Off and Running

The Middle East Nuclear Arms Race

By RICHARD L. RUSSELL

NATO

Turkish security guards NATO AWACS aircraft between surveillance flights of Turkish airspace, February 2003

Iran's suspected pursuit of nuclear weapons could contribute to a regional nuclear arms race in the Middle East. Nation-states already are hedging their bets that Tehran will one day harbor a nuclear weapons arsenal—even if it is an undeclared one. In the Persian Gulf, the six-member Gulf Cooperation Council (GCC), led by Saudi Arabia, has publicly announced plans to invest in the nuclear power industry. The GCC members claim that they are hedging their energy needs against future days when their oil reserves are depleted. The GCC, however, probably has in mind sending a not too thinly veiled threat to Iran. They too could follow suit with nuclear weapons programs under the guise of civilian nuclear programs if Tehran does not cease its uranium enrichment activities.

Elsewhere in the Middle East, countries are interested in nuclear power programs that could lay foundations for military nuclear weapons programs. Turkey, a state with one geopolitical foot in Europe and the other in the Middle East, has showed renewed interest in its nuclear power infrastructure. Egypt, too, has publicly declared its revamped interest in nuclear power technology. It appears that Syria was harboring a clandestine nuclear program until Israel, the first nuclear weapons–capable state in the Middle East, launched airstrikes in the fall 2007 to destroy its North Korean–supplied nuclear reactor.

While Iran's pursuit of nuclear weapons could act as a key contributor to a Middle East nuclear arms race, it might not be the only one. There are five overarching factors potentially leading to an appetite for nuclear weapons in the region: to deter adversaries, compensate for conventional military shortcomings, fight wars, garner domestic political power, and win international political power, especially to leverage against the United States. Given this powerful array of determinants for nuclear weapons present and pervasive in the Middle East, the current Western push to market and sell nuclear power infrastructure and capabilities to the region is dangerously short-sighted. These capabilities could well be converted for military nuclear weapons programs in some shape or form in the next generation.

Deter Adversaries

Middle Eastern states would look to nuclear weapons to deter regional adversaries. Israel's nuclear weapons program is a prime regional example of this driving factor, and other states may well follow suit. The Israelis, who leveraged their French-provided nuclear power plant at Dimona in the 1960s for its clandestine nuclear weapons program, sought nuclear weapons to deter hostile Arab states. Tel Aviv publicly neither confirms nor denies its nuclear weapons capabilities. As Avner Cohen and William Burr explain, the Israelis have steadfastly maintained that they would not be the "first country in the region to introduce nuclear weapons into the region," a diplomatic nuance meaning openly testing and publicly declaring nuclear weapons.[1] This posture allows the Israelis to have plausible deniability about their nuclear weapons capability while at the same time influencing the strategic thinking of Arab leaders on decisions of war and peace.

The idea that nuclear weapons afforded Israel a deterrent against conventional war has been problematic. Contrary to expectations by nuclear deterrence theory enthusiasts, Israel's thinly veiled nuclear weapons capabilities did not deter Egyptian and Syrian forces from attacking Israel in the 1973 Middle East war.[2] The Israelis in the earliest stages of the 1973 clash suffered severe battlefield losses on the Sinai. Reports have circulated for years that the Israelis were so concerned about an imminent defeat by Egyptian forces that they had readied their nuclear weapons. Israeli nuclear forces in 1973 consisted of French-built Mirage aircraft capable of delivering nuclear bombs and a small force of ballistic missiles armed with nuclear warheads.[3] The Israelis, however, were able to marshal an impressive

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conventional military turnaround and would have nearly routed Egyptian forces had it not been for American diplomatic intervention to stop the war. Israel's impressive conventional military reversal alleviated its need to resort to nuclear weapons against Egyptian forces to defend Israel proper.

The public revelation that Iran had a clandestine uranium enrichment program caught the attention of Arab Middle Eastern states. Iran was for nearly two decades working sporadically on uranium enrichment capabilities. The program, which began in the mid-1980s with centrifuge parts and drawings from the "father" of Pakistan's nuclear weapons program, A.Q. Khan, was revealed to the world in 2002 by Iranian dissidents. The Iranians had built a facility at Natanz with plans for installing 50,000 centrifuges.[4] The Iranians failed to notify the International Atomic Energy Agency (IAEA) of this program despite its obligation under the terms of the Non-Proliferation Treaty, which Tehran had signed.

