

BACKGROUNDER

No. 3855 | OCTOBER 1, 2024

DOUGLAS AND SARAH ALLISON CENTER FOR NATIONAL SECURITY

Iran Is Inching Toward a Nuclear Weapons Breakout: What Does This Mean for the United States?

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KEY TAKEAWAYS

The United States is at a critical juncture. With Iran inching closer to a nuclear weapon, it is imperative that the United States and its partners are prepared.

The United States does not want a war in the Middle East, but it also cannot afford to accept a nuclear-armed Iran.

As successive U.S. Administrations have concluded, a nuclear-armed Iran presents an unacceptable risk to U.S. vital national security interests.

Introduction

Iran can produce nuclear weapons far more rapidly than expected. In late April 2024, a senior Iranian lawmaker stated that there is only a "one-week gap from the issuance of the order to the first test" of a nuclear bomb. In July, U.S. Secretary of State Antony Blinken appeared to corroborate this statement in part when he announced that "instead of being at least a year away from having the breakout capacity of producing fissile material for a nuclear weapon, [Iran] is now probably one or two weeks away."

An August 2024 International Atomic Energy Agency (IAEA) report all but confirms these statements. As of August 17, Iran had 363.1 pounds of uranium enriched up to 60 percent—an increase of 49.8 pounds since the U.N. agency's May 2024 report.³ Uranium that is "enriched up to 60% purity is just a

short, technical step away from weapons-grade levels of 90%."⁴ Higher levels of enriched uranium have already been detected by IAEA inspectors. In February 2023, it was reported that "[i]nspectors from the [IAEA had] found uranium particles enriched up to 83.7% in Iran's underground Fordow nuclear site."⁵ This finding confirms that Iran is closer than ever to reaching the 90 percent that it needs to produce a nuclear weapon.

On July 23, 2024, the Office of the Director of National Intelligence (ODNI) released an unclassified report on Iran's nuclear program.⁶ This report does not include the following key sentence that appeared in the ODNI's February 2024 *Annual Threat Assessment of the U.S. Intelligence Community*: "Iran is not currently undertaking the key nuclear weapons-development activities necessary to produce a testable nuclear device." That same week, Senator Lindsey Graham described the classified version of ODNI's Iran report as "stunning" and said that Iran "could use these three of four months before our election to sprint to a nuclear weapon." As the Foundation for the Defense of Democracies recently noted, "The absence of this sentence, when added to factors including Senator Graham's response to the classified version of the July 2024 report, suggests that the U.S. intelligence community may assess that Iran is currently undertaking key nuclear weaponization activities necessary to produce a testable nuclear device."

Given these reports and Secretary Blinken's statement, we must assume that Tehran's supply of highly enriched uranium could be converted to enough weapons-grade fuel to produce a handful of nuclear bombs in a matter of days. To pose a credible threat to U.S. interests, Iran will need to upload these nuclear warheads onto missiles or other delivery vehicles. It is therefore significant that Iran has tested a multi-stage space-launch vehicle (SLV)—a technology that is inherently dual-use in nature. ¹⁰ As a recent report has noted:

Should Iran decide to convert a future heavy solid-propellant SLV into an ICBM [intercontinental ballistic missile], it would require the development of several additional technologies, most notably a heatshield capable of surviving re-entry into the atmosphere. This particular technology, however, has historically proven to be a manageable challenge for countries developing ICBMs.¹¹

Putting a nuclear weapon on a container or a truck is another—albeit suboptimal—way to deliver a nuclear weapon and one that could take far less time than it would take to field a nuclear-capable ballistic missile inventory.¹² There are some reports of increased activity at sites associated with Iran's crash nuclear program of the 2000s, to include possible weapons-related testing. Therefore, the possibility of a nuclear test by the Iranian regime in the coming weeks or months cannot be dismissed.¹³

Once it has actually produced these warheads, Iran would be able to field an initial, modest nuclear force. With these capabilities, it would have an outsized influence not only over the security of the region, but also over global energy prices and the world's economy. The implications of this decision for the United States and its regional partners are significant.

The Likely Impact of a Nuclear-Armed Iran

Democratic and Republican Administrations have agreed consistently that Iran must not obtain a nuclear weapon because it would enable Iran to have a far greater impact on Middle Eastern political and security issues, the global economy, and global energy prices. The Middle East is critical to the advancement of U.S. interests because it is a crossroads for global trade, telecommunications, and the movement of energy involving countries in Europe, Arica, and Asia.

The region contains over half of the world's known oil and natural gas reserves, making the Middle East highly consequential for the global economy. The stability and production levels of these energy resources have a direct impact on global energy prices and global economic stability.

