussions have started with Russia to advance that goal.³⁶⁴ Yet it may prove very difficult to simultaneously deter a nuclear-armed Iran, assure partners and further reduce the number of American nuclear weapons.³⁶⁵ Indeed, some analysts contend that reductions below New START levels would complicate Washington’s ability to execute existing extended deterrence commitments, let alone expanded nuclear guarantees associated with an Iranian containment regime.³⁶⁶ Others disagree, arguing that additional

reductions are both possible and desirable.³⁶⁷ Regardless of the objective operational requirements, further nuclear reductions could magnify allies' and partners' doubts about the credibility of American commitments, undermining U.S. reassurance objectives.³⁶⁸ At the very least, these concerns, combined with likely opposition from Congressional hawks, could make further nuclear force reductions more difficult to execute politically.

Significantly bolstering U.S. missile defense capabilities to check Iran could also make further nuclear reductions less likely by undermining Russian and Chinese willingness to sign onto arms control agreements.³⁶⁹ Although Russia seems pleased with the recent Obama administration move to cancel Phase 4 of its European missile defense plan, which Russia feared might provide some protection for NATO against Russian ICBMs,³⁷⁰ hardliners in Russia would likely use any expansion of U.S.-based NMD systems as an argument against making deeper cuts in Russia's nuclear arsenal.³⁷¹ China is similarly likely to see any expansion as threatening.³⁷²

Containment Lite?

Given these costs and trade-offs, it would be tempting to scale back the containment strategy outlined here. It might be possible, for example, to simply rely on U.S. declaratory policy, existing military capabilities and security relationships and a very small American regional presence to dissuade Iran from using its newfound nuclear capabilities. Such a scaled-down approach would likely prove sufficient to deter Iran from directly attacking the United States. But it would not be sufficient to check Iran's threatening behavior or limit the growth in Tehran's nuclear capabilities over time. Nor would it be sufficient to reassure U.S. allies and partners and thereby prevent them from pursuing their own nuclear capabilities (or in Israel's case, adopting destabilizing nuclear postures). In other words,

containment on the cheap might suffice to counter the least likely dangers emanating from a nuclear-armed Iran – intentional Iranian nuclear use against the United States – but would probably fail to address the much more likely dangers associated with a volatile, crisis-prone, nuclear Middle East.

XI. CONCLUSIONS

The Obama administration is committed to preventing – not containing – a nuclear-armed Iran. Given the likely consequences of Iranian nuclearization and the uncertainties, costs and strategic trade-offs associated with containment, this is the right approach. Moreover, having issued a “no-containment” pledge, the United States could not walk back from this policy now without damaging the very credibility it needs to effectively address the Iranian nuclear challenge. The commitment to prevention should remain firm.

However, this should not be used as an excuse to stick our collective heads in the sand. Even if U.S. policymakers prefer prevention to containment, prevention could fail. The United States is not likely to acquiesce to the emergence of a nuclear-armed Iran, but Tehran may be able to achieve an unstoppable breakout capability or develop nuclear weapons in secret before preventive measures, up to and including the use of force, have been exhausted. Alternatively, an ineffective military strike could produce minimal damage to Iran’s nuclear program while strengthening Iran’s motivation to acquire the bomb. Under any of these scenarios, Washington would be forced to shift toward containment regardless of current preferences.

The failure to prevent Iran from acquiring nuclear weapons would be bad, but the failure to be prepared for that possibility would be even worse. The emergence of a nuclear-armed Iran would further destabilize an already volatile region. Tehran would emerge as a more deadly adversary, and other states could react in ways that compound threats to vital U.S. interests.

Heading off these dangers would depend on a coherent strategy, not improvisation, and time would be of the essence. Implementing an effective containment strategy would require careful

planning to organize and quickly execute a complex array of changes to U.S. nuclear policy, regional security arrangements, conventional military deployments, intelligence activities, diplomacy, sanctions and counterproliferation policies. The time to conduct that planning is now, not the day after Iran gets the bomb. Some of the steps proposed in this report would require the United States to simply sustain or modify existing activities; others would require substantial modifications to current policy. None of the measures would be free of cost or risk, and many would force difficult strategic trade-offs. If the various components of containment, and the interactions among them, are not carefully thought out ahead of time, the likelihood of effectively managing and mitigating the dangers of a nuclear-armed Iran would be much lower.

This report has offered a first cut at identifying the requirements for effective containment, but it should not be seen as the final word. More serious planning and preparation is needed – not because we want to take this path, but because it may eventually become the only path left.

ENDNOTES

1. John Lewis Gaddis, *Strategies of Containment: A Critical Appraisal of American National Security Policy During the Cold War* (New York: Oxford University Press, 2005).
2. See, for example, Barry R. Posen, "A Nuclear-Armed Iran: A Difficult but Not Impossible Policy Problem" (Century Foundation, 2006); Fareed Zakaria, "Containing a Nuclear Iran," *Newsweek*, October 2, 2009; James M. Lindsay and Ray Takeyh, "After Iran Gets the Bomb," *Foreign Affairs*, 89 no. 2 (March/April 2010), 33-49; Karim Sadjapour, "The Sources of Soviet Iranian Conduct: George Kennan's Fifteen Lessons for Understanding and Dealing with Tehran," *Policy Outlook* (Carnegie Endowment for International Peace, December 2010); Roger Cohen, "Contain and Constrain Iran," *The New York Times*, November 14, 2011; and Robert J. Reardon, "Containing Iran: Strategies for Addressing the Iranian Nuclear Challenge" (RAND Corporation, 2012).
3. Kenneth M. Pollack, "Containing Iran," in *The Iran Primer: Power, Politics and U.S. Policy*, ed. Robin Wright (Washington: United States Institute of Peace, 2010).
4. Massimo Calabresi, "The Path to War," *Time*, March 11, 2013.
5. Jeffrey Goldberg, "Obama to Iran and Israel: 'As President of the United States, I Don't Bluff,'" *The Atlantic*, March 2, 2012; and The White House, Office of the Press Secretary, "Remarks by the President at AIPAC Policy Conference," Washington Convention Center, March 4, 2012.
6. The White House, Office of the Press Secretary, "Remarks of President Barack Obama to the People of Israel," Washington Convention Center, March 21, 2013.
7. The White House, Office of the Vice President, "Remarks by the Vice President to the AIPAC Policy Conference," Washington Convention Center, March 4, 2013; John Kerry, Secretary of State nominee, testimony to the Foreign Relations Committee, U.S. Senate, January 24, 2013; and Chuck Hagel, Secretary of Defense nominee, testimony at confirmation hearing before the Armed Services Committee, U.S. Senate, January 31, 2013.
8. See James K. Sebenius and Michael Singh, "Is a Nuclear Deal with Iran Possible? An Analytical Framework for the Iran Nuclear Negotiations," *International Security*, 37 no. 3 (Winter 2012/2013), 52-91; and Robert Jervis, "Getting to Yes with Iran," *Foreign Affairs*, 92 no. 1 (January/February 2013).
9. The first two reports in the series are Colin H. Kahl, Melissa Dalton and Matthew Irvine, "Risk and Rivalry: Iran, Israel and the Bomb" (Center for a New American Security, June 2012); and Colin H. Kahl, Melissa Dalton and Matthew Irvine, "Atomic Kingdom: If Iran Builds the Bomb, Will Saudi Arabia Be Next?" (Center for a New American Security, February 2013).
10. James R. Clapper, "Worldwide Threat Assessment of the U.S. Intelligence Community," Statement to the Select Committee on Intelligence, U.S. Senate, March 12, 2013, 7.
11. David Albright, Christina Walrond, Andrea Stricker and Robert Avagyan, "ISIS Analysis of IAEA Iran Safeguards Report" (Institute for Science and International Security, February 2013), 13.
12. If Iran used its 3.5 percent LEU stockpile in conjunction with its existing 20 percent material, this timeline could be shortened somewhat. See William C. Witt, Christina Walrond, David Albright and Houston Wood, "Iran's Evolving Breakout Potential" (Institute for Science and International Security, October 2012), 12-13.
13. Albright et al., "ISIS Analysis of IAEA Iran Safeguards Report," 13.
14. Witt et al., "Iran's Evolving Breakout Potential," 13; and Olli Heinonen, "What is the State of Play of the Iranian Program Today" (Belfer Center for Science and International Affairs, Harvard University, April 9, 2013).
15. Mark Fitzpatrick, "Iran Nuclear Plan: The Two Paths to Making a Nuclear Weapon," *The Telegraph*, February 26, 2013; and Reardon, "Containing Iran," 55.
16. The White House, Office of the Press Secretary, "Remarks by President Obama and Prime Minister Netanyahu of Israel in Joint Press Conference," Jerusalem, March 20, 2013.
17. David Albright et al., "Preventing Iran from Getting Nuclear Weapons: Constraining Its Future Nuclear Options," (Institute for Science and International Security, March 2012), 10; and Witt et al., "Iran's Evolving Breakout Potential," 6.
18. Clapper, "Worldwide Threat Assessment of the U.S. Intelligence Community," 7.
19. Albright et al., "Preventing Iran from Getting Nuclear Weapons," 12; Witt et al., "Iran's Evolving Breakout Potential"; and Joby Warrick and Greg Miller, "U.S. Intelligence Gains in Iran Seen to Boost Confidence," *The Washington Post*, April 7, 2012.
20. Ray Takeyh, "Why Iran Thinks It Needs the Bomb," *The Washington Post*, February 17, 2012; and Clapper, "Worldwide Threat Assessment of the U.S. Intelligence Community," 7. On Iran's foreign policy objectives, see Michael Eisenstadt, "The Strategic Culture of the Islamic Republic of Iran: Operational and Policy Implications," *Middle East Studies Monographs* no. 1 (Marine Corps University, August 2011); and Ray Takeyh, *Guardians of the Revolution: Iran and the World in the Age of the Ayatollahs* (New York: Oxford University Press, 2009).
21. See, for example, Yitzhak Benhorin, "Obama: Military Options Remains on Table," *YNet.com*, September 4, 2012.
22. Goldberg, "Obama to Iran and Israel."
23. Rowan Scarborough, "Pentagon Is Planning 'Contingency' for Iran and North Korea," *The Washington Times*, May 1, 2012; Thom Shanker, Eric Schmitt and David E. Sanger, "U.S. Adds Forces in Persian Gulf, a Signal to Iran," *The New York Times*, July 3, 2012; and Calabresi, "The Path to War."
24. See, for example, Michael Makovsky and Blaise Misztal, "Obama's Iran Policy Shifts Towards Containment," *The Washington Post*, December 9, 2011; and John Bolton, "On Iran, Sanctions Are Not the Answer," *USA Today*, January 17, 2012.
25. Richard K. Betts, "The Lost Logic of Deterrence," *Foreign Affairs*, 93 (March/April 2013).