It is probably no coincidence that after Iran's uranium enrichment centrifuge program was exposed in 2002, the most energy-wealthy countries in the world—joined by other states in the Middle East—suddenly decided to diversify their energy sources and invest in nuclear power plants. The Gulf Cooperation Council under Saudi leadership tasked a team in May 2009 to begin the study of peaceful purposes for nuclear power.[5] The Saudis are negotiating with France for the purchase of nuclear technology, and Paris has already signed civilian nuclear deals elsewhere in the Middle East, to include Algeria and Libya.[6] The United Arab Emirates (UAE) is energetically working with both France and the United States to develop its nuclear power industry.[7] South Korea too will be providing aid to the UAE nuclear power program.[8] Kuwait has shown interest in nuclear power cooperation with France, and its emir said in February 2009 that his country is "seriously considering joining the nuclear club but only for peaceful purposes."[9] Jordan in May 2009 signed a nuclear energy cooperation agreement with Russia in which Moscow would provide Amman with power plants, research facilities, and training centers.[10] President Hosni Mubarak in 2007 announced that Egypt would redouble investment in its nuclear power infrastructure.[11] Mubarak signed a nuclear energy deal with Russian President Vladimir Putin in March 2008, giving Russia the go-ahead to bid for building the first of four nuclear power plants in Egypt.[12]

The relatively sudden surge in Arab state interest in nuclear technology after the exposure of Iran's clandestine centrifuge program suggests that they perceive a more acute threat from Iranian nuclear weapons in the future than from Israel's nuclear weapons today. The Arab states, after all, have lived with Israel's veiled nuclear weapons capabilities for decades, but only after Iran's nuclear efforts became public did they move from rhetoric to investment in concrete capabilities. Israeli nuclear weapons were more an affront to Arab prestige than an acute security threat and never sparked a widespread nuclear arms race in the Middle East.

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The Arab states undoubtedly fear that nuclear weapons in Iranian hands will bolster Iranian power and influence in the Gulf and Middle East. Nuclear weapons would enable Tehran to even more aggressively support its growing surrogate influence through Shia militias in Iraq, Hizballah in Lebanon, and Hamas in the Palestinian community. The Arab states probably calculate that they would be exceedingly vulnerable to Iranian political coercion and military intimidation. The Arab Gulf states would be especially eager to have nuclear weapons to deter the use of Iranian ballistic missile and nuclear weapons use against them.

Turkey is likely thinking strategically much like the Arab states. Ankara has a working, and even improving, relationship with Iran, but it too will probably want to hedge its bets against a nuclear-armed Tehran in the not distant future. The Turks may well have had this set of calculations in mind with their recent renewed interest in revamping their nuclear power infrastructure.[13] Again, it is probably no coincidence that Turkey publicly announced plans to reinvest in its nuclear power infrastructure not long after the exposure of Iran's uranium enrichment plant at Natanz.

The Turkish General Staff would not want to be in an inferior bargaining position should relations with Iran deteriorate. Some observers might argue that Turkey could rely on its North Atlantic Treaty Organization (NATO) membership for a nuclear security umbrella to deter Iranian aggression, but that suggestion is likely to be less than satisfactory to the Turkish military. Turkey remembers well that when it prudently turned to NATO for protection from potential Iraqi retaliation in the run-up to the American-British 2003 war against Iraq, Turkey was sternly rebuffed. That experience was a bitter pill to swallow and will argue in favor of a nuclear deterrent against Iran's nuclear stockpile.

