Threats to U.S. Vital Interests

Assessing Threats to U.S. Vital Interests

The United States is a global power with global interests. Scaling its military power to threats requires careful judgments with regard to the importance and priority of those interests, whether the use of force is the most appropriate and effective way to address the threats to those interests, and how much and what types of force are needed to defeat such threats.

This *Index* focuses on three fundamental, vital national interests:

- Defense of the homeland;
- Successful conclusion of a major war that has the potential to destabilize a region of critical interest to the U.S.; and
- Preservation of freedom of movement within the global commons: the sea, air, and outer-space domains through which the nations of the world conduct their business.

The geographical focus of the threats in these areas is further divided into three broad regions: Asia, Europe, and the Middle East.

This is not to say that these are America's only interests. Among many others, the U.S. has an interest in the growth of economic freedom in trade and investment, the observance of internationally recognized human rights, and the alleviation of human suffering beyond our borders. None of these interests, however, can be addressed principally and effectively by the use of military force; nor would threats to these interests result in material damage to the

foregoing vital national interests. Thus, these additional American interests, however important they may be, are not used in this assessment of the adequacy of current U.S. military power.

In previous editions of this *Index*, we referenced two public sources as a mechanism with which to check our work against that of other recognized professional organizations in the field of threat analysis: *The Military Balance*, published annually by the London-based International Institute for Strategic Studies, ¹ and the annual *Worldwide Threat Assessment of the US Intelligence Community* (WWTA). ² The latter served as a reference point produced by the U.S. government against which each threat assessment in this *Index* was compared. We noted any differences between assessments in this *Index* and the work of the two primary references in summary comments.

The juxtaposition of our detailed, reviewed analysis against both *The Military Balance* and the WWTA revealed two stark limitations in these external sources.

- The Military Balance is an excellent and widely consulted source, but it is only a count of military hardware and lacks context in terms of equipment capability, maintenance and readiness, training, manpower, integration of services, doctrine, or the behavior of competitors that threaten the national interests of the U.S. as defined in this *Index*.
- The WWTA omits many threats, and its analysis of those that it does address is limited. Moreover, it does not reference

Threat Categories

Behavior	HOSTILE	AGGRESSIVE	TESTING	ASSERTIVE	BENIGN
Capability	FORMIDABLE	GATHERING	CAPABLE	ASPIRATIONAL	MARGINAL

underlying strategic dynamics that are key to the evaluation of threats and that may be more predictive of future threats than is a simple extrapolation of current events.

With respect to the WWTA, its limitations are most likely caused by the withholding from public view of the intelligence community's very sensitive assessments, which are derived from classified sources and/or result from analysis of unclassified, publicly available documents, with the resulting synthesized insights becoming classified by virtue of what they reveal about U.S. determinations and concerns. Given the need to avoid compromising sources, methods of collection, and national security findings, such a policy is understandable, but it also causes the WWTA's threat assessments to be of limited value to policymakers, the public, and analysts working outside of the government. We have therefore decided to stop using the WWTA as a reference and trust that the reader will double-check our conclusions with the various sources cited in the following pages as well as other publicly available reporting on challenges to core U.S. security interests discussed in this section.

Measuring or categorizing a threat is problematic because there is no absolute reference that can be used in assigning a quantitative score. Two fundamental aspects of threats, however, are germane to this *Index*: the threatening entity's desire or intent to achieve its objective and its physical ability to do so. Physical ability is the easier of the two to assess; intent is quite difficult. A useful surrogate for intent is observed behavior, because this is where intent becomes manifest through action. Thus, a provocative, belligerent pattern of behavior that seriously threatens U.S. vital interests

would be very worrisome. Similarly, a comprehensive ability to accomplish objectives even in the face of U.S. military power would cause serious concern for U.S. policymakers, while weak or very limited abilities would lessen U.S. concerns even if an entity behaved provocatively vis-à-vis U.S. interests.

Each categorization used in the *Index* conveys a word picture of how troubling a threat's behavior and set of capabilities have been during the assessed year. The five ascending categories for observed behavior are:

- Benign,
- Assertive,
- Testing,
- Aggressive, and
- · Hostile.

The five ascending categories for physical capability are:

- Marginal,
- Aspirational,
- Capable,
- · Gathering, and
- Formidable.