The region is also home to several trade choke points that handle a significant percentage of global energy and trade volumes. Connecting the Indian Ocean to the Mediterranean Sea through the Red Sea, the Suez Canal and the Bab al-Mandab Strait handle approximately 12 percent–15 percent of global trade volumes, 25 percent–30 percent of container shipping, 12 percent of seaborne oil, and 8 percent of liquified natural gas. ¹⁴ Another 30 percent of global oil and approximately 18 percent of global natural gas transit through the Strait of Hormuz. ¹⁵

Below the sea, 25 percent of global telecommunication travels through a network of undersea cables that transmit upwards of \$10 trillion in financial transactions every day. These cables are a central component of the American military's network-centric warfare operations. ¹⁶

What would happen specifically if Iran acquired a nuclear weapon? For one thing, Iran might become more confident and therefore more aggressive once it became a nuclear power. At the same time, countries within the region would likely be more hesitant to respond militarily to Iranian aggression. Such a power imbalance could give an emboldened Iran far greater deterrence against its adversaries than it has today. Overall, a nuclearized

Iran would trigger economic consequences, immediate security concerns, and long-term proliferation consequences.

Economic Consequences. Sustained tensions in the Middle East would impact global economic stability, influencing everything from energy prices to investor confidence to the movement of goods.

In the days following Iran's first successful nuclear test, or following an orchestrated, credible regime leak that Iran had a nuclear weapon, heightened geopolitical tensions would create more volatility in the energy market, which would drive up oil prices. Attacks in the past have demonstrated this volatility, which stems from market concerns about potential conflicts and disruptions in the global oil supply.

In 2019, for example, a Houthi missile and drone attack on the Abqaiq oil processing facility and Khurais oil field and processing plant in Saudi Arabia temporally disrupted the oil supply, spiking prices globally. Brent crude prices went from \$60.22 to \$69.04 in a single day—the largest price increase in a single day since 1988. Although Saudi Arabia was able to restore production quickly and bring global prices back down, the attack exposed how vulnerable energy infrastructure is to attacks by Iran and its proxies.

For the United States, energy security is at the heart of a thriving, healthy economy. Before 2005, America imported a significant percentage of its energy from Arab Gulf countries. The "shale boom" that took place after 2005 ignited hope among politicians that energy independence was possible. In 2020, the United States became a net exporter of petroleum for the first time since at least 1949. Today, only 12 percent of U.S. crude oil imports and 12 percent of total petroleum imports are sourced from the Gulf. 18

The global oil market is dynamic, and imports can be influenced by supply and demand factors. At times, because of pricing, contractual obligations, or availability, it might be more cost-effective to import heavy crude oil from the Middle East even if the U.S. has its own shale oil production. There is also an issue with U.S. refineries. Domestic refineries, many of which were constructed before the U.S. fracking boom, are designed to process the heavier crude oils from Russia and the Middle East. Consequently, it is often more cost-effective to export the lighter, sweeter shale oil that is produced domestically. The buying or selling of oil is therefore tied to prices set by the global energy market.

Any supply chain disruption creates a price spike everywhere, including in the United States. For American consumers, rising energy costs and supply chain disruptions would lead to higher gas prices and food prices, depending on how the market perceives the Iranian threat in the long term.

Such increases in the prices of key commodities almost certainly would trigger inflation across the broader U.S. economy.

Commercial trade is another issue. If the United States and its partners imposed strict sanctions in response to Iran's successful acquisition of nuclear capabilities, Tehran could use its proxies to target commercial trade in the Red Sea and Strait of Hormuz and energy infrastructure across the region, which would lead in turn to significant supply chain disruptions and, potentially, a larger conflict. Ongoing Houthi attacks in the Red Sea are giving the world a small taste of what to expect.

Since November 2023, the Iran-backed Houthis have targeted more than 70 vessels transiting the Red Sea, seized one vessel, and sunk two others. Major energy and shipping companies have diverted their vessels around the Cape of Good Hope, extending transit times and spiking freight rates. So far, shipping companies like A.P. Møller–Maersk have absorbed the additional costs, but port congestion is delaying deliveries for manufacturers and retailers. Over time, shippers may filter down additional costs to the consumer if the Red Sea route becomes a permanent no-go zone. If the Strait of Hormuz is also disrupted by Iran, the cost to global trade and energy will be significantly worse.