Antiaircraft guns guard Natanz nuclear facility in Iran, 2006

Flickr (Hamed Saber)

Backstopping Shortcomings

Another key driver for nuclear weapons in the Middle East would be the desire to plug holes in defenses due to conventional military shortcomings. Even though many Arab states are flush with the most advanced ground, naval, and air weaponry, their conventional militaries suffer from numerous problems. Arab Gulf states, for example, lack strong population bases from which to draw educated and technologically capable soldiers, sailors, and airmen to man their expensive weapons systems and train for modern mobile-conventional warfare. These traits leave these states excessively reliant on foreign contractors to maintain and field their forces. Family and tribal ties, moreover, trump military competence for high command in Arab Gulf states. These states likely would look to nuclear weapons as the "quick fix" for all conventional military shortcomings. They might even calculate that nuclear weapons in the future would relieve Arab Gulf states from the arduous and long-term work needed to improve their conventional military forces that, more often than not, are reflections of the shortcomings of their own cultures, histories, and societies.[14]

Gulf state regimes would be drawn to the allure of nuclear weapons as the ultimate guarantee of their survival in a future military crisis with larger Iranian conventional military forces. The regimes might calculate

that in a future crisis with an Iran armed with nuclear weapons, the United States would be deterred from entering the fray, leaving the Arab Gulf states to fend for themselves.

To ensure that they could hold Iranian targets at risk, Arab Gulf states are likely to be interested in acquiring and modernizing their now limited ballistic missile holdings. The Saudis clandestinely procured intermediate-range CSS–2 ballistic missiles from China in the mid-1980s, and the UAE clandestinely procured Scud missiles from China in 1989.[15] These missiles are old, though, and the UAE and Saudi Arabia would no doubt like more ballistic missiles. Pakistan, China, North Korea, and Russia would be the places for them to shop, and they could offer lucrative sales to countries willing to skirt the Missile Technology Control Regime, a voluntary cooperative effort by Western states to stem the flow of ballistic missile–related technology to states trying to build up their ballistic missile capabilities.

U.S. Navy (Joseph Krypel)

BMP–3 armored personnel carrier offloaded in Kuwait as part of Gulf Cooperation Council protective buildup, March 2003

Syria has an acute interest in nuclear weapons to compensate for its conventional military shortcomings in its strategic competition with Israel. Syrian conventional forces have been consistently bested by Israeli conventional forces in the Arab-Israeli wars as well as in clashes in and around Lebanon. Syria's conventional capabilities eroded even more when the Soviet Union collapsed and the Moscow arms pipeline dried up. Moscow under Putin's muscular foreign policy might yet renew major conventional arms supplies to Syria to revamp its conventional forces in the near future. But modern Russian arms alone would not redress Syria's conventional shortcomings against Israeli forces.

The Syrian regime apparently decided to look to nuclear weapons to make up for its conventional military shortcomings. Damascus ran the risk of detection by Israel and was clandestinely assembling a North Korean–supplied nuclear reactor until the Israelis mounted an airstrike and destroyed it in September 2007. The Syrians spent months razing and cleaning up the site before allowing international inspectors to investigate.[16] The Israelis have neither confirmed nor denied the airstrike, an astute diplomatic posture that helped keep the strike from spiraling into a broader Middle East war. Had Israel publicly and blatantly lauded the strike, the bravado could have so humiliated the Damascus regime that it might have retaliated militarily.

Egypt might make a similar strategic calculus in the future. A political convulsion in the region or in Egypt itself could one day lead to the breakdown of the Egyptian-Israeli peace treaty to reawaken the bitter security rivalry that was the core of the Arab-Israel wars in the last century. The most well-organized Egyptian political opposition and the most likely to assault the Cairo regime would be the Muslim Brotherhood, which in July 2006 publicly called on the Mubarak regime to develop a nuclear deterrent.[17]

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This suggests that a nuclear weapons capability would be high on the policy agenda for a Muslim Brotherhood–led government in Cairo. Egypt, unlike Syria, is well equipped with modern conventional weaponry thanks to decades of American security assistance. But Egyptian society and its armed forces suffer from shortcomings that prevent the full exploitation of the modern weaponry's capabilities, leaving Egypt's conventional forces outclassed by Israel's conventional forces.

Egypt could turn to nuclear weapons in the first instance to deter Israeli nuclear forces and in the second instance to counterbalance Israeli conventional military capabilities. In a future regional security environment mired with Egyptian and Israeli tensions, Cairo would want nuclear weapons to reassure itself that Israel could not use the threat of nuclear and conventional military superiorities to politically coerce Egypt. Cairo might see nuclear weapons as the ultimate security guarantee should push come to shove in a regional crisis. Egyptians would want nuclear weapons to deter Israeli conventional forces from again storming over Egyptian military forces, flooding the Sinai Desert, and threatening to cross the Suez Canal to challenge the survival of Egypt's regime.