These characterizations—behavior and capability—form two halves of an overall assessment of the threats to U.S. vital interests.

In another significant departure from previous editions, we have changed the organizational structure from a U.S. interests-based approach, by region, to one that focuses squarely on threat actors. In our previous approach, the reader would see China assessed in each section per U.S. interest: threats to the U.S. homeland, threats to regional stability, and threats to free movement in the commons. This seemed confusing, so in this edition, the reader will see China addressed

once, with discussion of how it challenges U.S. interests. The same approach is used to discuss Russia, Iran, North Korea, and relevant terrorist groups.

We always hold open the potential to add or delete from this list of threat actors; inclusion of any state or non-state entity is based solely on our assessment of its ability to pose a meaningful challenge to a critical U.S. interest.

Endnotes

- International Institute for Strategic Studies, The Military Balance 2014: The Annual Assessment of Global Military Capabilities and Defence Economics (London: Routledge, 2014); The Military Balance 2015: The Annual Assessment of Global Military Capabilities and Defence Economics (London: Routledge, 2015); The Military Balance 2016: The Annual Assessment of Global Military Capabilities and Defence Economics (London: Routledge, 2016); The Military Balance 2017: The Annual Assessment of Global Military Capabilities and Defence Economics (London: Routledge, 2017); and The Military Balance 2018: The Annual Assessment of Global Military Capabilities and Defence Economics (London: Routledge, 2018).
- 2. James R. Clapper, Director of National Intelligence, "Worldwide Threat Assessment of the US Intelligence Community," statement before the Select Committee on Intelligence, U.S. Senate, January 29, 2014, http://www.dni.gov/files/documents/Intelligence%20 Reports/2014%20WWTA%20%20SFR_SSCI_29_Jan.pdf; James R. Clapper, Director of National Intelligence, "Worldwide Threat Assessment of the US Intelligence Community," statement before the Committee on Armed Services, U.S. Senate, February 26, 2015, http://www.armed-services.senate.gov/imo/media/doc/Clapper_02-26-15.pdf; James R. Clapper, Director of National Intelligence, "Worldwide Threat Assessment of the US Intelligence Community," statement before the Committee on Armed Services, U.S. Senate, February 9, 2016, https://www.armed-services.senate.gov/imo/media/doc/Clapper_02-09-16.pdf; Daniel R. Coats, Director of National Intelligence, "Worldwide Threat Assessment of the US Intelligence Community," statement before the Select Committee on Intelligence, U.S. Senate, May 11, 2017, https://www.dni.gov/files/documents/Newsroom/Testimonies/SSCI%20Unclassified%20SFR%20-%20Final.pdf; and Daniel R. Coats, Director of National Intelligence, "Worldwide Threat Assessment of the US Intelligence Community," statement before the Select Committee on Intelligence, U.S. Senate, February 13, 2018, https://www.dni.gov/files/documents/Newsroom/Testimonies/2018-ATA---Unclassified-SSCI.pdf.

Russia

ussia remains an acute and formidable Lthreat both to the United States and to U.S. interests in Europe. From the Arctic to the Baltics, Ukraine, and the South Caucasus, and increasingly in the Mediterranean, Russia continues to foment instability in Europe. Despite economic problems, Russia continues to prioritize the rebuilding of its military and funding for its military operations abroad. Russia's military and political antagonism toward the United States continues unabated, and its efforts to undermine U.S. institutions and the NATO alliance are serious and troubling. Russia uses its energy position in Europe along with espionage, cyberattacks, and information warfare to exploit vulnerabilities and seeks to drive wedges into the transatlantic alliance and undermine people's faith in government and societal institutions.

Overall, Russia has significant conventional and nuclear capabilities and remains the principal threat to European security. Its aggressive stance in a number of theaters, including the Balkans, Georgia, Syria, and Ukraine, continues both to encourage destabilization and to threaten U.S. interests.