26. "Interview Transcript: President Obama with José Díaz-Balart," *NBC Universal*, September 12, 2012.
27. See, for example, David E. Sanger, "On Iran, Questions of Detection and Response Divide U.S. and Israel," *The New York Times*, March 6, 2012; and Michael Singh, "Defining Our Red Lines," *ForeignPolicy.com*, October 11, 2012.
28. "Transcript and Audio: Third Presidential Debate," National Public Radio, October 22, 2012.
29. Michael D. Shear and David E. Sanger, "Iran Nuclear Weapon to Take Year or More, Obama Says," *The New York Times*, March 15, 2013.
30. Sanger, "On Iran, Questions of Detection and Response Divide U.S. and Israel."
31. Clapper, "Worldwide Threat Assessment of the U.S. Intelligence Community," 7.
32. Benjamin Netanyahu, "Speech to the United Nations General Assembly 2012" (United Nations, New York, September 27, 2012).
33. Dan Williams, "Obama Won't Trip Over Netanyahu's Iran Red Line," *Reuters*, March 15, 2013.
34. Albright et al., "U.S. Nonproliferation Strategy for the Changing Middle East" (Project on U.S. Middle East Nonproliferation Strategy, January 2013), 3-4; Reardon, "Containing Iran," 61-64; and Witt et al., "Iran's Evolving Breakout Potential," 21.
35. Joby Warrick, "Iran's Bid to Buy Banned Magnets Stokes Fears about Major Expansion of Nuclear Capacity," *The Washington Post*, February 13, 2013.
36. Fredrik Dahl, "Iran Move to Speed Up Nuclear Program Troubles West," *Reuters*, February 21, 2013.
37. David Albright, Andrea Stricker and Christina Walrond, "Discouraging Any Iranian Decision to Produce Highly Enriched Uranium" (Institute for Science and International Security, October 2012); and "Iran May Need Highly Enriched Uranium in Future, Official Says," *Reuters*, April 16, 2013.
38. Fitzpatrick, "Iran Nuclear Plan."
39. Reardon, "Containing Iran," 56-57.
40. On the concept of "self-deterrence," see Thérèse Delpech, "Nuclear Deterrence in the 21st Century" (RAND Corporation, 2012), 34-35 and 113-114.
41. International Institute for Strategic Studies, "North Korea's Weapons Programmes: A Net Assessment," *Strategic Dossier* (January 2004), 38.
42. Jacques E.C. Hymans and Matthew S. Gratias, "Iran and the Nuclear Threshold: Where Is the Line?" *Nonproliferation Review*, 20 no. 1 (March 2013), 13-38.
43. Reardon, "Containing Iran," 62-63.
44. Tabassum Zakaria and Mark Hosenball, "Special Report: Intel Shows Iran Nuclear Threat Not Imminent," *Reuters*, March 23, 2012.
45. Thomas Erdbrink, "Iran Vows to Expand its Nuclear Program," *The Washington Post*, November 30, 2009.
46. Albright et al., "Preventing Iran from Getting Nuclear Weapons," 23-24; Reardon, "Containing Iran," 61; and Ray Takeyh, "The Best Red Line for a Nuclear Iran," *The Washington Post*, March 31, 2013.
47. Albright et al., "Preventing Iran from Getting Nuclear Weapons"; and Reardon, "Containing Iran," 61.
48. Joby Warrick, "North Korean Secrecy on Bomb Test Fuels Speculation on Nuclear Advances," *The Washington Post*, March 31, 2013.
49. Uzi Mahnaimi, Michael Sheridan and Shota Ushio, "Iran Steps Deep into Kim's Nuclear Huddle," *The Sunday Times* (London), February 17, 2013; James S. Robbins, "Does Iran Already Have the Bomb?" *USA Today*, February 28, 2013; and David Albright, President, Institute for Science and International Security (ISIS), "A Dangerous Nexus: Preventing Iran-Syria-North Korea Nuclear and Missile Proliferation," testimony to the Foreign Affairs Committee, Subcommittee on the Middle East and North Africa and Subcommittee on Asia and the Pacific, U.S. House of Representatives, April 11, 2013.
50. Warrick, "North Korean Secrecy on Bomb Test Fuels Speculation on Nuclear Advances."
51. Albright et al., "U.S. Nonproliferation Strategy for the Changing Middle East," 7.
52. Kahl, Dalton and Irvine, "Risk and Rivalry," 34-35.
53. Adam Entous and Julian E. Barnes, "Pentagon Bulks Up 'Bunker Buster' Bomb to Combat Iran," *Wall Street Journal*, May 3, 2013. Estimates of how much delay a U.S. strike could produce range from 4 to 10 years. For the lower end, see The Iran Project, "Weighing Benefits and Costs of Military Action Against Iran" (September 2012), 29-30; for the upper estimate, see Matthew Kroenig, "Five Reasons to Attack Iran," *The Christian Science Monitor*, January 24, 2012.
54. Seyed Hossein Mousavian, *The Iranian Nuclear Crisis: A Memoir* (Washington: Carnegie Endowment for International Peace, 2012), 13-14.
55. The Iran Project, "Weighing Benefits and Costs of Military Action Against Iran," 38-39.
56. James Dobbins et al., "Coping with a Nuclearizing Iran" (RAND Corporation, 2011), 95-96, 103-104; Colin H. Kahl, "The Iran Containment Fallacy," *Congress blog on TheHill.com*, February 22, 2012; and Dennis Ross, "Calling Iran's Bluff: It's Time to Offer Tehran a Civilian Nuclear Program," *New Republic*, June 15, 2012.
57. John Lewis Gaddis, "Strategies of Containment, Past and Future," *Hoover Digest*, no. 2 (April 2001).
58. International Institute for Strategic Studies, "North Korea's Weapons Programme," 48.
59. Richard L. Kugler, "An Extended Deterrence Regime to Counter Iranian Nuclear Weapons" (National Defense University, September 2009), 12-13. On

the likelihood of Iran eventually choosing to declare and test its arsenal, see Hymans and Gratijs, "Iran and the Nuclear Threshold," 13-38.