Fighting Wars

Another key determinant for nuclear weapons proliferation in the Middle East is the desire for nuclear weapons to wage war. This view may be startling to observers who judge that nuclear weapons are only good for deterrence and not for warfighting. But the history of nuclear weapons development shows otherwise. The United States and its NATO Allies during the Cold War deployed nuclear weapons in Europe not as some grand deterrent bluff, but because they intended to use them if the Warsaw Pact forces invaded Western Europe with conventional forces. The United States and its Allies worried that Warsaw Pact forces outnumbered and outgunned NATO forces, so the Alliance would have to resort to tactical nuclear weapons to blunt a conventional invasion.[18]

Middle Eastern states will probably be making similar calculations. Saudi Arabia, for example, might come to think that the early use of nuclear weapons against Iranian forces invading through Kuwait would be wiser statecraft than letting those forces get an operational foothold in the oil-rich Eastern Province of Saudi Arabia, where a largely Shia population is alienated from the Sunni Saudi regime and is sympathetic to Iran. Kuwait itself has no geopolitical buffer zone and might want to resort to nuclear weapons before numerically superior Iranian forces cross into Kuwaiti territory. If the Kuwaitis were to hesitate in employing nuclear weapons, they would risk losing their country as they did in Saddam Hussein's 1990 invasion. The Saudis and Kuwaitis, on top of these calculations, might judge that they themselves would need to resort to nuclear weapons to thwart an Iranian invasion because the United States would not want to put its forces in the line of fire as it did against Iraq in 1991 and 2003 because of the threat of Iran targeting American forces with nuclear weapons.

The Iranians are certainly aware of American conventional military prowess and would not seek a fair fight in a clash with the United States. Tehran watched American and British forces dispatch Saddam's regime in 3 weeks, an impressive task that Iran was not able to accomplish after 8 brutal years of war with Iraq, which sapped its national strength. The Iranians in the future, especially the Revolutionary Guard, might use nuclear weapons against American conventional military forces should they fear for the survival of the Tehran regime. They might calculate that Iranian nuclear weapons use would shock the Americans and compel them to stand down their military operations. They might additionally figure that the United States would exercise restraint and not retaliate with nuclear weapons against Iran given Washington's political interest in maintaining the nonuse of nuclear weapons norm and the American avoidance of inflicting civilian casualties in war.

Syria and Egypt too might find themselves embroiled in a future Arab-Israeli war. If faced with the threat of Israeli forces capturing Damascus or Cairo, the Syrian and Egyptian regimes could calculate that their use of nuclear weapons against Israeli conventional forces on the battlefield would not cross the threshold for Israeli nuclear weapons retaliation against their capitals and population centers. These would be risky calculations to be sure, but they are plausible, especially during crises in which authoritarian regimes believe their survival is at stake.

Political Power at Home

Other pressures for nuclear weapons come from domestic politics and the struggle for power inside Middle East nation-states. Often overlooked is the fact that armed forces and domestic communities and interest blocks become influential advocates for nuclear weapons programs in decisionmaking circles. As Scott Sagan points out, a state's nuclear energy establishment includes civilian reactors and laboratories, military elements, politicians, and the public, who strongly support nuclear weapons acquisition. These are all important drivers of proliferation.[19]

Iran's Revolutionary Guard is undoubtedly a powerful domestic advocate for nuclear weapons. President Mahmoud Ahmadinejad is a Revolutionary Guard veteran, and under his leadership, Guard commanders have filled increasingly important domestic political and economic posts to increase the institution's overall influence in government decisionmaking. The Revolutionary Guard operates most of Iran's ballistic missiles and would likely control Iran's future nuclear weapons.[20] When push comes to shove in government power corridors, it has vested interests in seeing that the nuclear weapons program proceeds and, along with it, the Revolutionary Guard's status and prestige in Tehran politics.