Russian Military Capabilities. According to the International Institute for Strategic Studies (IISS), among the key weapons in Russia's inventory are 334 intercontinental ballistic missiles; 2,750 main battle tanks; and more than 5,140 armored infantry fighting vehicles, more than 6,100 armored personnel carriers, and more than 4,342 pieces of artillery. The navy has one aircraft carrier; 58 submarines (including 10 ballistic missile submarines); four cruisers; 16 destroyers; 14 frigates; and 105

patrol and coastal combatants. The air force has 1,223 combat-capable aircraft. The IISS counts 280,000 members of the army. Russia also has a total reserve force of 2,000,000 for all armed forces. Russian deep-sea research vessels include converted ballistic missile submarines, which hold smaller auxiliary submarines that can operate on the ocean floor. ²

To avoid political blowback from military deaths abroad, Russia has increasingly deployed paid private volunteer troops trained at Special Forces bases and often under the command of Russian Special Forces. Russia has used such volunteers in Libya, Syria, and Ukraine because "[t]hey not only provide the Kremlin with plausible political deniability but also apparently take casualties the Russian authorities do not report."3 In February 2018, for example, at Deir al-Zour in eastern Syria, 500 pro-Assad forces and Russian mercenaries armed with Russian tanks, artillery, and mortars attacked U.S.-supported Kurdish forces.4 Approximately 30 U.S. Rangers and Delta Force special operators were also at the base.⁵ U.S. airstrikes helped to repulse the attack, and according to some estimates, 300 Russian mercenaries were either killed or wounded.6

In January 2019, reports surfaced that 400 Russian mercenaries from the Wagner Group were in Venezuela to bolster the regime of Nicolas Maduro. Russian propaganda in Venezuela has supported the regime and stoked fears of American imperialism. According to one report, "Kremlin-backed media in Latin America is pounding hard on the narrative that Washington's recognition of Juan Guaidó as Venezuela's legitimate president is part of

a centuries-old pattern of meddling by the United States in the region." As the crisis metastasized and protests against the Maduro regime grew, Russia began to deploy Russian troops and supplies to bolster Maduro's security forces. In December, Russia temporarily deployed two TU-160 nuclear-capable bombers to Caracas. Russia exports billions in arms to Venezuela (and has loaned the regime money to purchase Russian arms) along with \$70 million-\$80 million yearly in nonmilitary goods.

In July 2016, Russian President Vladimir Putin signed a law creating a National Guard with a total strength (both civilian and military) of 340,000, controlled directly by him. ¹² He created his National Guard, which is responsible for "enforcing emergency-situation regimes, combating terrorism, defending Russian territory, and protecting state facilities and assets," by amalgamating "interior troops and various law-enforcement agencies." ¹³ Although Putin could issue a directive to deploy the force abroad, ¹⁴ it is more likely to be used to stifle domestic dissent.

The World Bank projects that the Russian economy will grow by a tepid 1.4 percent in 2019. In the first quarter of 2019, real disposable incomes in Russia declined by 2.3 percent. Such low forecasts and economic results could imply that Russia will have difficulty funding military affairs, but economic problems at home also can incentivize regimes to pursue military adventures abroad to distract the public and generate positive news for the government. If an autocratic leader relies on military power to maintain political control, there is ample reason to maintain spending on the military in spite of glum economic news.

Russia spent \$61.4 billion on its military in 2018, which is 3.5 percent less than it spent in 2017.¹⁷ One analyst, however, cautions that:

In reality Russia's effective military expenditure, based on purchasing power parity (Moscow buys from Russian defense manufacturers in rubles), is more in the range of \$150–180 billion per year, with a much higher percentage dedicated to

procurement, research and development than Western defense budgets.... There is well over 1 trillion rubles of military expenditure in Russia outside of the regular defense budget.¹⁸

Much of Russia's military expenditures go toward modernization of its armed forces. In January 2018, Chairman of the Joint Chiefs of Staff and U.S. Marine Corps General Joseph Dunford noted that "[t]here is not a single aspect of the Russian armed forces that has not received some degree of modernization over the past decade." In 2019, according to the Russian Ministry of Defense, Russia will spend \$21.5 billion on procurement. Taking into account total military expenditure, Russia spent 4 percent of GDP on defense in 2018. Taking into account total military expenditure.