60. Avner Cohen, *The Worst-Kept Secret: Israel's Bargain with the Bomb* (New York: Columbia University Press, 2010).
61. For a good summary of these arguments, see Shashank Joshi, "The Permanent Crisis: Iran's Nuclear Trajectory" (Royal United Services Institute for Defence and Security Studies, 2012), 84-87.
62. Bari Weiss, "The Tyrannies Are Doomed: Weekend Interview with Bernard Lewis," *The Wall Street Journal*, April 2, 2011; Noah Feldman, "Islam, Terror and the Second Nuclear Age," *The New York Times*, October 29, 2006; Norman Podhoretz, "The Case for Bombing Iran," *Commentary*, June 2007; Mehdi Khalaji, "Apocalyptic Politics: On the Rationality of Iranian Policy," Policy Focus no. 79 (Washington Institute for Near East Policy, January 2008); Dore Gold, *The Rise of Nuclear Iran: How Iran Defies the West* (Washington: Regnery Publishing, 2009); Shmuel Bar, "Can Cold War Deterrence Apply to a Nuclear Iran," Strategic Perspectives no. 7 (Jerusalem Center for Public Affairs, 2011), 5-7; Bolton, "On Iran, Sanctions Are Not the Answer"; and Peter Huessy, "Faulty Assumptions on Iran," *The Washington Times*, April 20, 2012. Israeli Prime Minister Netanyahu also appears to share this view. Netanyahu, "Speech to the United Nations General Assembly 2012."
63. On the surface, this seems plausible since outgoing President Mahmoud Ahmadinejad, some of his associates and a number of Islamic Revolutionary Guard Corps members appear to subscribe to these beliefs. Such messianic leaders might nihilistically welcome destruction to usher the return of the Twelfth Imam and the "day of judgment." See Bar, "Can Cold War Deterrence Apply to a Nuclear Iran," 5; and Frederick W. Kagan, "Deterrence Misapplied: Challenges in Containing a Nuclear Iran" (Council on Foreign Relations, May 2010), 3-5.
64. Jacquelyn K. Davis and Robert L. Pfaltzgraff, Jr., "Iran with Nuclear Weapons" (Institute for Foreign Policy Analysis, September 2008), 3; and Delpech, *Nuclear Deterrence in the 21st Century*, 99. This is one of the dangers mentioned most frequently by U.S. and Israeli officials. See, for example, The White House, "Remarks of President Barack Obama to the People of Israel"; and Benjamin Netanyahu, "Prime Minister Benjamin Netanyahu Addresses AIPAC 2012" (Washington Convention Center, March 5, 2012).
65. As Iran reportedly instructed Hezbollah to do during the militant group's 2006 war with Israel. See Benjamin S. Lambeth, "Air Operations in Israel's War Against Hezbollah: Learning from Lebanon and Getting It Right in Gaza" (RAND Corporation, 2011), 105-106.
66. Davis and Pfaltzgraff, Jr., "Iran with Nuclear Weapons," 5-6; David Ochmanek and Lowell H. Schwartz, "The Challenge of Nuclear-Armed Regional Adversaries" (RAND Corporation, 2008), 26, 35-36; and Gregory F. Giles, "Deterring a Nuclear-Armed Iran from Adventurism and Nuclear Use," in *Tailored Deterrence: Influencing States and Groups of Concern*, eds. Barry Schneider and Patrick Ellis (Maxwell Air Force Base, AL: U.S. Air Force Counterproliferation Center, May 2011), 27.
67. Colin H. Kahl, "One Step Too Far," *Foreign Affairs*, 91 no. 5 (September/October 2012); and Matthew Kroenig and Robert McNally, "Iranian Nukes and Global Oil," *The American Interest*, 8 no. 4 (March/April 2013), 44-45.
68. Michael Eisenstadt, "Religious Ideologies, Political Doctrines and Nuclear Decision-Making," in Eisenstadt and Mehdi Khaleji, "Nuclear Fatwa: Religion and Politics in Iran's Proliferation Strategy," Policy Focus 115 (Washington Institute for Near East Policy, September 2011), 4-6.
69. Jennifer Lind, "Why North Korea Gets Away with It," *ForeignAffairs.com*, April 12, 2012; and Jeffrey Lewis, "Frienemies: The North's Nuclear Test Was Bad Enough, the South Shouldn't Make It Worse," 38north.org, February 26, 2013.
70. S. Paul Kapur, *Dangerous Deterrent: Nuclear Weapons Proliferation and Conflict in South Asia* (Stanford, CA: Stanford University Press, 2007); and Dinshaw Mistry, "Complexity of Deterrence Among New Nuclear States," in eds. T.V. Paul, Patrick M. Morgan and James J. Wirtz, *Complex Deterrence* (Chicago: University of Chicago Press, 2009), 183-203.
71. For a general discussion of relevant theory and historical cases, as well as the applicability to Iran, see Kahl, Dalton and Irvine, "Risk and Rivalry," 19-23.
72. Robert Jervis, *The Meaning of the Nuclear Revolution: Statecraft and the Prospects of Armageddon* (Ithaca, NY: Cornell University Press, 1989), 19-22, 35-37.
73. Kugler, "An Extended Deterrence Regime to Counter Iranian Nuclear Weapons," 14.
74. Davis and Pfaltzgraff, "Iran with Nuclear Weapons," 3, 86; Delpech, *Nuclear Deterrence in the 21st Century*, 38, 102, 111-112; Eric S. Edelman, Andrew F. Krepinevich and Evan Braden Montgomery, "The Dangers of a Nuclear Iran," *Foreign Affairs*, 90 no. 1 (January/February 2011), 73-74; and Giles, "Deterring a Nuclear-Armed Iran from Adventurism and Nuclear Use," 16-17.
75. On the general dynamics associated with crisis instability, see Thomas C. Schelling, *Strategy of Conflict* (Cambridge, MA: Harvard University Press, 1960), 207-230; Thomas C. Schelling, *Arms and Influence* (New Haven, CT: Yale University, 1966), 221-260; and Jervis, *The Meaning of the Nuclear Revolution*, 136-174.
76. Lindsay and Takeyh, "After Iran Gets the Bomb," 39; Edelman, Krepinevich and Montgomery, "The Dangers of a Nuclear Iran," 68-69; Matthew Kroenig, "Time to Attack Iran," *Foreign Affairs*, 91 no. 1 (January/February 2012), 78; and Austin Long, "Proliferation and Strategic Stability in the Middle East," in *Strategic Stability: Contending Interpretations*, eds. Elbridge A. Colby and Mike S. Gearson (Carlisle, PA: Strategic Studies Institute, February 2013), 406-409.
77. Shahram Chubin, "Command and Control in a Nuclear-Armed Iran," Proliferation Papers 45 (Institut Français des Relations Internationales Security Studies Center, January/February 2013).
78. Yair Evron, "An Israel-Iran Balance of Nuclear Deterrence: Seeds of Instability," in *Israel and a Nuclear Iran: Implications for Arms Control, Deterrence and Defense*, ed. Ephram Kam (Tel Aviv: Institute for National Security Studies, July 2008), 56-57.
79. National Intelligence Council, *Global Trends 2030: Alternative Worlds*, NIC 2012-001 (December 2012), 60.

80. Edelman, Krepinevich and Montgomery, "The Dangers of a Nuclear Iran," 69-71; Ari Shavit, "The Bomb and the Bomber," *The New York Times*, March 21, 2012; and Amos Yadlin and Anver Golov, "A Nuclear Iran: The Spur to a Regional Arms Race?" *Strategic Assessment*, 15 no. 3 (October 2012), 7-26.
81. Reardon, "Containing Iran," 115. See also, Delpech, *Nuclear Deterrence in the 21st Century*, 15-16, 33; National Intelligence Council, *Global Trends 2030: Alternative Worlds*, 60; and U.S. Department of State, International Security Advisory Board, *Report on Discouraging a Cascade of Nuclear Weapons States* (October 19, 2007).
82. Ash Jain, "Nuclear Weapons and Iran's Global Ambitions: Troubling Scenarios," Policy Focus no. 114 (Washington Institute for Near East Policy, August 2011), 18-20; and Kroenig, "Time to Attack Iran," 78.
83. Davis and Pfaltzgraff, "Iran with Nuclear Weapons," 58, 60; Edelman, Krepinevich and Montgomery, "The Dangers of a Nuclear Iran," 71-73; and Joshi, "The Permanent Crisis," 99-101.
84. Steve Levine, "Why the World is Headed Toward More Oil Scarcity," *Quartz*, December 24, 2012.
85. Charles S. Robb and Charles Wald (chairs), "The Price of Inaction: Analysis of Energy and Economic Effects of a Nuclear Iran" (Bipartisan Policy Center, October 2012).
86. Kroenig and McNally, "Iranian Nukes and Global Oil," 41-47.
87. Jeffrey W. Knopf, "Three Items in One: Deterrence as Concept, Research Program and Political Issue," in *Complex Deterrence*, eds. Paul, Morgan and Wirtz, 37-38; and Department of Defense, *Deterrence Operations Joint Operating Concept*, Version 2.0 (December 2006), 3, 5-6, 19-28.
88. Knopf, "Three Items in One: Deterrence as Concept, Research Program, and Political Issue," 38; Robert Jervis, "Deterrence, Rogue States and U.S. Policy," in eds. Paul, Morgan and Wirtz, *Complex Deterrence*, 134; Betts, "The Lost Logic of Deterrence," 88; and Kugler, "An Extended Deterrence Regime to Counter Iranian Nuclear Weapons," 24.
89. For a discussion of these various types of deterrence, see Paul K. Huth, *Extended Deterrence and the Prevention of War* (New Haven, CT: Yale University Press, 1988), chap. 2; and Patrick M. Morgan, *Deterrence Now* (Cambridge, UK: Cambridge University Press, 2003), 1-41.
90. Davis and Pfaltzgraff, "Iran with Nuclear Weapons," 77-79.
91. Lynn E. Davis et al., "Iran's Nuclear Future: Critical U.S. Policy Choices" (RAND Corporation, 2011), 31.
92. Eisenstadt, "Religious Ideologies, Political Doctrines and Nuclear Decision-Making," 1-12.
93. Davis et al., "Iran's Nuclear Future," 10-11.
94. Eisenstadt, "The Strategic Culture of the Islamic Republic of Iran," 2.
95. Lindsay and Takeyh, "After Iran Gets the Bomb," 35-36; Bruce Riedel, "Iran-U.S.: After the Iranian Bomb" (Center for Strategic Studies, Institute for National Strategic Studies, National Defense University, September 20, 2011), 2-3.
96. Alan J. Kuperman, "A Nuclear Iran Is Too Much to Risk," *Los Angeles Times*, April 1, 2012.
97. Davis et al., "Iran's Nuclear Future," 31-32; Eisenstadt, "The Strategic Culture of the Islamic Republic of Iran," 8-9.
98. Clapper, "Worldwide Threat Assessment of the U.S. Intelligence Community," 5, 7; and Laura Rozen, "The Regime in Iran Is a Very Rational One' Former Israeli Intelligence Chief Tells CBS," Yahoo News, March 8, 2012.
99. Davis et al., "Iran's Nuclear Future," 32-36; Eisenstadt, "The Strategic Culture of the Islamic Republic of Iran," 4-5; and "Gulf Roundtable Summary: The Evolution of Iran's Military Doctrine" (Center for Strategic and International Studies, January 9, 2013).
100. Quoted in Eisenstadt, "The Strategic Culture of the Islamic Republic of Iran," 3. See also, Daniel Sobelman, "Iran: 'Unimaginable' Retaliation if Israel Hits Nuclear Plant," *Haaretz*, February 4, 2002.
101. Marcus George and Zahra Hosseinian, "Iran Will Destroy Israeli Cities if Attacked: Khamenei," Reuters, March 21, 2013.
102. David E. Thaler et al., "Mullahs, Guards and Bonyads: An Exploration of Iranian Leadership Dynamics" (RAND Corporation, 2010), 120-122.
103. Bar, "Can Cold War Deterrence Apply to a Nuclear Iran?" 6.
104. Davis and Pfaltzgraff, "Iran with Nuclear Weapons," 38; Dalia Dassa Kaye, Alizea Nader and Parisa Roshon, "Israel and Iran" (RAND Corporation, 2011), 75-76; and Riedel, "Iran-U.S.: After the Iranian Bomb," 3.
105. Karl Vick, "In Iran, Even Some on Right Warning Against Extremes," *The Washington Post*, March 27, 2006; Eisenstadt, "Religious Ideologies, Political Doctrines and Nuclear Decision-Making," 6-7; and Abbas Milani, "The Ayatollah in His Labyrinth," *ForeignPolicy.com*, April 4, 2013.
106. Institute for Science and International Security, "The Iranian Power Struggle and its Implications for the Nuclear Crisis," isisnucleariran.org, June 2, 2011; Neil MacFarquhar, "A Divine Wind Blows Against Iran's President," *The New York Times*, June 22, 2011; Alireza Nader, "Ahmadinijad vs. the Republican Guards," *Al Arabiya News*, July 25, 2011; and Thomas Erdbrink, "Power Struggle Is Gripping Iran Ahead of June Election," *The New York Times*, April 3, 2013.
107. Timothy Crawford, "The Endurance of Extended Deterrence: Continuity, Change and Complexity in Theory and Practice," in eds. Paul, Morgan and Wirtz, *Complex Deterrence*, 284.
108. Department of Defense, *Deterrence Operations Joint Operating Concept*, 16-17.
109. Kugler, "An Extended Deterrence Regime to Counter Iranian Nuclear Weapons," 25; and Clark A. Murdock et al., "Exploring the Nuclear Posture Implications of Extended Deterrence and Assurance: Workshop Proceedings and Key Takeaways" (Center for Strategic and International Studies, November 2009), 18-19.