Wide swaths of public opinion also support Iran's pursuit of nuclear technology. It would not be too much of a leap to assume that public opinion would be proud of a government that demonstrates technological prowess with the detonation of a nuclear device. Iran's development of nuclear power is a source of great domestic pride and nationalism. As Iran scholar Ray Takeyh observes, "Far from being a source of restraint, the emerging popular sentiment is that, as a great civilization with a long history, Iran has a right to acquire a nuclear capability."[21] The pride that swells from Iran's nuclear activities helps to temper public frustrations with a deteriorating economy and lack of political freedoms. Takeyh notes on this score that the "recent disclosures of the sophisticated nature of Iran's nuclear program have been a source of pride for a citizenry accustomed to the revolution's failures and setbacks."[22]

Many regimes in the Middle East are likely to feel threatened by internal political convulsions over the next 25 years and would view nuclear weapons as a hedge against mob civil violence and coups. Syria's minority Alawite regime, for example, might have had an internal security threat contingency on its mind in working on its clandestine nuclear program with North Korea. Saudi Arabia might become gravely threatened by al Qaeda Sunni-based insurgents or Hizballah Shia insurgents in the heavily Shia-populated Eastern Province. The royal families in the small Arab Gulf states, especially those with deep financial pockets such as the UAE and Kuwait, could see nuclear weapons as their aces in the hole to guarantee their survival and their control over the political weight of even larger populations of expatriates and foreign workers on which many government and private sector functions depend. Egypt could face a tumultuous political transition after President Mubarak's death, and nuclear weapons would be useful instruments to rally nationalism and garner internal support for a new regime.

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Leverage on Washington

A factor that looms large behind Middle Eastern aspirations for nuclear weapons is power and influence—beyond nuclear and conventional deterrence and warfighting capabilities—in regional and international politics. The Iranians would want to parlay a nuclear weapons inventory to politically coerce Saudi Arabia and the

LTG Ricardo Sanchez and Ambassador L. Paul Bremer brief media on capture of Saddam Hussein, December 2003

U.S. Air Force (Steven Pearsall)

Arab Gulf states into appeasing Iranian security policy and distancing themselves from American power in the Gulf and Middle East. Saudi Arabia would want to tap a nuclear stockpile to counterbalance Iran's nuclear weapons inventory to maintain its political stature as leader of the Sunni Muslim world against Iran as the leader of the Shia Muslim world. The smaller Arab Gulf states—the UAE and Kuwait in particular—would want to use nuclear weapons inventories to maintain their political autonomies from both Saudi Arabia and Iran in the event that the United States is compelled to lessen its military and political presence in the region in light of the proliferation of nuclear weapons.

Egypt, as well as Syria and Algeria, would see nuclear weapons as instruments for stopping the erosion of their political power in regional and international politics. These nations have been especially frustrated to see power shifting from northern Africa and the Levant to the Gulf. Egypt has long seen itself as the center of Arab politics, but frets that it is being eclipsed by Saudi and Gulf power. Egypt would look to nuclear weapons to reassert its stature as the preeminent Arab power. Cairo would not want to be eclipsed by Shia power bolstered by Tehran's nuclear weapons, which could be parlayed into more aggressive Iranian support for Hizballah and Palestinian militant Islamists such as Islamic Jihad and Hamas to put Iran front and center in Middle East politics. Algerian officials reportedly considered nuclear power as part of a plan to transform Algeria into a regional superpower, and nuclear weapons could have played a part in this strategy, according to nuclear weapons expert David Albright.[23]

Middle Eastern states would be especially keen to parlay nuclear weapons into influence abroad with the United States, which is a final determinant for regional nuclear weapons proliferation. Middle Eastern states have no doubt noticed that what captures acute American attention is nuclear weapons proliferation. They see, for example, that two of the poorest per capita countries in the world, Pakistan and North Korea, are able to seize the attention of American policymakers and exert an influence on international politics well above their economic "throw weights." As for Iran, Karim Sadjadpour notes a private conversation with a former member of Iran's nuclear negotiating team during which he opined that Iran's nuclear program was not so important until it became important to the United States. The Iranian official responded, "That's absolutely right."[24]

Syria, with a bleak economic picture comparable to those of Pakistan and North Korea, probably harbored illusions of one day presenting the world with a nuclear fait accompli. Damascus could have parlayed nuclear weapons capabilities for the attention of and influence on American policy in the Middle East. That tack would have been in keeping with Syria's longstanding regional role as the "spoiler" with its support of Palestinian and Shia Hizballah opposition, and more recently of Sunni jihadists in Iraq, to make sure that no major regional agreements could go through without Damascus's approval.