In early 2018, Russia introduced the new State Armament Program 2018–2027, a \$306 billion investment in new equipment and force modernization. However, according to the Royal Institute of International Affairs, "as inflation has eroded the value of the rouble since 2011, the new programme is less ambitious than its predecessor in real terms."²²

Russia's nuclear capabilities have been prioritized for modernization, and 82 percent of its nuclear forces have been modernized.²³ Russia plans to deploy the RS-28 (Satan 2) ICBM by 2021 as a replacement for the RS-36, which is being phased out in the 2020s.²⁴ The missile, which can carry up to 15 warheads, underwent flight development tests from April–June 2019.²⁵

The armed forces also continue to undergo process modernization, which was begun by Defense Minister Anatoly Serdyukov in 2008. 26 Partially because of this modernization, former U.S. Deputy Assistant Secretary of Defense for Strategy and Force Development Elbridge Colby stated in January 2018 that the U.S. military advantage over Russia is eroding. 27 Approximately 46 percent of Russian land forces' equipment has been modernized.

Russia reportedly will begin state trials for its T-14 Armata main battle tank in 2019,²⁸ although the Armata's cost might prove

prohibitive, and "procurement in quantity will focus on modernized T-72, T-80, and T-90 tanks." Russia's fifth-generation Su-27 fighter fell short of expectations, particularly with regard to stealth capabilities. In May 2018, the government cancelled mass production of the Su-27 because of its high costs and limited capability advantages over upgraded fourth-generation fighters.³⁰

In October 2018, Russia's sole aircraft carrier, the *Admiral Kuznetsov*, was severely damaged when a dry-dock sank and a crane fell, puncturing a hole in the deck and hull.³¹ The carrier is not likely to be salvaged. In May 2019, reports surfaced that Russia is seeking to build a new nuclear-powered aircraft carrier, beginning in 2023 for delivery in the late 2030s, but the procurement's financial and technological feasibility remains questionable.³²

In March 2017, Russia announced life-extension programs for its *Akula*-class and *Oscar II*-class nuclear-powered submarines, which operate in both the Northern and Pacific Fleets.³³ Russia is also reportedly deploying Kalibr cruise missiles to submarines and surface vessels operating in the Western Atlantic.³⁴

Following years of delays, the Admiral Gorshkov stealth guided missile frigate was commissioned in July 2018. The second Admiral Gorshkov-class frigate, the Admiral Kasatonov, began sea trials in April 2019; however, according to some analysts, tight budgets and the inability to procure parts from Ukrainian industry (importantly, gas turbine engines) make it difficult for Russia to build the two additional Admiral Gorshkov-class frigates as planned. 35 On April 23, 2019, keel-laying ceremonies took place for the fifth and sixth Admiral Gorshkovclass frigates.36 Russia plans to procure eight Lider-class guided missile destroyers for its Northern and Pacific Fleets, but procurement has faced consistent delay, and construction will not begin until 2025 at the earliest.³⁷

Russia recently sold three *Admiral Grig-orovich*—class frigates to India. The ships had been intended for the Black Sea Fleet, but Russia found itself unable to produce a replacement engine following Ukraine sanctions.

Similar problems have befallen the long-delayed *Admiral Gorshkov*–class procurements. Of the planned 14 frigates, Russia has engines for only two.³⁸

Russia's naval modernization continues to prioritize submarines. According to the IISS, "Submarine building will focus on completing the series of Borey-A ballistic-missile boats armed with Bulava missiles and Project 08851 Yasen-M multi-role submarines, though from the early 2020s construction is expected to begin on the first Khaski-class successor."39 The Khaski-class submarines are planned fifth-generation stealth nuclear-powered submarines. They are slated to begin construction in 2023 and to be armed with Zircon hypersonic missiles, which have a reported speed of from Mach 5 to Mach 6.40 According to a Russian vice admiral, these submarines will be two times quieter than current subs.41

Russia also continues to upgrade its diesel electric *Kilo*-class subs. ⁴² Because of construction delays, the first of six planned Project 636.3 *Kilo*-class diesel-electric attack submarines will not be delivered until the end of 2020 or in 2021, with all six planned for delivery by 2025. ⁴³ According to one analyst, the submarines' improvement in noise reduction has led them to be nicknamed "Black Holes," but "the submarine class lacks a functioning air-independent propulsion system, which reduced the boats' overall stealth capabilities." ⁴⁴

Transport remains a nagging problem, and Russia's Defense Minister has stressed the paucity of transport vessels. Russia does not have enough air transport, for example, to airdrop its large paratrooper force at one time. ⁴⁵ In 2017, Russia reportedly needed to purchase civilian cargo vessels and use icebreakers to transport troops and equipment to Syria at the beginning of major operations in support of the Assad regime. ⁴⁶