110. Department of Defense, *Nuclear Posture Review* (April 2010), 15, 33.
111. In 1969, President Richard Nixon declared the U.S. commitment to “provide a shield if a nuclear power threatens the freedom of a nation allied with us or of a nation whose survival we consider vital to our security.” In 1980, after the Soviet invasion of Afghanistan, President Jimmy Carter went a step further, declaring that “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.” See Emile Hokayem, “Extended Deterrence in the Gulf: A Bridge to Far?” in “Perspectives on Extended Deterrence,” ed. Bruno Tertrais (Fondation pour la Recherche Strategique, May 2010), 81.
112. The language on nuclear terrorism parallels existing declaratory policy on North Korea. The White House, Office of the Press Secretary, “Remarks by President Obama to the Australian Parliament,” Parliament House, Canberra, Australia, November 17, 2011.
113. Davis and Pfaltzgraff, “Iran with Nuclear Weapons,” 24-25, 71-72, 90; and Department of Defense, *Deterrence Operations Joint Operating Concept*, 6, 16-17, 25-26, 29-32, 44-48.
114. Department of Defense, *Deterrence Operations Joint Operating Concept*, 42-44.
115. Arms Control Association, “New START at a Glance,” *Arms Control Today*, August 2012.
116. Hans M. Kristensen, “New START Treaty Has New Counting,” Strategic Security Blog from the Federation of American Scientists on fas.org, March 29, 2010.
117. Department of Defense, Office of the Assistant Secretary of Defense for Nuclear, Chemical and Biological Defense Programs, *The Nuclear Matters Handbook, Expanded Edition* (2011), 33, 44-48, 163-164.
118. Anthony H. Cordesman and Abdullah Toukan, “Iran, Israel and the Effects of Nuclear Conflict in the Middle East” (Center for Strategic and International Studies, June 2009); and Joshi, “The Permanent Crisis,” 86-87.
119. Steven Pifer et al., “U.S. Nuclear and Extended Deterrence: Consideration and Challenges” (Brookings Institution, May 2010), 41.
120. Crawford, “The Endurance of Extended Deterrence,” 282-283.
121. *Ibid.*, 287-288.
122. Evron, “An Israel-Iran Balance of Nuclear Deterrence,” 52.
123. Murdock et al., “Exploring the Nuclear Posture Implications of Extended Deterrence and Assurance,” 1-2, 11-13.
124. U.S. Department of State, International Security Advisory Board, *Report on Discouraging a Cascade of Nuclear Weapons States*, 23; and Philippe C. Bleek and Eric Lorber, “Extended Deterrence and Allied Proliferation,” (paper prepared for the Project On Strategic Stability Evaluation (POSSE), Vienna, Austria, February 28, 2013).
125. Regional proliferation concerns are probably exaggerated. Historically, region-wide cascades have often been predicted but have never materialized, and even limited “reactive” proliferation has been rare. Egypt and Turkey are often listed as prime candidates for developing nuclear weapons in response to Iran, but neither is primed to do so. Saudi Arabia is more likely to pursue *some form* of nuclear deterrent to counter archrival Iran, but a U.S. nuclear guarantee would likely prove sufficient to prevent the Kingdom from pursuing an indigenous bomb or acquiring one from ally Pakistan. See Kahl, Dalton and Irvine, “Atomic Kingdom.”
126. Kugler, “An Extended Deterrence Regime to Counter Iranian Nuclear Weapons,” 27-29; and Pifer et al., “U.S. Nuclear and Extended Deterrence,” 42.
127. Davis et al., “Iran’s Nuclear Future,” 63, 111-112; and Pifer et al., “U.S. Nuclear and Extended Deterrence,” 42.
128. The Obama administration has extensively engaged the Muslim Brotherhood, but divergent interests have produced mixed results. See Michael Wahid Hanna, “Clouded U.S. Policy on Egypt,” *ForeignPolicy.com*, February 26, 2013.
129. Iraq attempts to maintain a delicate balance between its relations with the United State and Iran. See, for example, Howard LaFranchi, “John Kerry Urges Iraq to Inspect Iranian Overflights to Syria,” *The Christian Science Monitor*, March 25, 2013.
130. Davis et al., “Iran’s Nuclear Future,” 60-65; Pifer et al., “U.S. Nuclear and Extended Deterrence,” 42; and Reardon, “Containing Iran,” 152.
131. For a discussion of Saudi motivations, see Kahl, Dalton and Irvine, “Atomic Kingdom,” 30-33.
132. Kugler, “An Extended Deterrence Regime to Counter Iranian Nuclear Weapons,” 30-31; Murdock et al., “Exploring the Nuclear Posture Implications of Extended Deterrence and Assurance,” 5-6, 56-58, 61-63; and Pifer et al., “U.S. Nuclear and Extended Deterrence,” 42.
133. Davis et al., “Iran’s Nuclear Future,” xvii; and Murdock et al., “Exploring the Nuclear Posture Implications of Extended Deterrence and Assurance,” 2-3, 13, 23-31.
134. Davis et al., “Iran’s Nuclear Future,” 47; and Murdock et al., “Exploring the Nuclear Posture Implications of Extended Deterrence and Assurance,” 32.
135. Davis et al., “Iran’s Nuclear Future,” 46-47, 62-63.
136. *Ibid.*, 59-60.
137. Murdock et al., “Exploring the Nuclear Posture Implications of Extended Deterrence and Assurance,” 40.
138. Department of Defense, *Nuclear Posture Review*, 27, 35.
139. Cohen, *The Worst-Kept Secret*, xxvii-xxviii; and Mark Fitzpatrick, “Nuclear Capabilities in the Middle East,” Background Paper (European Union Non-Proliferation Consortium, July 2011), 1-3.

140. Andrew Feickert, "Missile Survey: Ballistic and Cruise Missiles of Foreign Countries" (Congressional Research Service, March 5, 2004), 36; Yuval Azoulay, "Missile Test 'Will Improve Deterrence,'" *Haaretz*, January 18, 2008; and Dan Williams, "Israel Test-Fires Missile as Iran Debate Rages," Reuters, November 2, 2011.
141. Abdullah Toukan, "Study on a Possible Israeli Strike on Iran's Nuclear Facilities" (Center for Strategic and International Studies, March 14, 2009).
142. "Israel Gets 4th Nuke-Capable German Submarine," Associated Press, May 3, 2012; and International Institute for Strategic Studies (IISS), "The Military Balance 2013" (March 14, 2013), 365, 384.
143. Posen, "A Nuclear-Armed Iran," 15.
144. Morgan, *Deterrence Now*, 16.
145. Reuven Pedatzur, "Israel Can Deter Iran," *Al-Monitor*, October 9, 2012. See also, Louis René Beres, "Watching the Clock," *Jerusalem Post*, February 28, 2012; Beres, "Israel's Uncertain Strategic Future," *Parameters*, 37 no. 1 (Spring 2007), 39-40; and Pedatzur, "The Iranian Nuclear Threat and Israeli Options," *Contemporary Security Studies*, 28 no. 3 (December 2007), 526, 531-535.
146. Dimitry Adamsky, "Why Israel Should Learn to Stop Worrying and Love the Bomb," *ForeignAffairs.com*, March 31, 2012.
147. Murdock et al., "Exploring the Nuclear Posture Implications of Extended Deterrence and Assurance," 62-63; and Reardon, "Containing Iran," 155.
148. Louis René Beres, "Correspondence: Israel and the Bomb," *International Security*, 29 no. 1 (Summer 2005), 175-178.
149. Micah Zenko, "Come Out of the Nuclear Closet," *The New York Times*, March 8, 2012.
150. Office of the Director of National Intelligence, *Unclassified Report to Congress on the Acquisition of Technology Relating to Weapons of Mass Destruction and Advanced Conventional Munitions* (February 2012), 4.
151. Lindsay and Takeyh, "After Iran Gets the Bomb," 37.
152. Frederic Wehrey et al., "Dangerous but Not Omnipotent: Exploring the Reach and Limitations of Iranian Power in the Middle East" (RAND Corporation, 2009), 81-129; and Daniel Byman, "Iran's Support for Terrorism in the Middle East," testimony to the Committee on Foreign Relations, U.S. Senate, July 25, 2012.
153. Matthew Bunn, "Nuclear Terrorism: A Strategy of Prevention," in *Going Nuclear: Nuclear Proliferation and International Security in the 21st Century*, eds. Michael E. Brown, Owen R. Coté Jr., Sean M. Lynn-Jones and Steven E. Miller (Cambridge, MA: MIT Press, 2010), 343; Posen, "A Nuclear-Armed Iran," 14-15; and Riedel, "Iran-U.S.: After the Iranian Bomb," 3.
154. S. Paul Kapur, "Deterring Nuclear Terrorists," in *Complex Deterrence*, eds. Paul, Morgan and Wirtz, 117-118.
155. Department of Defense, *Deterrence Operations Joint Operating Concept*, 30.
156. Davis and Pfaltzgraff, "Iran with Nuclear Weapons," 91-92; Department of Defense, *The Nuclear Matters Handbook, Expanded Edition*, 89-90; and Lindsay and Takeyh, "After Iran Gets the Bomb," 45.
157. Debra Decker, "Before the First Bomb Goes Off: Developing Nuclear Attribution Standards and Policies," Discussion Paper 2011-03 (Belfer Center for Science and International Affairs, Harvard Kennedy School, April 2011); and National Research Council, Committee on *Nuclear Forensics, Nuclear Forensics: A Capability at Risk* (Washington: National Academies Press, 2010).
158. Department of Defense, *The Nuclear Matters Handbook, Expanded Edition*, 83-84.
159. See "Seoul Communiqué," 2012 Seoul Nuclear Security Summit, The Nuclear Security Summit, March 27, 2012; and Director General of the International Atomic Energy Agency, "Nuclear Security Report 2012" (IAEA, July 2012), 16.
160. Department of Defense, *The Nuclear Matters Handbook, Expanded Edition*, 90.
161. Keir A. Lieber and Daryl G. Press, "Why States Won't Give Nuclear Weapons to Terrorists," *International Security*, 46 no. 2 (Summer 2013, forthcoming).
162. Sadr, "The Impact of Iran's Nuclearization on Israel," 66.
163. Pifer et al., "U.S. Nuclear and Extended Deterrence," 41.
164. Lieber and Press, "Why States Won't Give Nuclear Weapons to Terrorists."
165. Clapper, "Worldwide Threat Assessment of the U.S. Intelligence Community," 7.
166. National Intelligence Council, *Foreign Missile Developments and the Ballistic Missile Threat to the United States Through 2015* (September 1999); and Department of Defense, *Annual Report on Military Power of Iran* (April 2012), 4.
167. Michael Elleman, "Iran's Ballistic Missile Program," in *The Iran Primer*, ed. Wright; and Greg Thielmann, "Iran's Missile Program and Its Implications for U.S. Missile Defense," Threat Assessment Brief (Arms Control Association, February 2013), 4-5. See also Steven A. Hildreth, "Iran's Ballistic Missile and Space Launch Programs" (Congressional Research Service, December 6, 2012), 35-37.
168. David Wright, "Timeline for an Iranian Solid-fuel ICBM," AllThingsNuclear.org, February 10, 2013.
169. Department of Defense, *Ballistic Missile Defense Review Report* (February 2010), 15, 24-30; and Thielmann, "Iran's Missile Program and Its Implications for U.S. Missile Defense," 2-4.
170. Amaani Lyle, "Hagel: U.S. Bolstering Missile Defense," *American Forces Press Service*, March 15, 2013.
171. Department of Defense, *Ballistic Missile Defense Review Report*, 24; and LTG Patrick J. O'Reilly, "Ballistic Missile Defense Overview: European Phased Adaptive Approach" (paper presented to the Atlantic Council, Washington, October 18, 2011).