Over the long term, the threat of nuclear escalation or nuclear proliferation would create a high level of uncertainty for the global market. Investors might perceive increased risk in the Middle East and decide to pull their investments in infrastructure, industry, and other economic sectors. The United Arab Emirates and Saudi Arabia in particular have spent years implementing key reforms in their business environments to increase foreign direct investment (FDI).²²

Ultimately, long-term instability sparked by a regional arms race in the Middle East could reshape global trade patterns as shipping companies redirect their vessels around conflict zones, thereby increasing both transit times and the cost of goods.

Immediate Security Concerns. Today, Iran is a formidable adversary, but it is not yet positioned to dominate the Middle East. To do so, it would need to conquer its neighbors or coerce them into submission.

Large-scale conquest and occupation of its neighbors is not an option for Iran given the makeup of its forces and its capabilities, but Tehran nevertheless uses its missile, drone, and proxy forces to wreak havoc upon Israel, Saudi Arabia, Jordan, and others in the region. So far, these actors have focused primarily on bolstering their defenses against the Iranian regime and have yet to pursue any offensive actions. Regional actors might change their behavior, however, should Iran acquire even a modest nuclear capability.

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A nuclearized Iran could increase Tehran's coercive power over its neighbors, making it more difficult for the United States and its regional partners to deter and potentially defeat Iranian aggression. For example, if Iranian leaders believed that outside powers were deterred by the threat of Iranian nuclear retaliation—in the same way, some claim, that NATO limits its assistance to Ukraine for fear of provoking a Russian nuclear escalation in response—then the regime in Tehran might pursue more aggressive and provocative actions once it believed that it was shielded by a nuclear umbrella.²³

In this scenario, Iranian leadership would feel emboldened to make larger or more frequent attacks on U.S. and allied interests—to include missile attacks on targets within the region, an expanded use of regional proxies such as Hezbollah and the Houthis, and direct attacks against U.S. and allied interests in the region. Iran might do so because it believed that a modest nuclear arsenal would shield it from reprisals. It is entirely possible that Tehran thinks that a limited nuclear arsenal could serve two purposes: to deter large-scale attacks on the regime and safeguard the country from counterattacks in response to Iranian-backed actions across the region.

Ultimately, it is difficult to predict how the acquisition of even a modest nuclear arsenal will impact the behavior of Iran's leaders. Over time, nuclear actors have matured in their strategic thinking in ways that indicated restraint, but history is filled with examples of new nuclear powers that have considered or threatened the use of nuclear weapons to gain a strategic or operational advantage. The most famous example is Douglas MacArthur's desire during the Korean War to employ nuclear weapons to achieve tactical advantage.²⁴

Long-Term Proliferation Consequences. If Iran used its nuclear arsenal to engage in even more provocative and reckless behavior, other countries within the region might seek their own nuclear weapons capabilities to deter Iranian actions and stabilize the region. Crown Prince Mohammed bin Salman has already stated that if Iran acquires a nuclear weapon, Saudi Arabia will seek to do the same.²⁵ Other countries like Turkey could follow Saudi Arabia and Iran, sparking an arms race in the Middle East.

While the United States should not minimize the immediate economic and security implications of an Iranian bomb, American policymakers must understand the long-term implication of a nuclear-armed Iran: the potential unravelling of the global nonproliferation regime.

The United States has been able to mitigate the impacts of North Korea's acquisition of nuclear weapons, but it has done so through great effort and two decades later still struggles to assure key allies like Japan and South Korea that it will come to their defense if they are attacked, particularly with nuclear

weapons. South Korea's increasing desire either for U.S. nuclear weapons forward deployed to the peninsula or for an independent, indigenous "South Korean bomb" reflects the proliferation pressures that are exerted on regional neighbors following the introduction of a new nuclear power.²⁶

U.S. policymakers must therefore understand that if Iran becomes a nuclear power, the United States will likely face a multi-decade struggle to contain the proliferation impacts of an Iranian bomb—a struggle that might not prove to be effective. Following the Soviet Union's entry into the nuclear club, the United Kingdom and France followed suit and became nuclear powers shortly thereafter. Despite existing success in East Asia, it is unclear whether South Korea or Japan will become nuclear powers in response to Chinese and North Korean nuclear expansion.

Similar actions could unfold in the Middle East. A nuclearized Iran could trigger one or even multiple states to seek nuclear weapons as a means to deter Iranian aggression and achieve security.

In the end, the politically and militarily unstable Middle East could contain five or more nuclear-armed states. The United States, Israel, and Israel's Arab partners must therefore be prepared to act if and when Iran attains nuclear weapon capability or risk long-term regional instability. Given the history of Iran's nuclear program, the news that Iran is nearing nuclear breakout is alarming.