Although budget shortfalls have hampered modernization efforts overall, analysts believe that Russia will continue to focus on developing high-end systems such as the S-500 surface-to-air missile system.⁴⁷ In May 2018, it was reported that Russian testing of the S-500

system struck a target 299 miles away. If true, this is the longest surface-to-air missile test ever conducted, and the S-500's range could have significant implications for European security when the missile becomes operational.⁴⁸

Russia's counterspace and countersatellite capabilities are formidable. A Defense Intelligence Agency report released in February 2019 summarized Russian capabilities:

[O]ver the last two decades, Moscow has been developing a suite of counterspace weapons capabilities, including EW [electronic warfare] to deny, degrade, and disrupt communications and navigation and DEW [directed energy weapons] to deny the use of space-based imagery. Russia is probably also building a ground-based missile capable of destroying satellites in orbit.49

In 2018 and 2019, Russia continued tests on an anti-satellite weapon built to target imagery and communications satellites in low Earth orbit. ⁵⁰ According to the IISS, modernization priorities for Russia's space force include "restor[ing] Russia's early-warning satellite network, with the re-equipping of the ground-based warning system with *Voronezh* radars nearing completion." ⁵¹

Russian Exercises. Russian military exercises, especially snap exercises, are a source of serious concern because they have masked real military operations in the past. Their purpose is twofold: to project strength and to improve command and control. According to Army General Curtis M. Scaparrotti, former Commander, U.S. European Command, "their exercise program demonstrates increasingly sophisticated command and control and integration across multiple warfare areas."⁵²

Exercises in the Baltic Sea in April 2018, a day after the leaders of the three Baltic nations met with President Donald Trump in Washington, were meant as a message. Russia stated twice in April that it planned to conduct three days of live-fire exercises in the Exclusive Economic Zone of Latvia, which forced

a rerouting of commercial aviation as Latvia closed some of its airspace. Sweden issued warnings to commercial aviation and sea traffic. He turned out that Russia did not actually fire any live missiles, and the Latvian Ministry of Defense described the event as a show of force, nothing else. The exercises took place near the Karlskrona Naval Base, the Swedish navy's largest base.

Russia's snap exercises are conducted with little or no warning and often involve thousands of troops and pieces of equipment.⁵⁷ In February 2017, for example, Russia ordered snap exercises involving 45,000 troops, 150 aircraft, and 200 anti-aircraft pieces.⁵⁸ The reintroduction of snap exercises has "significantly improved the Russian Armed Forces' warfighting and power-projection capabilities," according to one account. "These, in turn, support and enable Russia's strategic destabilisation campaign against the West, with military force always casting a shadow of intimidation over Russia's sub-kinetic aggression." ⁵⁹

Snap exercises have been used for military campaigns as well. According to General Scaparrotti, "the annexation of Crimea took place in connection with a snap exercise by Russia."

Snap exercises also provide Russian leadership with a hedge against unpreparedness or corruption. "In addition to affording combat-training benefits," the IISS reports, "snap inspections appear to be of increasing importance as a measure against corruption or deception. As a result of a snap inspection in the Baltic Fleet in June 2016, the fleet's commander, chief of staff and dozens of high-ranking officers were dismissed."

Russia conducted its VOSTOK ("East") strategic exercises, held primarily in the Eastern Military District, mainly in August and September of 2018 and purportedly with 300,000 troops, 1,000 aircraft, and 900 tanks taking part. Eastern East

[T]he breadth of the exercise was impressive. It uniquely involved several major military districts, as troops from the Central Military District and the Northern Fleet confronted the Eastern Military District and the Pacific Fleet. After establishing communication links and organizing forces, live firing between September 13–17 [sic] included air strikes, air defence operations, ground manoeuvres and raids, sea assault and landings, coastal defence, and electronic warfare.⁶⁴

Chinese and Mongolian forces also took part, with China sending 3,200 soldiers from the People's Liberation Army along with 900 tanks and 30 fixed-wing aircraft.⁶⁵ Chinese participation was a significant change from past iterations of VOSTOK. However, Chinese forces were likely restricted largely to the Tsugol training ground, and an uninvited Chinese intelligence ship shadowed the Russian Navy's sea exercises during the exercise.⁶⁶

Threats to the Homeland

Russia is the only state adversary in the region that possesses the capability to threaten the U.S. homeland with both conventional and nonconventional means. Although there is no indication that Russia plans to use its capabilities against the United States absent a broader conflict involving America's NATO allies, the plausible potential for such a scenario serves to sustain the strategic importance of those capabilities.