172. John Vandiver, "NATO: U.S. Plans for Missile Defense Won't Leave Europe Exposed," *Stars and Stripes*, March 18, 2013.
173. William Fallon and Lester Lyles, "Science and Technology Issues of Early Intercept Ballistic Missile Defense Feasibility" (Defense Science Board, 2011), 9, 20, 31.
174. The National Research Council, for example, has raised concerns about the GMD system and questioned whether it can adequately protect the East Coast. See National Research Council, *Making Sense of Ballistic Missile Defense: An Assessment of Concepts and Systems for U.S. Boost-Phase Missile Defense in Comparison to Other Alternatives* (Washington: National Academies Press, 2012), 86, 104.
175. Lyle, "Hagel: U.S. Bolstering Missile Defense."
176. Fallon and Lyles, "Science and Technology Issues of Early Intercept Ballistic Missile Defense Feasibility," 26-28; and National Research Council, *Making Sense of Ballistic Missile Defense*, 104-105, 128-132.
177. Fallon and Lyles, "Science and Technology Issues of Early Intercept Ballistic Missile Defense Feasibility," 31.
178. Davis and Pfaltzgraff, "Iran with Nuclear Weapons," 69, 83; Lindsay and Takeyh, "After Iran Gets the Bomb," 43-44; Murdock et al., "Exploring the Nuclear Posture Implications of Extended Deterrence and Assurance," 16, 21.
179. National Research Council, *Making Sense of Ballistic Missile Defense*, 71, 102.
180. Kugler, "An Extended Deterrence Regime to Counter Iranian Nuclear Weapons," 37.
181. Michael Levi, "Stopping Nuclear Terrorism," *Foreign Affairs*, 87 no. 1 (January/February 2008); and Department of Defense, *The Nuclear Matters Handbook, Expanded Edition*, chap. 6.
182. Edelman, Krepinevich and Montgomery, "The Dangers of a Nuclear Iran," 75; and Jerrold L. Nadler, Edward J. Markey and Bennie G. Thompson, "Cargo, the Terrorists' Trojan Horse," *The New York Times*, June 26, 2012.
183. Levi, "Stopping Nuclear Terrorism"; and Department of Defense, *The Nuclear Matters Handbook, Expanded Edition*, 91-92.
184. Department of Defense, *Deterrence Operations Joint Operating Concept*, 32-33.
185. Davis et al., "Iran's Nuclear Futures," 39-41; and Davis and Pfaltzgraff, "Iran with Nuclear Weapons," 9-10, 18-19, 31-33, 39-54.
186. Clapper, "Worldwide Threat Assessment of the U.S. Intelligence Community," 1.
187. Thom Shanker and David E. Sanger, "U.S. Suspects Iran Was Behind a Wave of Cyberattacks," *The New York Times*, October 13, 2012.
188. Email correspondence with Bob Butler, former Deputy Assistant Secretary of Defense for Cyber Policy, February 18, 2013.
189. Ashton B. Carter and Jane Holl Lute, "A Law to Strengthen Our Cyberdefense," *The New York Times*, April 1, 2012.
190. Ellen Nakashima, "As Cyberwarfare Heats Up, Allies Turn to U.S. Companies for Expertise," *The Washington Post*, November 22, 2012.
191. Thom Shanker, "In Kuwait, Panetta Affirms U.S. Commitment to the Middle East," *The New York Times*, December 11, 2012.
192. Anna Mulrine, "U.S. Plans to Base Regional Force in Kuwait. Will Iran Get the Message?" *The Christian Science Monitor*, June 20, 2012.
193. Shanker, Schmitt and Sanger, "U.S. Adds Forces in Persian Gulf"; Bradley Russell and Max Boot, "Iran Won't Close the Strait of Hormuz," *The Wall Street Journal*, January 4, 2012; Christopher P. Cavas, "New Cold War Takes Shape in Arabian Gulf," *Defense News*, March 24, 2013; U.S. Navy, unclassified PowerPoint slide on "Trends in DOD Presence," provided to authors, February 5, 2013; and IISS, "The Military Balance 2013," Map 12, 362.
194. See "The Gulf Security Architecture: Partnership with the Gulf Cooperation Council," Majority Staff Report prepared for the Committee on Foreign Relations, U.S. Senate, June 19, 2012.
195. David E. Sanger and Eric Schmitt, "U.S. Speeding Up Missile Defenses in Persian Gulf," *The New York Times*, January 30, 2010; and "U.S. Has Deployed PAC-3 Missile Defense Batteries to Four Gulf States," *Geostrategy Direct*, September 29, 2010.
196. Adam Entous and Julian E. Barnes, "Pentagon Bulks Up Defenses in the Gulf," *The Wall Street Journal*, July 17, 2012; Nuclear Threat Initiative, "U.S. to Deploy Missile-Tracking Radar in Qatar," *Global Security Newswire*, July 17, 2012.
197. Entous and Barnes, "Pentagon Bulks Up Defenses in the Gulf"; and Nuclear Threat Initiative, "U.S. to Deploy Missile-Tracking Radar in Qatar."
198. Interview with Department of Defense official, March 22, 2013.
199. Schelling, *Arms and Influence*, 43-55; and Murdock et al., "Exploring the Nuclear Posture Implications of Extended Deterrence and Assurance," 20.
200. Kugler, "An Extended Deterrence Regime to Counter Iranian Nuclear Weapons," 35-37.
201. Dan Williams, "Israel's Barak Boosts Obama amid U.S. Threats on Iran," *Reuters*, December 22, 2011; Scarborough, "Pentagon Is Planning 'Contingency' for Iran and North Korea"; Z. Byron Wolf, "On Iran, Top Pentagon General Stresses Defense," *The Note* blog on abcnews.com, May 28, 2012; and Shanker, Schmitt and Sanger, "U.S. Adds Forces in Persian Gulf, a Signal to Iran."
202. Anthony Cordesman, "The Conventional Military," in *The Iran Primer*, ed. Wright. See also Aaron Kalman, "We Have Prepared a Military Option for Iran, U.S. General Says," *Times of Israel*, March 5, 2013.
203. Pifer et al., "U.S. Nuclear and Extended Deterrence," 39. Based on a comparison with the 1991 Gulf War against Iraq, the American Enterprise Institute suggests that the United States would require 80,000 conventional forces to contain a nuclear-armed Iran, as well as tens of thousands of

reinforcing forces in the event of any crisis or conflict. Thomas Donnelly, Danielle Pletka and Maseh Zarif, "Containing and Deterring a Nuclear Iran: Questions for Strategy, Requirements for Military Forces" (American Enterprise Institute, December 2011), 39-44. But given Iran's lack of significant power projection capabilities, the Iraq analogy is a poor one. The above estimate also presumes that the goal of any U.S. action would be the invasion and occupation of key Iranian military and nuclear sites and regime change. But, as we argue below, such taking such actions would dramatically increase the risk of nuclear escalation.