Iran's Nuclear Program Explained

During the 1970s, Iran under Shah Mohamad Reza Pahlavi worked with the United States and several European nations to initiate a civilian nuclear power program. Building a series of nuclear reactors and nuclear research centers, the shah hoped to develop a robust nuclear energy sector that could supply substantial amounts of electricity across Iran.

This vision was cut short by the 1979 Islamic Revolution that overthrew the Pahlavi dynasty. Palieving that nuclear weapons were "un-Islamic," Iran's new Supreme Leader Ayatollah Khomeini shut down the program. In 1984, however, after Iraq's use of chemical weapons against Iranian soldiers during the Iran–Iraq war, then-President (and current Supreme Leader) Ali Khamenei secretly restarted the nuclear program with help from Russia, China, and Pakistan.

The program did not raise alarm bells for the IAEA until 2002, when Iranian dissident groups leaked information about two Iranian nuclear sites: a heavy-water production facility at Arak and what soon afterwards was shown to be a uranium enrichment facility at Natanz.³⁰ Natanz could

provide Iran with weapons-grade uranium, and Arak could help it obtain weapons-grade plutonium—a fact not lost on the IAEA. As the IAEA and U.S. scrutinized Saddam Hussein's alleged weapons of mass destruction program, Iran continued its nuclear work in a more covert manner.

At the same time, European states and others tried to halt Iran's nuclear enrichment program. Despite years of intense diplomatic efforts, Iran did not fulfill its commitment to curtail its uranium enrichment.

Then the Obama Administration's 2015 nuclear agreement with Iran, the Joint Comprehensive Plan of Action (JCPOA), made the situation worse by relieving sanctions on Iran, which in any event were outweighed by other provisions of the agreement that extracted from Iran only limited and easily reversible nuclear concessions.³¹ The JCPOA legitimized and allowed Iran to operate its covertly built uranium enrichment facilities at Natanz and Fordow, and key restrictions on uranium enrichment would expire after 10 to 15 years, leaving Tehran free to increase enrichment to an industrial scale and position itself for a nuclear breakout by the mid to late 2020s. The JCPOA also ignored Iran's support for terrorism, regional interventions, and ballistic missile development.³²

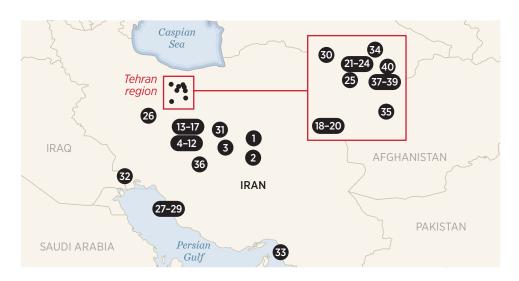
Recognizing the JCPOA's serious flaws, the Trump Administration eventually pulled out of the agreement in 2018 and implemented a "maximum pressure" sanctions campaign to force Iran to return to the negotiating table and agree to a more restrictive deal.³³

Between 2018 and 2021, the Trump Administration imposed more than 1,500 sanctions on Iran and foreign companies and individuals that did business with Iran.³⁴ These sanctions targeted Iranian state institutions, officials, shipping and trading companies, banks, and businesses.³⁵ In 2019, the Trump Administration reported that the Iranian rial had lost over two-thirds of its value as inflation hit 40 percent.³⁶ Iran's "Gross Official Reserves" fell from \$122.5 billion in 2018 to \$12.4 billion in 2019 and then \$4 billion in 2020. By comparison, neighboring Iraq had over \$54.1 billion in reserves in 2020.³⁷

These findings indicate that U.S. sanctions placed immense pressure on Iran's economy, yet its nuclear program continued. Iran resumed its 20 percent enrichment of uranium, installed and operated more advanced centrifuges, and produced uranium metal.³⁸ The Trump Administration tried to trigger a snapback of U.N. sanctions in response to Iran's nuclear noncompliance, but it did not find support at the Security Council and was forced to continued its own sanctions campaign.³⁹ Then President Joe Biden took office in 2021 with a firm commitment to revive JCPOA negotiations with Iran.