Egypt could think along similar lines. Cairo sees its old position at the center of Arab politics deteriorating as Jordan plays a greater role in regional issues, Saudi Arabia increasingly exerts a leadership role based on wealth and stature, and Iran strengthens its regional role in the Gulf and the Levant. Cairo could parlay its nuclear power infrastructure into a military nuclear weapons program to redress Egypt's sliding prestige in the region against Israel, Arab states, and Iran. Egyptian leaders might calculate that the peace treaty with Israel would protect it from Israeli military strikes should a clandestine Egyptian nuclear weapons program be exposed. The Egyptians could present the United States with a fait accompli nuclear weapons capability and use it as leverage to gain more American security assistance for Egypt. Cairo could argue that unless Washington ratchets up its military security assistance, Egypt would have to move from a minimalist to a maximalist nuclear weapons inventory.

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Algeria could reawaken its nuclear weapons program to extract American policy attention. Algiers might find itself in the next generation under renewed and even more strident militant Islamic opposition than in the 1990s. Algerian officials could argue that they need major infusions of American military and security assistance to make sure that nuclear weapons remain secure in secular Arab political hands in Algiers and not fall into the hands of the likes of al Qaeda of northern Africa. The Algerians might take pointers on this score from Pakistan's extraction of generous economic, military, security, and intelligence assistance from the United States because Washington is increasingly uneasy about the security of Pakistan's nuclear weapons inventory in light of the Taliban and al Qaeda inroads in Pakistan.

Nonproliferation Policy Implications

Middle East states will be under heavy pressure in the future to convert civilian nuclear power programs into clandestine military nuclear weapons programs given the key strategic factors at play in the region. The international community is putting itself at risk by essentially replaying the French mistake of supplying Israel and Iraq with ostensibly civilian nuclear power reactors that in the last century were stealthily harnessed for military nuclear weapons programs. Even if Western nuclear technology is not directly harnessed for military nuclear weapons programs in the near term, the expertise and technology could be easily diverted to the military over the longer run. The United States, France, and other Western countries, for example, made that mistake in supplying South Africa with civilian nuclear technology and assistance. Although that assistance did not directly build South Africa's nuclear weapons before the 1990 abandonment, it substantially increased the technical competence of Pretoria's nuclear engineers, technicians, and scientists who made up South Africa's nuclear weapons intellectual capital.[25]

Some observers object to this line of reasoning and counter that Arab states would not dare risk jeopardizing their bilateral security relationships with the United States by embarking on clandestine nuclear weapons programs. But these programs could be small and difficult for Washington to uncover. The South African case illustrates how medium-sized powers such as the Arab states could nurture nuclear weapons programs that could go undetected. Pretoria's bomb program in the 1980s employed only 100 people, of whom about 40 were directly involved in the weapons program and about 20 built South Africa's small nuclear arsenal. By the time the program was cancelled in 1990, the work force still only had about 300 people.[26] International safeguards under the auspices of the IAEA would be little more than speed bumps to determined Middle Eastern

proliferators. With minimal cunning, they could play along with IAEA inspections and hide military nuclear weapons programs much as North Korea and Iraq did in the past and Iran is doing today.

The Arab Gulf states are relying on technical assistance from France, the United States, China, Russia, and others to get their nuclear power infrastructures up and running. As they do, these Gulf states are training a cadre of domestic talent that over a generation could be ready to fill foreign shoes and assume the reins of the nuclear power infrastructure, especially if Arab Gulf states withdraw from IAEA safeguards and the Non-Proliferation Treaty and shift their civilian programs to military nuclear weapons programs. Emirati officials, for example, readily admit today that they are developing domestic talent to run and maintain nuclear reactors by creating nuclear science and engineering degree programs at the country's largest technical school.[27] One cannot help but suspect that with a healthy dose of "street smarts," the UAE and other Middle East strategists can see how far Iran has progressed in its nuclear program and are determined to keep pace even though they are getting a late start. **JFQ**

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NOTES

[1] Avner Cohen and William Burr, "The Untold Story of Israel's Bomb," *The Washington Post*, April 30, 2006, B1, B3.