204. Cordesman, "The Conventional Military."

205. Ibid.

206. For discussions of Iran's ballistic missile capabilities, see Michael Elleman, "Iran's Ballistic Missile Program"; Michael Elleman, "Iran's Ballistic Missile Capabilities: A Net Assessment," (International Institute for Strategic Studies, May 10, 2010); Steven A. Hildreth, "Iran's Ballistic Missile and Space Launch Programs" (Congressional Research Service, December 6, 2012); and Office of the Director of National Intelligence, *Unclassified Report to Congress on the Acquisition of Technology Relating to Weapons of Mass Destruction and Advanced Conventional Munitions*, 3-4.

207. Cordesman, "The Conventional Military"; and Colin H. Kahl, "Not Time to Attack Iran," *Foreign Affairs*, 91 no. 2 (March/April 2012), 169.

208. General James N. Mattis, U.S. Marine Corps, Commander, U.S. Central Command, "The Posture of U.S. Central Command," Statement to the Armed Services Committee, U.S. Senate, March 6, 2012.

209. National Research Council, *Making Sense of Ballistic Missile Defense*, Prepublication, 3-28; and Fallon and Lyles, "Science and Technology Issues of Early Intercept Ballistic Missile Defense Feasibility," 8, 23. "Coverage" may not mean adequate defense, however.

210. Eddie Boxx, "Building Gulf Missile Defenses One Small Win at a Time," Policywatch 2060 (Washington Institute for Near East Policy, March 2013).

211. Davis et al., "Iran's Nuclear Future," xvii, 48.

212. Kugler, "An Extended Deterrence Regime to Counter Iranian Nuclear Weapons," 6, 37.

213. The U.S. military is currently converting some heavy bombers and long-range missiles to conventional roles and exploring other nonnuclear capabilities for precision strike at long range. Davis et al., "Iran's Nuclear Future," 42; Davis and Pfaltzgraff, "Iran with Nuclear Weapons," 72-77; Department of Defense, *Deterrence Operations Joint Operating Concept*, 39-42; and Department of Defense, *Nuclear Posture Review*, 20, 24.

214. Pifer et al., "U.S. Nuclear and Extended Deterrence," 42.

215. Department of Defense, *Deterrence Operations Joint Operating Concept*, 35-36.

216. IISS, "The Military Balance 2013," 550-551. The total 2012 GCC defense budget estimate includes 2011 expenditures for Qatar and the United Arab Emirates, the most recent data available.

217. "The Gulf Security Architecture: Partnership with the Gulf Cooperation Council," 10; and IISS, "The Military Balance 2013," 400.

218. IISS, "The Military Balance 2013," 367; and "The Gulf Security Architecture: Partnership with the Gulf Cooperation Council," 10-11.

219. IISS, "The Military Balance 2013," 408.

220. Vivienne Walt, "Rattled by Iran, Arab Regimes Draw Closer," *Time*, December 15, 2009.

221. "The Gulf Security Architecture: Partnership with the Gulf Cooperation Council," 12; and IISS, "The Military Balance 2013," 389.

222. Christopher P. Cavalas, "Saudi Arabia Mulling BMD-Capable Destroyers," *Defense News*, June 13, 2011; and IISS, "The Military Balance 2013," 368.

223. "Raytheon to Upgrade Saudi Patriot Air Defense System," *Defence Talk*, June 23, 2011; "U.S. Clears Sale of Lockheed Missile Defense System to U.A.E., Qatar," Reuters, November 6, 2012; and IISS, "The Military Balance 2013," 413.

224. IISS, "The Military Balance 2013," 414.

225. "The Gulf Security Architecture: Partnership with the Gulf Cooperation Council," 17; IISS, "The Military Balance 2013," 407; and interview with Department of Defense official, March 22, 2013.

226. "Qatar, U.A.E. Seek THAAD Systems," UPI.com, November 6, 2012; and IISS, "The Military Balance 2013," 399.

227. "The Gulf Security Architecture: Partnership with the Gulf Cooperation Council," 10.

228. Murdock et al., "Exploring the Nuclear Posture Implications of Extended Deterrence and Assurance," 2.

229. This is already a major objective of what U.S. Central Command calls its "regional security architecture." See General David Petraeus, "Remarks to the 6th International Institute for Strategic Studies Regional Security Summit" (The Manama Dialogue, Bahrain, December 12, 2009).

230. Boxx, "Building Gulf Missile Defenses One Small Win at a Time." Efforts are slowly starting to move in this direction. U.S. Central Command, for example, is encouraging Gulf states to work together to form a GCC-wide combined air operations center as a platform to promote shared early warning and integrated air and missile defense. The United Arab Emirates has also created an Integrated Air and Missile Defense Center in Abu Dhabi to serve as the Gulf region's leading training facility on missile defense and to promote GCC interoperability and integration efforts. "The Gulf Security Architecture: Partnership with the Gulf Cooperation Council," 17-18; and U.S. Central Command, "Arabian Gulf Integrated Air and Missile Defense," unclassified briefing provided to authors, April 26, 2013.

231. "The Gulf Security Architecture: Partnership with the Gulf Cooperation Council," 14; Anthony Cordesman, "U.S.-Iranian Competition: The Gulf Military Balance - I" (Center for Strategic and International Studies, January 2013), 43; and Cavalas, "New Cold War Takes Shape in Arabian Gulf."

232. Daniel Sagalyn, "Iran Watching as U.S. Military Launches Exercise in Strait of Hormuz," *PBS NewsHour*, September 16, 2012.
233. "Clinton Promises U.S. Will Back Gulf Security," Reuters, March 31, 2012; and U.S. Department of State, Office of the Spokesman, "Joint Communique from the Second Ministerial Meeting for the U.S.-GCC Strategic Cooperation Forum," October 1, 2012.
234. Robert Burns, "U.S. Quietly Expands Defense Ties with Saudis," Associated Press, May 19, 2011; and Christopher M. Blanchard, "Saudi Arabia: Background and U.S. Relations" (Congressional Research Service, June 19, 2012), 6.
235. Reardon, "Containing Iran," 154; and "Saudi Proposes Plan to Dig Strait of Hormuz Bypass," *Gulf News*, April 9, 2013.
236. Shanker and Sanger, "U.S. Suspects Iran Was Behind a Wave of Cyberattacks."
237. Colin H. Kahl, "Obama Has Been Great for Israel," *ForeignPolicy.com*, August 16, 2012.
238. See, for example, Thom Shanker, "U.S. Arms Deal with Israel and 2 Arab Nations is Near," *The New York Times*, April 18, 2013. For a general discussion, see William Wunderle and Andre Briere, "U.S. Foreign Policy and Israel's Qualitative Military Edge: The Need for a Common Vision," *Policy Focus 80* (Washington Institute for Near East Policy, January 2008).
239. IISS, "The Military Balance 2013," 364, 384.
240. *Ibid.*, 364.
241. *Ibid.*, 364-365.
242. Nancy Montgomery, "EUCOM: Huge U.S.-Israeli Exercise Not Linked to Tensions with Iran," *Stars and Stripes*, January 11, 2012; and Isabel Kershner, "American Troops Arrive in Israel for Defense Drill," *The New York Times*, October 17, 2012.
243. Robert F. Worth, "Effort to Rebrand Arab Spring Backfires in Iran," *The New York Times*, February 2, 2012.
244. Barbara Slavin, "Poll: Sectarianism, Syria Drive Negative Image of Iran," *Al-Monitor*, March 5, 2013.
245. "Looking at Iran: How 20 Arab and Muslim Nations View Iran and Its Policies" (Zogby Research Services, 2012), v and 40-42.
246. "Egypt's Foreign Policy: Independent – or Not?" *The Economist*, September 1, 2012; "Morsi Criticizes Syria at Tehran Meeting," *Al Jazeera*, August 30, 2012; and Giorgio Cafiero, "Can Egypt Chart Its Own Course?" *Middle East Post*, September 18, 2012.
247. Efraim Halevy, "Iran's Achilles' Heel," *The New York Times*, February 8, 2012; and Jubin Goodarzi, "Iran and Syria," in *The Iran Primer*, ed. Wright.
248. "Challenging the Axis of Resistance: Syria, Iran and the Strategic Balance in the Middle East" (United States Institute of Peace, March 19, 2012); and John Calabrese, "The Regional Implications of the Syria Crisis" (Middle East Institute, December 21, 2012).
249. Thanassis Cambanis, "How the Arab Spring Killed Hezbollah," *New Republic*, September 20, 2012; and Dexter Filkins, "After Syria: If the Assad Regime Falls, Can Hezbollah Survive?" *The New Yorker*, February 25, 2013.
250. International Crisis Group, "Light at the End of Their Tunnels? Hamas & the Arab Uprisings," Middle East Report no. 129 (ICG, August 2012).
251. George Friedman, "Consequences of the Fall of the Syrian Regime," *Stratfor*, July 24, 2012; and Calabrese, "The Regional Implications of the Syria Crisis."
252. Michael Wahid Hanna, "Iran Has Less Power in Iraq than We Think," *The Atlantic*, October 14, 2010; Colin H. Kahl, "Halting the Descent: U.S. Policy Toward a Deteriorating Situation in Iraq," testimony to the Committee on Foreign Affairs, U.S. House of Representatives, March 21, 2012; and Melissa G. Dalton and Nora Bensahel, "Revitalizing the Partnership: The United States and Iraq a Year after Withdrawal" (Center for a New American Security, December 2012), 3-4.
253. On Iraq, see Dalton and Bensahel, "Revitalizing the Partnership," 5-7.
254. Dennis B. Ross and James F. Jeffrey, "Obama II and the Middle East: Strategic Objectives for U.S. Policy" (Washington Institute for Near East Policy, March 2013), 17-25.
255. Colin H. Kahl and Marc Lynch, "U.S. Strategy After the Arab Uprisings: Toward Progressive Engagement," *Washington Quarterly* (Spring 2013), 53-57; Pifer et al., "U.S. Nuclear and Extended Deterrence," 43; and Reardon, "Containing Iran," 154.
256. Frederic C. Hof, "The United States, Europe and the Case of Syria," *Viewpoint* (Atlantic Council, March 25, 2013).
257. Robert Sharp and Sterling Jensen, "Holding Lebanon Together: The Lebanese Armed Forces," *Small Wars Journal*, June 1, 2012; and Barbara Slavin, "Syria War Spurs U.S. Military Aid to Lebanon," *Al-Monitor*, February 20, 2013.
258. Daniel Byman, "How to Handle Hamas," *Foreign Affairs*, 89 no. 5 (September/October 2010).
259. Yoel Guzansky, "Tacit Allies: Israel and the Arab Gulf States," *Israel Journal of Foreign Affairs*, 5 no. 1 (Winter 2011), 9-17.
260. Pifer et al., "U.S. Nuclear and Extended Deterrence," 42-43.
261. S.J. Res. 23, "Authorization for Use of Military Force," 2001.
262. See, for example, LaFranchi, "John Kerry Urges Iraq to Inspect Iranian Overflights to Syria"; and Steven Lee Myers and Thom Shanker, "After Sinai Attack, U.S. and Egypt Step Up Talks on Security," *The New York Times*, August 11, 2012.
263. A forthcoming CNAS report will outline a comprehensive strategy to disrupt Iranian and Iranian-backed illicit networks.
264. Matthew Levitt, "Criminal Connections: Hizbullah's Global Illicit Financial Actions" (IHS Defense, Risk and Security Consulting, September 2012),