MAP 1

Iran's Nuclear Infrastructure



- **Operational Status** Operational Under Construction Undeclared
- 1 Saghand Uranium Mine
- 2 Zarigan Mining and Industrial Complex
- 3 Ardakan Yellowcake Production Plant
- Uranium Conversion Facility (UCF)
- Enriched Uranium Powder Plant (EUPP)
- Manufacturing Plant (FMP)
- 7 Fuel Plate Fabrication Plant (FPFP)
- 8 Zirconium Production Plant (ZPP)
- Miniature Neutron Source Reactor (MNSR) (30 kWt)
- 10 Heavy Water Zero Power Reactor
- 11 Light Water Sub-Critical Reactor (LWSCR)
- 12 Light water research reactor (10 MWt)
- 13 Natanz Centrifuge Workshop
- 14 New Generation Centrifuge Assembly
- 15 Pilot Fuel Enrichment Plant (PFEP)
- 16 Fuel Enrichment Plant (FEP)
- 17 Iran Centrifuge Assembly Center (ICAC)
- 18 Fordow Fuel Enrichment Plant (FFEP)
- 19 National Center for Vacuum Technology
- 20 National Materials Science and Engineering Research Center
- 21 Tehran Research Reactor (TRR) (5 MWt)
- 22 Jabr Ibn Hayan Multipurpose Laboratories (JHL)

- 23 Molybdenum, Iodine, and Xenon Radioisotope Production Facility (MIX Facility)
- 24 Waste Handling Facility
- 25 O Turquzabad ("Location 1")
- 26 Khondab Heavy Water Research Reactor (IR-40) (20 MWt)
- 27 Bushehr-1 (Pressurized Water Reactor) (1,000 MWe)
- 28 Bushehr-2 (V-528 VVER-1000 Pressurized Water Reactor) (974MWe)
- 29 Bushehr-3 (V-528 VVER-1000 Pressurized Water Reactor) (974MWe)
- 30 Karaj Waste Storage Facility
- 31 Anarak Near-Surface Repository
- 32 Karun Nuclear Power Station (Pressurized Water Reactor) (300MWe)
- 33 Iran-Hormuz Nuclear Power Station
- 34 O Lavisan-Shian ("Location 2")
- 35 O Varamin ("Location 3")
- 36 O Marivan ("Location 4")
- 37 O Taleghan 1 and 2
- 38 O Shahid Boroujerdi Underground Facility
- 39 O Golab Dareh
- 40 O Research Center for Explosion and Impact (METFAZ) Sanjarian facility

NOTE: Locations are approximate.

SOURCE: Iran Watch, "Table of Iranian Nuclear Sites and Related Facilities," May 28, 2024, https://www.iranwatch.org/our-publications/weapon-program-background-report/table-iranian-nuclear-sites-related-facilities (accessed September 17, 2024).

Failure of Post-JCPOA Nuclear Talks

Over a two-year period from April 2021 to May 2023, the Biden–Harris Administration participated with the Europeans in a series of direct and indirect talks with Iran to negotiate a return to the JCPOA. Instead of maintaining the Trump Administration's economic sanctions regime to pressure Tehran to renegotiate a stronger nuclear deal, the Biden–Harris Administration relaxed sanctions and offered incentives to induce Iran to restart nuclear discussions.

In February 2021, President Biden removed the Iran-backed Houthis from the State Department's list of Foreign Terrorist Organizations (FTOs) and "told the United Nations Security Council it was rescinding a Trump administration assertion that all U.N. sanctions had been reimposed on Iran in September [2020]."⁴⁰ The Biden–Harris Administration also relaxed economic sanctions on Iranian oil exports, allowing the regime to sell over \$44.7 billion worth of oil—mostly to China—from January 2021 to June 2022.⁴¹ In March 2021, the U.S. praised the Europeans for not censuring Iran for its lack of inspection compliance at the IAEA in Vienna.⁴²

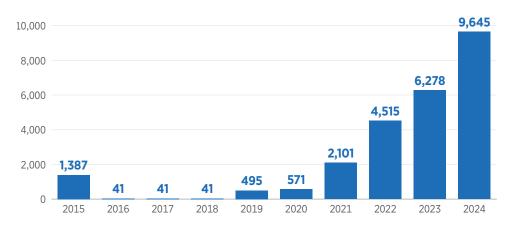
Tehran returned to the negotiating table but did not change its behavior. Uranium enrichment jumped from 20 percent to 60 percent in the first three months of 2021 while Tehran started to deploy large numbers of advanced centrifuges that were prohibited until after 2025 under the JCPOA.⁴³ Yet the Biden–Harris Administration continued to push for a deal.⁴⁴

After the election of Iranian President Ebrahim Raisi in June 2021, Tehran upped its price for returning to JCPOA compliance.⁴⁵ After backand-forth negotiations in Vienna, Iran demanded that Washington remove its designation of Iran's Islamic Revolutionary Guard Corps (IRGC) as an FTO. The Biden–Harris Administration rightly refused to lift the FTO designation, ending the talks in Vienna in April 2022.⁴⁶

Although its efforts to revive the JCPOA failed, reports in June 2023 confirmed that the Biden–Harris Administration was discussing an alternative agreement with Iran. ⁴⁷ The Administration relaxed its enforcement of U.S. sanctions on Iran's oil exports, dragged its feet on applying new sanctions on Iran, and issued sanctions waivers in June 2023 that authorized the release of \$2.76 billion held in escrow in Iraq to repay Iran for exports of natural gas and electricity. Media reports suggested that these steps were part of an informal "mini deal" that would trade sanctions relief with a cap on its stock of 60 percent enriched uranium for a pause in proxy attacks against U.S. forces in the region.