Russia's National Security Strategy describes NATO as a threat to the national security of the Russian Federation:

The buildup of the military potential of the North Atlantic Treaty Organization (NATO) and the endowment of it with global functions pursued in violation of the norms of international law, the galvanization of the bloc countries' military activity, the further expansion of the alliance, and the location of its military infrastructure closer to Russian borders are creating a threat to national security.⁶⁷

The same document also clearly states that Russia will use every means at its disposal to achieve its strategic goals: "Interrelated political, military, military-technical, diplomatic, economic, informational, and other measures are being developed and implemented in order to ensure strategic deterrence and the prevention of armed conflicts." A new version of Russia's military doctrine signed by Putin in December 2014 similarly emphasizes the threat allegedly posed by NATO and global strike systems. 69

Russian Strategic Nuclear Threat. Russia possesses the largest arsenal of nuclear weapons among the nuclear powers (when short-range nuclear weapons are included). It is one of the few nations with the capability to destroy many targets in the U.S. homeland and in U.S.-allied nations and to threaten and prevent free access to the commons by other nations.

Russia has both intercontinental-range and short-range ballistic missiles and a varied arsenal of nuclear weapons that can be delivered by sea, land, and air. It also is investing significant resources in modernizing its arsenal and maintaining the skills of its workforce, and modernization of the nuclear triad will remain a top priority under the new State Armaments Program. However, an aging nuclear workforce could impede this modernization: "[A]lthough Russia's strategic-defence enterprises appear to have preserved some of their expertise, problems remain, for example, in transferring the necessary skill sets and experience to the younger generation of engineers."⁷¹

Russia currently relies on its nuclear arsenal to ensure its invincibility against any enemy, intimidate European powers, and deter counters to its predatory behavior in its "near abroad," primarily in Ukraine but also concerning the Baltic States.⁷² This arsenal serves as a protective umbrella under which Russia can modernize its conventional forces at a deliberate pace. But while this nuclear deterrent protects it from a large-scale attack, Russia also needs a modern and flexible military to fight local wars such as those against

Georgia in 2008 and the ongoing war against Ukraine that began in 2014. Under Russian military doctrine, the use of nuclear weapons in conventional local and regional wars is seen as de-escalatory because it would cause an enemy to concede defeat. In May 2017, for example, a Russian parliamentarian threatened that nuclear weapons might be used if the U.S. or NATO were to move to retake Crimea or defend eastern Ukraine.⁷³

General Scaparrotti discussed the risks presented by Russia's possible use of tactical nuclear weapons in his 2019 EUCOM posture statement: "Russia's non-strategic nuclear weapons stockpile is of concern because it facilitates Moscow's mistaken belief that limited nuclear first use, potentially including low-yield weapons, can provide Russia a coercive advantage in crises and at lower levels of conflict."

Russia has two strategies for nuclear deterrence. The first is based on a threat of massive launch-on-warning and retaliatory strikes to deter a nuclear attack; the second is based on a threat of limited demonstration and "de-escalation" nuclear strikes to deter or terminate a large-scale conventional war. Russia's reliance on nuclear weapons is based partly on their small cost relative to the cost of conventional weapons, especially in terms of their effect, and on Russia's inability to attract sufficient numbers of high-quality servicemembers. In other words, Russia sees its nuclear weapons as a way to offset the lower quantity and quality of its conventional forces.

Moscow has repeatedly threatened U.S. allies in Europe with nuclear deployments and even preemptive nuclear strikes. The Russians justify their aggressive behavior by pointing to deployments of U.S. missile defense systems in Europe even though these systems are not scaled or postured to mitigate Russia's advantage in ballistic missiles and nuclear weapons to any significant degree.