- 18-25; and Michael Braun, David Asher and Matthew Levitt, "Party of Fraud: Hizballah's Criminal Enterprises," Policy Watch 1911 (Washington Institute for Near East Policy, March 2013).
265. Kevin G. Hall, "Obama Embraces Patriot Act to Sanction a Lebanese Bank," McClatchy, February 10, 2011; Jo Becker, "Beirut Bank Seen as a Hub of Hezbollah's Financing," *The New York Times*, December 13, 2011; and Jay Solomon, "U.S. Probes Lebanon Banking Deals," *The Wall Street Journal*, April 26, 2012.
266. "U.S. Seizes \$150M from Lebanon Bank in Hezbollah Money Laundering Probe," Reuters, August 21, 2012.
267. Levitt, "Criminal Connections," 25.
268. "Iran Escalating Efforts to Destabilizing Region – Panetta," Reuters, February 1, 2013.
269. Karen DeYoung and Joby Warrick, "Iran and Hezbollah Build Militia Networks in Syria in Event that Assad Falls, Officials Say," *The Washington Post*, February 10, 2013.
270. Thomas E. Donilon, "Hezbollah Unmasked," *The New York Times*, February 17, 2013.
271. See, for example, Barbara Slavin, "Officials: U.S. 'Outed' Iran's Spies in 1997," *USA Today*, March 29, 2004; Najmeh Bozorgmehr, "Iran Expels Kuwaiti Diplomats," *Financial Times*, April 10, 2011; and Frederick Richter, "Bahrain Expels Iranian Diplomat," Reuters, April 26, 2011.
272. Schelling, *Arms and Influence*, 55; Crawford, "The Endurance of Extended Deterrence," 285-287.
273. Daryl Press, *Calculating Credibility: How Leaders Assess Military Threats* (Ithaca, NY: Cornell University Press, 2005).
274. Huth, *Extended Deterrence and the Prevention of War*, chaps. 3-4.
275. Giles, "Deterring a Nuclear-Armed Iran from Adventurism and Nuclear Use," 27 and 30.
276. Morgan, *Deterrence Now*, 271-272.
277. Indeed, Schelling described coercive bargaining in nuclear crises as a "competition in risk taking, characterized not so much by tests of force as by tests of nerve." Schelling, *Arms and Influence*, 94.
278. Schelling, *Arms and Influence*, chap. 3; and Schelling, *The Strategy of Conflict*, chap. 8.
279. Robert Jervis, "Why Nuclear Superiority Doesn't Matter," *Political Science Quarterly*, 94 no. 4 (Winter 1979/1980), 617-633.
280. Matthew Kroenig, "Nuclear Superiority and the Balance of Resolve," *International Organization*, 67 no. 1 (January 2013), 141-171.
281. The state defending the status quo typically has the advantage in the balance of resolve. This is especially likely to hold true when one state is defending its homeland and the provocation is not plausibly linked to the opponent's survival. See Jervis, "Why Nuclear Superiority Doesn't Matter," 632.
282. Eisenstadt, "The Strategic Culture of the Islamic Republic of Iran," 2; and Marisa Cochrane, "The Battle for Basra," *Iraq Report 9* (Institute for the Study of War, June 2008).
283. Michael Singh, "Will Iran Dare Close the Strait of Hormuz," *The Iran Primer*, ed. Wright.
284. Patrick Clawson, "Iran Beyond Oil?" Policywatch 2062 (Washington Institute for Near East Policy, April 2013).
285. "Iran Says U.S. Presence in Gulf 'Not New Issue,'" *The Daily Star*, January 21, 2012; and "From Iran, New Threats to Close Key Oil Route," *Los Angeles Times*, July 2, 2012.
286. Department of Defense, *Deterrence Operations Joint Operating Concept*, 17, 26.
287. Joshi, "The Permanent Crisis," 94-95.
288. For the same reasons, the balance of interests in a crisis involving Iranian proxies in the Gulf that are not operating out of Iranian territory would favor the United States and its partners because the free flow of oil and the stability of Gulf regimes is more central to the interests of the United States and its partners than the survival of a local proxy group is to Tehran's interests.
289. Kroenig, "Nuclear Superiority and the Balance of Resolve," 167-168.
290. Davis et al., "Iran's Nuclear Futures," 43-44; Jervis, "Deterrence, Rogue States and U.S. Policy," 147-148; and Kugler, "An Extended Deterrence Regime to Counter Iranian Nuclear Weapons," 34-37.
291. Thomas C. Schelling, "Confidence in Crisis," *International Security*, 8 no. 4 (Spring 1984), 58.
292. For a discussion of the factors that would likely shape Iranian nuclear posture decisions, see Chubin, "Command and Control in a Nuclear-Armed Iran"; and Kahl, Dalton and Irvine, "Risk and Rivalry," 26-30.
293. For a general defense of "no first use," see Michael S. Gerson, "No First Use: The Next Step in U.S. Nuclear Policy," *International Security*, 35 no. 2 (Fall 2010), 7-47; and Scott D. Sagan, "The Case for No First Use," *Survival*, 51 no. 3 (2009), 163-182.
294. Department of Defense, *Nuclear Posture Review*, vii-viii, 15.
295. Jeffrey Lewis, "Declaratory Policy," *ArmsControlWonk.com*, January 4, 2010.
296. Bruno Tertrais, "The Trouble with No First Use," *Survival*, 51 no. 5 (2009), 23.
297. Sagan, "The Case for No First Use," 177.
298. Kahl, Dalton and Irvine, "Risk and Rivalry," 26-27.
299. Kingston Reif, "When Less is Not More," *Bulletin of the Atomic Scientists*, March 12, 2012.
300. Michael R. Gordon, "U.S. Air Raids In '02 Prepared for War in Iraq," *The New York Times*, July 20, 2003.
301. See, for example, Lindsay and Takeyh, "After Iran Gets the Bomb," 44

302. Given that Israel lacks the full range of conventional capabilities available to the United States, the Israelis may feel they need to leave open the possibility of employing nuclear weapons in retaliation to chemical and biological attacks, in addition to nuclear ones, to strengthen their deterrent against these threats.
303. "Country Profile: Israel" (Nuclear Threat Initiative, February 2013).
304. See Evron, "An Israel-Iran Balance of Nuclear Deterrence," 57-58; and Adamsky, "Why Israel Should Learn to Stop Worrying and Love the Bomb."
305. See Kahl, Dalton and Irvine, "Risk and Rivalry," 26-27.
306. Pedatzur, "Israel Can Deter Iran."
307. Ibid.
308. Schelling, "Confidence in Crisis," 58-60.
309. Reardon, "Containing Iran," 156.
310. Ibid., 156.
311. Routine military contacts between U.S. and Iranian forces, including bridge-to-bridge naval communications and radio communications among aviators, already occur now at the tactical level. But Iran has thus far been reluctant to establish links between higher echelon naval commanders. Jay Solomon, "Iran Rejects U.S. Hot Line," *The Wall Street Journal*, October 4, 2011.
312. Joshi, "The Permanent Crisis," 103-104; and Mistry, "Complexity of Deterrence Among New Nuclear States," 190-195.
313. Pedatzur, "The Iranian Nuclear Threat and Israeli Options," 528.
314. Delpach, *Nuclear Deterrence in the 21st Century*, 51-53, 161; and Kugler, "An Extended Deterrence Regime to Counter Iranian Nuclear Weapons," 10.
315. Kugler, "An Extended Deterrence Regime to Counter Iranian Nuclear Weapons," 20, 32.
316. Davis et al., "Iran's Nuclear Future," 39-41; and Davis and Pfaltzgraff, "Iran with Nuclear Weapons," 9-10.
317. Reardon, "Containing Iran," 154.
318. Davis et al., "Iran's Nuclear Future," xvii, 43-44; and Murdock et al., "Exploring the Nuclear Posture Implications of Extended Deterrence and Assurance," 22.
319. Jervis, "Deterrence, Rogue States and U.S. Policy," 137; and Stein, "Rational Deterrence Against 'Irrational' Adversaries?" 66-70.
320. Eisenstadt, "The Strategic Culture of the Islamic Republic of Iran."
321. White House, Office of the Press Secretary, "Fact Sheet on the new U.N. Security Council Sanctions on Iran," June 9, 2010.
322. See International Crisis Group (ICG), "Spider Web: The Making and Unmaking of Iran Sanctions," Middle East Report No. 138 (February 25, 2013), 5-14.
323. Ibid., 21-30.
324. Hildreth, "Iran's Ballistic Missile and Space Launch Programs," 53-54; and IISS, "The Military Balance 2013," 358, 360.
325. ICG, "Spider Web," 20; and International Institute for Strategic Studies, "Iran Sanctions Halt Long-Range Ballistic-Missile Development," *Strategic Comments*, 22 (July 2012).
326. Kugler, "An Extended Deterrence Regime to Counter Iranian Nuclear Weapons," 37-38.
327. Ibid., 32.
328. Jonathan Pollack, *No Exit: North Korea, Nuclear Weapons and International Security* (Abingdon, U.K.: Routledge, 2011).
329. However, whether U.S. sanctions could ultimately be lifted cannot be taken for granted. See, ICG, "Spider Web," 42-45; and The Iran Project, "Weighing the Benefits and Costs of International Sanctions Against Iran."
330. Nuclear Threat Initiative, "Proliferation Security Initiative."
331. Jacek Durkalec, "The Proliferation Security Initiative: Evolution and Future Prospects," Non-Proliferation Papers no. 16 (EU Non-Proliferation Consortium, June 2012), 13-15; and Mary Beth Nikitin, "Proliferation Security Initiative" (Congressional Research Service, June 15, 2012), 6-7.
332. Albright et al., "U.S. Nonproliferation Strategy for the Changing Middle East," 46-51.
333. Durkalec, "The Proliferation Security Initiative," 12-13; and Nikitin, "Proliferation Security Initiative."
334. Eben Kaplan, "The Proliferation Security Initiative," Background (Council on Foreign Relations, October 2006); and Nikitin, "Proliferation Security Initiative."
335. Durkalec, "The Proliferation Security Initiative," 14-16; and Kaplan, "The Proliferation Security Initiative."
336. See Kagan, "Deterrence Misapplied," 2-4; and Thaler et al., "Mullahs, Guards and Bonyads," chap. 6.
337. Edelman, Krepinevich and Montgomery, "The Dangers of a Nuclear Iran," 75.
338. See, for example, the discussion in "Stronger Together: CSIS Gulf Roundtable with CJCS Gen Martin Dempsey" (Center for Strategic and International Studies, March 21, 2013).
339. Davis and Pfaltzgraff, "Iran with Nuclear Weapons," 7.