CHART 1

Iranian Installed Advanced Centrifuges by Year



SOURCE: David Albright, Sarah Burkhard, Spencer Faragasso, and Andrea Stricker, "Analysis of IAEA Iran Verification and Monitoring Report—February 2024," Institute for Science and International Security, March 4, 2024, https://isis-online.org/isis-reports/detail/analysis-of-iaea-iran-verification-and-monitoring-report-february-2024 (accessed September 17, 2024).

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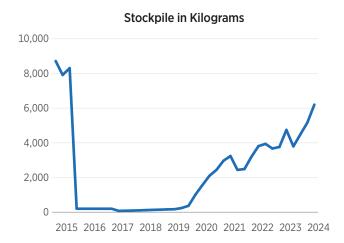
Subsequently, attacks against U.S. forces were less frequent, but Iran did not scale back its enrichment.⁴⁸ Instead, it continued to add advanced centrifuges and removed 27 cameras that had allowed the IAEA to monitor its nuclear activities over the preceding six years⁴⁹ This action came in response to a resolution against Iran for failing to cooperate with IAEA probes that found uranium traces at three undeclared sites. In September 2023, Iran also expelled one-third of the IAEA enrichment-related nuclear inspectors who were in the country as part of the Nuclear Nonproliferation Treaty's Safeguards Agreement to ensure that Iran was not building nuclear weapons.⁵⁰

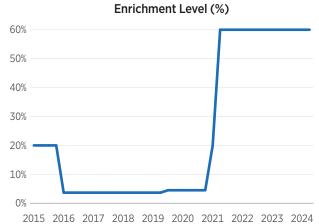
After expressing "concern" over Iran's lack of IAEA compliance, the Biden–Harris Administration chose to double down on its negotiations with Tehran. In September 2023, the Administration negotiated a controversial deal with Iran to release five American hostages in exchange for five Iranians held in U.S. jails and at least \$6 billion of Iranian assets frozen in South Korea. This deal was secured despite the expulsion of top IAEA inspectors just days before.

Shortly thereafter, on October 7, 2023, armed and supported by Iran, Hamas launched an attack against Israel that unleashed region-wide violence against Israel and the United States. With all eyes on the war between

CHART 2

Iranian Enriched Uranium





SOURCE: International Atomic Energy Agency, "IAEA and Iran—IAEA Board Reports," https://www.iaea.org/newscenter/focus/iran/iaea-and-iran-iaea-board-reports (accessed September 17, 2024).

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Israel and Hamas in Gaza, the Iranians have accelerated their nuclear activities with little to no pushback from the United States or Europe. Lack of transparency combined with increasing nuclear capabilities means that Iran is closer than ever to a nuclear breakout.

Breakout Time Zero

According to the May 2024 IAEA report, Iran is continuing to stockpile uranium enriched to between 20 percent and 60 percent. ⁵³ In the past, Iran has claimed that its nuclear enrichment is for commercial nuclear use. For comparison, civilian nuclear reactors operate on 3 percent–5 percent enriched uranium. ⁵⁴ One can assume that a country that stockpiles uranium enriched to a level of 60 percent purity—which is only a technical step from 90 percent—is seeking to reach breakout capability for nuclear weapons.

What this means is that, according to then-Chairman of the Joint Chiefs of Staff General Mark Milley, Iran could have enough fissile material for a nuclear bomb in "less than two weeks" and produce a nuclear device in "several more months." ⁵⁵

Iran is a "latent" nuclear power—one that remains a non-nuclear power by choice. Once it makes the decision to enrich uranium to weapons grade, heritage.org

it will quickly become a nuclear weapon state—and may in fact be able to produce a small number of nuclear weapons before that becomes apparent to other actors. The implications of a nuclearized Iran for the United States, Israel, and the rest of the Middle East will be serious.

Proliferation Among Autocrats: A Short History

To understand what the United States should do now, one must examine the implications of a nuclear-armed Iran. To do so, it is helpful to examine the behaviors of other adversarial states that became nuclear powers.