Russia continues to violate the Intermediate-Range Nuclear Forces (INF) Treaty, which bans the testing, production, and possession of intermediate-range missiles.⁷⁷ Russia first

violated the treaty in 2008 and then systematically escalated its violations, moving from testing to producing to deploying the prohibited missile into the field. In early 2017, Russia fully deployed the SSC-X-8 cruise missile in violation of the INF Treaty. Russia has deployed battalions with the cruise missile at a missile test site, Kapustin Yar, in southern Russia; at Kamyshlov, near the border with Kazakhstan; in Shuya, east of Moscow; and in Mozdok, in occupied North Ossetia.78 U.S. officials consider the banned cruise missiles to be fully operational.79 In December 2018, in response to Russian violations, the U.S. declared Russia to be in material breach of the INF Treaty, a position with which NATO allies were in agreement.80 On February 2, 2019, the U.S. suspended its obligations under the INF Treaty.81

Threat of Regional War

In the view of many U.S. allies, Russia poses a genuine threat. At times, this threat is of a military nature. At other times, Russia uses less conventional tactics such as cyberattacks, utilization of energy resources, and propaganda. Today as in Imperial times, Russia's influence is exerted by both the pen and the sword. Organizations like the Collective Security Treaty Organization (CSTO) or the Eurasian Economic Union (EEU) attempt to bind regional capitals to Moscow through a series of agreements and treaties.

Espionage is another tool that Russia uses in ways that are damaging to U.S. interests. In May 2016, a Russian spy was sentenced to prison for gathering intelligence for Russia's Foreign Intelligence Service (SVR) while working as a banker in New York. The spy specifically transmitted intelligence on "potential U.S. sanctions against Russian banks and the United States' efforts to develop alternative energy resources." The European External Action Service, diplomatic service of the European Union (EU), estimates that 200 Russian spies are operating in Brussels, which also is the headquarters of NATO.

On March 4, 2018, Sergei Skripal, a former Russian GRU colonel who was convicted in 2006 of selling secrets to the United Kingdom and freed in a spy swap between the U.S. and Russia in 2010, and his daughter Yulia were poisoned with Novichok nerve agent by Russian security services in Salisbury, U.K. Hundreds of residents could have been contaminated, including a police officer who was exposed to the nerve agent after responding.84 It took a year and the work of 190 U.K. Army and Air Force personnel plus contractors to complete the physical cleanup of Salisbury.85 On March 15, France, Germany, the U.K., and the U.S. issued a joint statement condemning Russia's use of the nerve agent: "This use of a military-grade nerve agent, of a type developed by Russia, constitutes the first offensive use of a nerve agent in Europe since the Second World War."86 U.S. intelligence officials have reportedly linked Russia to the deaths of 14 people in the U.K. alone, many of them Russians who ran afoul of the Kremlin.87

Russian intelligence operatives are reportedly mapping U.S. telecommunications infrastructure around the United States, focusing especially on fiber optic cables. 88 In March 2017, the U.S. charged four people, including two Russian intelligence officials, with directing hacks of user data involving Yahoo and Google accounts. 89 In December 2016, the U.S. expelled 35 Russian intelligence operatives, closed two compounds in Maryland and New York that were used for espionage, and levied additional economic sanctions against individuals who took part in interfering in the 2016 U.S. election. 90

Russia has also used its relations with friendly nations—especially Nicaragua—for espionage purposes. In April 2017, Nicaragua began using a Russian-provided satellite station at Managua that, even though the Nicaraguan government denies it is intended for spying, is of concern to the U.S.⁹¹ The Russian-built "counter-drug" center at Las Colinas that opened in November 2017 will likely be "supporting Russian security engagement with the entire region." Russia also has an agreement with Nicaragua, signed in 2015, that allows access to Nicaraguan ports for its naval vessels. ⁹³

Russian Pressure on Central and Eastern Europe. Moscow poses a security challenge to members of NATO that border Russia. Although a conventional Russian attack against a NATO member is unlikely, primarily because it would trigger a NATO response, it cannot be entirely discounted. Russia continues to use cyberattacks, espionage, its significant share of the European energy market, and propaganda to sow discord among NATO member states and undermine the alliance. The Estonian Foreign Intelligence Service's International Security and Estonia 2019 report states clearly that "The only serious threat to regional security, including the existence and sovereignty of Estonia and other Baltic Sea states, emanates from Russia. It involves not only asymmetrical, covert or political subversion, but also a potential military threat."94

After decades of Russian domination, the countries in Central and Eastern Europe factor Russia into their military planning and foreign policy formulation in a way that is simply unimaginable in many Western European countries and North America. Estonia and Latvia have sizable ethnic Russian populations, and there is concern that Russia might exploit this as a pretext for aggression—a view that is not without merit in view of Moscow's irredentist rhetoric and Russia's use of this technique to annex Crimea.