[2] Ward Wilson, "The Myth of Nuclear Deterrence," *Nonproliferation Review* 15, no. 3 (November 2008), 434.

[3] Patrick Tyler, *A World of Trouble: The White House and the Middle East—From the Cold War to the War on Terror* (New York: Farrar Straus Giroux, 2009), 141.

[4] William J. Broad and David E. Sanger, "As Crisis Brews, Iran Hits Bumps in Atomic Path," *The New York Times*, March 5, 2006.

[5] "GCC Work Team on Peaceful Nuclear Energy Use Meets," *Oman Daily Observer*, May 20, 2009.

[6] "Saudi-French Civil N-Pact 'Soon,'" *Saudi Gazette*, May 11, 2009.

[7] James Kanter, "France Set to Announce UAE Nuclear Deal," *International Herald Tribune*, January 14, 2008; Jay Solomon and Margaret Coker, "Oil-Rich Arab State Pushes Nuclear Bid with U.S. Help," *The Wall Street Journal*, April 2, 2009.

[8] "South Korean Cabinet Approves Peaceful Nuclear Accord with UAE," Kuwait News Agency, June 17, 2009.

[9] "Kuwait Eyes Civilian Nuclear Power Project with French Help," *The Peninsula* (Doha), February 19, 2009.

[10] "Russia, Jordan Sign Nuclear Cooperation Agreement," *Haaretz* (Tel Aviv), May 23, 2009.

[11] "Egypt Unveils Nuclear Plants Plan," BBC News, October 29, 2007.

[12] "Russia-Egypt Nuclear Deal Signed," BBC News, March 25, 2008.

[13] Karl Vick, "Energy, Iran Spur Turkey's Revival of Nuclear Plants," *The Washington Post*, March 7, 2006.

[14] For a comprehensive analysis of Arab military shortcomings, see Kenneth M. Pollack, *Arabs at War: Military Effectiveness, 1948–1991* (Lincoln: University of Nebraska Press, 2002).

[15] Richard L. Russell, *Weapons Proliferation and War in the Greater Middle East: Strategic Contest* (London: Routledge, 2006), 64.

[16] Jay Solomon, "Syria Signals It Will Stop U.N. Nuclear Inspectors," *The Wall Street Journal*, October 4, 2008.

[17] James A. Russell, "A Tipping Point Realized? Nuclear Proliferation in the Persian Gulf and Middle East," *Contemporary Security Policy* 29, no. 3 (December 2008), 530.

[18] For an insightful treatment of nuclear weapons strategy in Cold War Europe, see Lawrence Freedman, *The Evolution of Nuclear Strategy* (New York: St. Martin's Press, 1983), 288–293.

[19] Scott D. Sagan, "Why Do States Build Nuclear Weapons? Three Models in Search of a Bomb," *International Security* 21, no. 3 (Winter 1996/1997), 63–65.

[20] Anthony H. Cordesman and Martin Kleiber, *Iran's Military Forces and Warfighting Capabilities: The Threat to the Northern Gulf* (Westport, CT: Praeger Security International, 2007), 73.

[21] Ray Takeyh, "Iran Builds the Bomb," *Survival* 46, no. 4 (November 2004), 58.

[22] Ray Takeyh, *Hidden Iran: Paradox and Power in the Islamic Republic* (New York: Henry Holt and Company, 2006), 154.

[23] David Albright and Corey Hinderstein, "Algeria: Big Deal in the Desert?" *Bulletin of the Atomic Scientists* 57, no. 3 (May–June 2001), 47.

[24] Quoted in Theodoros Tsakiris, ed., "Iranian-American Relations under the Early Obama Administration: Virtual Dialogue," *Middle East Economic Survey Research Special Report*, April 15, 2009.

[25] J.W. de Villiers, Roger Jardine, and Mitchell Reiss, "Why South Africa Gave Up the Bomb," *Foreign Affairs* 72, no. 5 (November–December 1993), 105.

[26] David Albright, "South Africa and the Affordable Bomb," *Bulletin of the Atomic Scientists* 50, no. 4 (July 1994).

[27] Jay Solomon and Margaret Coker, "Oil-Rich Arab State Pushes Nuclear Bid with U.S. Help," *The Wall Street Journal*, April 2, 2009.