In September 1949, four years after the U.S. had detonated atomic bombs over Hiroshima and Nagasaki to end World War II, the Soviet Union carried out its first post-war nuclear test. ⁵⁶ A month later, the Air Force sent a memorandum to the Director of Intelligence that discussed possible Soviet atomic attacks on targets in the United States and the United Kingdom. ⁵⁷

Alarmed by these reports, American policymakers called for massive military spending in 1950 to stay ahead of the Soviet Union.⁵⁸ The history of Europe in the four decades that followed was the history of a continent in which thousands of nuclear weapons were deployed and millions of men were under arms—but also in which a tense and uneasy peace reigned.

By the middle of the Cold War, it was clear that Communist China was close to a nuclear breakout—a development that was deeply troubling for American policymakers. In the days before China tested its first nuclear weapon in 1964, the Department of Defense warned that Chairman Mao's alarming rhetoric made it unlikely that China would be more cautious as a nuclear power. The Department of Defense also argued that China would provide nuclear arms to Vietnam and North Korea and use the threat of nuclear war to drive the United States out of Asia. As it turned out, the United States remained in Asia after the Vietnam War, and China refused to help North Korea build a nuclear weapon, despite providing Pakistan with a tested nuclear weapons design and enough weapons-grade uranium for two nuclear weapons in the early 1980s.

By the 1970s, North Korean leader Kim II Sung was determined to join the nuclear club. Consequently, Pyongyang began its nuclear program with the assistance of the Soviet Union. ⁶² In 1994, it became clear that North Korea sought an independent nuclear capability: It even threatened to turn Seoul into a "sea of flames" by the mid-1990s. In response, the U.S. military drew up plans to send cruise missiles and F-117 stealth fighters to strike the Yongbyon nuclear reactor. A last-minute intervention by former President

Jimmy Carter eventually led to an agreement by North Korea to freeze its nuclear program—thus undercutting a potential chance to strangle the North Korean nuclear program in its cradle.⁶³

Jimmy Carter's agreement did not last long. After violating the terms of the agreement on multiple occasions, North Korea reactivated its nuclear plant in Yongbyon, expelled IAEA inspectors in 2003. and detonated its first nuclear weapon within a few short years. 64 Since that time, multiple diplomatic attempts—to include the Six Party Talks—and intense economic sanctions have failed to convince the Kim family to halt North Korea's nuclear program. Instead, the country has conducted multiple nuclear tests and continues to debut a variety of missiles with increasing ranges.

While North Korea, Russia, and China have never employed nuclear weapons against their adversaries, the nuclear status of all three countries empowers them to influence or deter adversaries' actions. At a minimum, their nuclear arsenals have a major influence on security decision-making in the Indo-Pacific and Europe.

- Russia's nuclear arsenal complicates allied decision-making and NATO support of Ukraine;
- China's nuclear arsenal complicates its ties with the United States and will have implications for a possible defense of Taiwan from a Chinese invasion; and
- North Korea's seemingly endless series of nuclear threats against the United States and its allies in South Korea and Japan also impacts the regional security posture of the Indo-Pacific.

The ability to employ this type of coercive leverage is one of the main reasons why Iran has spent decades developing its nuclear weapons program.

What Should the U.S. Do?

In the decades since the Islamic Republic of Iran came to power in 1979, the regime has made it clear that the United States is public enemy number one and Israel is public enemy number two. Even though Russia, China, and North Korea have never employed their nuclear weapons, there is no guarantee that Iran will show restraint. In fact, the ideological nature of the regime could mean that Iran's behavior could be quite different from the behavior of other states that have acquired nuclear capabilities.

The United States is at a critical juncture. With Iran inching closer to a nuclear weapon, it is imperative that the United States and its partners are prepared. Therefore, the next presidential Administration should:

- Field the capabilities required to destroy Iran's weapon capabilities, including options for destroying hardened and deeply buried nuclear targets. U.S. intelligence currently indicates that Iran has two hardened and deeply buried targets—the facilities at Natanz and Fordow. The United States must therefore be able and reserve the right to hold at risk whatever targets it deems necessary to deny Iran the ability to field nuclear weapons.
- Maximize diplomatic and economic pressure on Tehran by denying it access to resources for nuclear programs. Under the Trump administration, there were more than 1,500 terrorism, missile, and nuclear sanctions targeted against individuals and state institutions. These sanctions cost Tehran over \$200 billion from 2018–2021. As a result of these sanctions, in 2019 alone, Iran cut its defense spending by 28 percent, 17 percent of which was for IRGC funding. Sanctions—when effective—limit Iran's ability to fund proxies like Hamas, the Houthis, and Hezbollah as well as its nuclear program. Returning to a campaign of maximum diplomatic and economic pressure could seriously limit Iran's ability to build nuclear weapons.
- Support Israel's defense. For more than four decades, Iran's rulers have pledged to destroy Israel, which has been and is one of America's closest partners. The Department of Defense should supply weapons, intelligence, and other aid that Israel requires to defend itself and advocate for Israel's right to respond to threats. The Department of Defense should also ramp up defense production to meet Israel's requirements for air and missile defenses, air-to-ground weapons, and other capabilities, such as tanker aircraft and large ordnance systems like the Massive Ordnance Penetrator, while also providing Israel with targeting and other military support when necessary.⁶⁷
- Expedite arms sales and delivery to Arab allies along with associated training and other support. The Trump Administration successfully developed good working relationships with Arab partners