340. For a discussion of the history of Russia-Iran and Russia-China ties, see Mark N. Katz, "Iran and Russia," in *The Iran Primer*, ed. Wright; and John S. Park, "Iran and China," in *The Iran Primer*, ed. Wright.
341. Davis and Pfaltzgraff, "Iran with Nuclear Weapons," 71; and Kenneth M. Pollack, "Deterring a Nuclear Iran: The Devil in the Details" (Council on Foreign Relations, May 2010), 6-7.
342. See, for example, Sadjapour, "The Sources of Soviet Iranian Conduct"; Cohen, "Contain and Constrain Iran"; and Reardon, "Containing Iran," 149.
343. Department of Defense, *Deterrence Operations Joint Operating Concept*, 27-28.
344. Schelling, *Arms and Influence*, 74-75 and 84; Crawford, "The Endurance of Extended Deterrence," 289-290; and Jervis, "Deterrence, Rogue States and U.S. Policy," 136-137.
345. Davis and Pfaltzgraff, "Iran with Nuclear Weapons," 67.
346. Dobbins et al., "Coping with a Nuclearizing Iran," 108-109.
347. Davis and Pfaltzgraff, "Iran with Nuclear Weapons," 24, 36-38, 87.
348. Edelman, Krepinevich and Montgomery, "The Dangers of a Nuclear Iran," 75.
349. Michael Singh, "Mideast Seeks a New Commitment from Obama," *The Washington Post*, March 18, 2013.
350. Delpech, *Nuclear Deterrence in the 21st Century*, 88, 94, 102, 113-114.
351. Kahl, "Not Time to Attack Iran"; and The Iran Project, "Weighing Benefits and Costs of Military Action Against Iran," 33-42.
352. Dennis Ross, "Calling Iran's Bluff."
353. See, for example, Albright et al., "Preventing Iran from Getting Nuclear Weapons," 34-44.
354. Department of Defense, *Sustaining U.S. Global Leadership: Priorities for 21st Century Defense* (January 2012).
355. Kugler, "An Extended Deterrence Regime to Counter Iranian Nuclear Weapons," 27.
356. *Ibid.*, 31-32.
357. "White House Proposes Defense Spending Above Budget Caps," Reuters, April 10, 2013.
358. Nevertheless, the forward deployment of these forces is not without cost to Washington; indeed, the United States continues to make significant investments in improving military infrastructure in the region. See "The Gulf Security Architecture: Partnership with the Gulf Cooperation Council."
359. Joshua Stewart and Sam Fellman, "Pentagon: Carrier Fleet Cut to One in Gulf," *The Navy Times*, February 6, 2013.
360. Department of Defense, Office of the Assistant Secretary of Defense (Public Affairs), "Remarks by Secretary Panetta at the Shangri-La Dialogue in Singapore," June 2, 2012; and Cheryl Pellerin, "Carter Quantifies Shift of DoD Resources to Asia-Pacific," Armed Forces Press Service, March 21, 2013.
361. Edelman, Krepinevich and Montgomery, "The Dangers of a Nuclear Iran," 76; Mark E. Manyin et al., "Pivot to the Pacific? The Obama Administration's 'Rebalancing' Toward Asia" (Congressional Research Service, March 28, 2012), 9; and General James N. Mattis, "The Posture of U.S. Central Command."
362. Kahl and Lynch, "U.S. Strategy After the Arab Uprisings," 50, 55-56.
363. The White House, Office of the Press Secretary, "Remarks by President Barack Obama in Prague," April 5, 2009. The 2010 NPR identified five key nuclear objectives: "1. Preventing nuclear proliferation and nuclear terrorism; 2. Reducing the role of U.S. nuclear weapons in U.S. national security strategy; 3. Maintaining strategic deterrence and stability at reduced nuclear force levels; 4. Strengthening regional deterrence and reassuring U.S. allies and partners; and 5. Sustaining a safe, secure, and effective nuclear arsenal." Department of Defense, *Nuclear Posture Review*, iii.
364. David Sanger, "Obama to Renew Drive for Cuts in Nuclear Arms," *The New York Times*, February 10, 2013; and David M. Herszenhorn, "Progress Is Reported in Arms Talks with Russia," *The New York Times*, March 21, 2013.
365. Murdock et al., "Exploring the Nuclear Posture Implications of Extended Deterrence and Assurance," 2, 8, 28-30; and David J. Trachtenberg, "U.S. Extended Deterrence: How Much Strategic Force is Too Little?" in *Tailored Deterrence*, eds. Schneider and Ellis, 273-306.
366. Andrew F. Krepinevich, Jr., "U.S. Nuclear Requirements in an Era of Defense Austerity," testimony to the Armed Services Committee, Subcommittee on Strategic Forces, U.S. House of Representatives, March 13, 2013.
367. James Cartwright et al., "Global Zero Nuclear Policy Commission Report: Modernizing U.S. Nuclear Strategy, Force Structure and Posture" (Global Zero, May 2012).
368. Delpech, *Nuclear Deterrence in the 21st Century*, 12-14 and 41; and Murdock et al., "Exploring the Nuclear Posture Implications of Extended Deterrence and Assurance," 6.
369. Thielmann, "Iran's Missile Program and its Implications for U.S. Missile Defense," 5-6; and Dean A. Wilkening, "Nuclear Zero and Ballistic-Missile Defense," *Survival*, 52 no. 6 (December 2010), 107-108, 118.
370. Herszenhorn, "Progress Is Reported in Arms Talks with Russia."
371. Fred Weir, "U.S. Drops Europe Missile Defense Plan – but Moscow Is Unimpressed," *The Christian Science Monitor*, March 18, 2013.
372. Vandiver, "NATO: U.S. Plans for Missile Defense Won't Leave Europe Exposed."

About the Center for a New American Security

The mission of the Center for a New American Security (CNAS) is to develop strong, pragmatic and principled national security and defense policies. Building on the expertise and experience of its staff and advisors, CNAS engages policymakers, experts and the public with innovative, fact-based research, ideas and analysis to shape and elevate the national security debate. A key part of our mission is to inform and prepare the national security leaders of today and tomorrow.

CNAS is located in Washington, and was established in February 2007 by co-founders Kurt M. Campbell and Michèle A. Flournoy. CNAS is a 501(c)3 tax-exempt nonprofit organization. Its research is independent and non-partisan. CNAS does not take institutional positions on policy issues. Accordingly, all views, positions, and conclusions expressed in this publication should be understood to be solely those of the authors.

© 2013 Center for a New American Security.

All rights reserved.

Center for a New American Security

1301 Pennsylvania Avenue, NW
Suite 403
Washington, DC 20004

TEL 202.457.9400
FAX 202.457.9401
EMAIL info@cnas.org
www.cnas.org

Production Notes

Paper recycling is reprocessing waste paper fibers back into a usable paper product.

Soy ink is a helpful component in paper recycling. It helps in this process because the soy ink can be removed more easily than regular ink and can be taken out of paper during the de-inking process of recycling. This allows the recycled paper to have less damage to its paper fibers and have a brighter appearance. The waste that is left from the soy ink during the de-inking process is not hazardous and it can be treated easily through the development of modern processes.





**Center for a
New American
Security**

**STRONG, PRAGMATIC AND PRINCIPLED
NATIONAL SECURITY AND DEFENSE POLICIES**

1301 Pennsylvania Avenue, NW
Suite 403
Washington, DC 20004

TEL 202.457.9400
FAX 202.457.9401
EMAIL info@cnas.org

www.cnas.org

ISBN 978-193508771-7

5 0 9 9 9 >



9 781935 087717



Printed on Post-Consumer Recycled paper with Soy Inks