to confront Tehran, but the Biden–Harris Administration chose to favor Iran over regional partners to entice the regime to return to the JCPOA. These efforts failed to secure a nuclear deal and instead alienated Arab partners by ignoring their security concerns. The United States should instead strengthen Arab countries' ability to deter or defend against Iranian air, maritime, and other threats with more limited U.S. support.

- Facilitate increased defense cooperation between Israel and Gulf partners. The Abraham Accords set up a framework that could be used to explore new defense, investment, and political opportunities to bring together Israel and Arab partners under American leadership. Greater consultations, coordination, information-sharing, and technology-sharing between Arab and Israeli partners should focus on countering Iranian air, missile, and maritime threats as well as Iran-sponsored terrorism.
- Expand regional missile defenses. Working with regional partners, the United States should expand regional integrated air and missile defenses to defend American interests and deter Iranian aggression, particularly from missile and airborne threats, more effectively. In particular, the U.S. should encourage the development and production of such capabilities among key partners within the region.
- Improve regional deterrence presence. The United States should consider an enhanced deterrence posture for the region both to deter Iranian aggression and to assure regional partners. This posture should include bomber assurance and deterrence missions by nuclear-capable bombers and ports of call by key naval assets.
- Expand and improve U.S. petroleum refinery capacity. In the past, the U.S. has relied on global oil markets to meet surges in domestic demand, but overseas access to markets could be constrained when Iran acquires nuclear weapons. American refineries are predominantly tuned to process heavy crude oil because most refineries were built before lighter American shale became profitable. To offset the potential loss of heavy refined petroleum products imported from the Middle East, the United States should provide tax incentives to U.S. energy companies to reconfigure, expand, or build new petroleum refineries within the United States.

- Revitalize the Strategic Petroleum Reserve (SPR). Congress established the Strategic Petroleum Reserve in 1975 to mitigate energy shocks. The SPR is mandated to hold a 90-day reserve of crude oil, which is stored at four sites located in Texas and Louisiana that have a combined capacity of 714 million barrels. At the end of the Trump Administration in January 2020, the SPR contained 635 million barrels of crude oil. As of August 2024, the SPR contained 376.5 million barrels of crude oil—almost half of what it held at the end of the Trump Administration. Alow SPR leaves the energy security of the American people at risk. The United States should replenish the Strategic Petroleum Reserve and potentially expand SPR storage capacity to cushion the impacts of a spike in petroleum prices if Iran achieves nuclear capability.
- Ensure that the United States has the capacity to detect ballistic missile launches. The United States has long maintained the ability to detect ballistic missile launches in much of the Northern Hemisphere. The existing architecture to detect these launches, however, may be insufficient to detect launches in Iran. Consequently, the Department of Defense should ensure that it maintains a persistent capability to detect ballistic missile launches from Iran, and if, necessary, intercept and destroy said missile launches.

Conclusion

Neither the United States, Israel, the Arab Gulf countries, nor many other countries in the Middle East want Iran to control the region. The stakes are high. Tehran's high-profile coordinated attack against Israel in April 2024 clearly demonstrated that Iran has both the capability and the will to escalate its aggression against adversaries. A modest nuclear arsenal would only increase the Iranian threat. There is still time, however, to increase collective deterrence against Iran to curb Tehran's aggression.

It is possible that Iran could test a nuclear device in the coming weeks or months. If it does, the President as Commander in Chief will have to decide how to respond and what to do. The U.S. does not want a war in the Middle East, but it also cannot afford to accept a nuclear-armed Iran. A diplomatic solution is almost certainly desirable but at this juncture may not be possible.

All of these decisions will confront the next President. Regardless of the outcome of the November elections, the United States must equip and empower its regional partners and allies to confront Iran, use its diplomatic and economic levers to put pressure on the Iranian regime, and—if necessary—develop and maintain the capabilities needed to destroy Iran's nuclear capabilities.

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