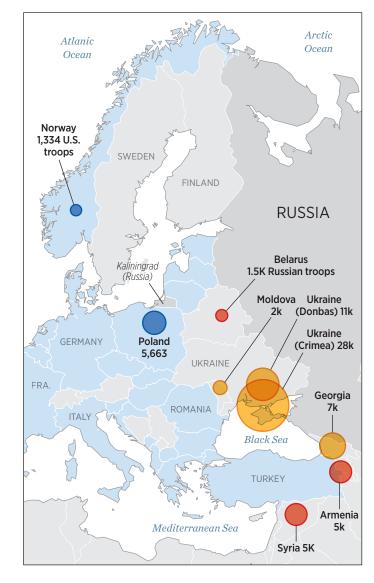
Lithuania's National Threat Assessment 2019 states that "Russia exploits democratic freedoms and rights for its subversive activity. Under the veil of care for its diaspora, Russia tries to fragment Lithuanian society. Furthermore, while pretending to develop cultural relations, Russia actually promotes its aggressive foreign policy."95 Latvian authorities similarly describe the means used by Russia to claim that it is defending the rights of citizens or Russian compatriots: TV propaganda to push discrediting messages about Latvia and stories in which the rights of Russian citizens are allegedly violated; "spreading interpretations of history favourable to Russia within Russia and abroad, as well as actively engaging in military-memorial work";

U.S. Troops Greatly Outnumbered Near Russian Border

There are only two NATO nations that directly border Russia and also have U.S. troops stationed inside its borders: Norway and Poland. Even when including rotational troops, U.S. troops there number about 7,000—far less than the 59,500 Russian troops that are, for all intents and purposes, permanently stationed outside its borders on NATO's perimeter.

- NATO nations
- U.S. troops in NATO nations adjacent to Russia
- Russian troops
- Russian troops in occupied territories

SOURCE: U.S. Department of Defense, Defense Manpower Data Center, March 2019, and Heritage Foundation research.



and the use of "compatriot support funds and other compatriot policy bodies" targeted at Latvian youth. 96

Russia has also sought to undermine the statehood and legitimacy of the Baltic States. In January 2018, for example, Putin signed a decree renaming an air force regiment the "Tallinn Regiment" to "preserve holy historical military traditions" and "raise [the] spirit of military obligation." General Scaparrotti testified in March 2017 that Russian propaganda and disinformation should be viewed as an extension of Russia's military capabilities:

"The Russians see this as part of that spectrum of warfare, it's their asymmetric approach." 98

Russia has sought to use misinformation to undermine NATO's Enhanced Forward Presence in the Baltics. In April 2017, Russian hackers planted a false story about U.S. troops being poisoned by mustard gas in Latvia on the Baltic News Service website. 99 Lithuanian parliamentarians and media outlets began to receive e-mails in February 2017 containing a false story that German soldiers had sexually assaulted an underage Lithuanian girl. 100 U.K. forces in Estonia have also been targeted with a

fake news story about British troops harassing an elderly Estonian at a hospital.¹⁰¹

U.S. troops stationed in Poland for NATO's EFP have been the target of similar Russian misinformation campaigns. ¹⁰² A fake story that a U.S. Army vehicle had hit and killed a Lithuanian boy during Saber Strike 2018 in June was meant to undermine public support for NATO exercises. ¹⁰³ One report summarized that "Russia's state propaganda channels RT and Sputnik remain very keen to exploit to the maximum any incidents involving eFP personnel, and to repeat the Kremlin's anti-NATO and anti eFP narrative. ²¹⁰⁴ In particular, recent Russian propaganda focuses on portraying EFP as an "occupying force." ²¹⁰⁵

Russia has also demonstrated a willingness to use military force to change the borders of modern Europe. When Kremlin-backed Ukrainian President Viktor Yanukovych failed to sign an Association Agreement with the EU in 2013, months of street demonstrations led to his ouster early in 2014. Russia responded by sending troops, aided by pro-Russian local militia, to occupy the Crimean Peninsula under the pretext of "protecting Russian people." This led to Russia's eventual annexation of Crimea, the first such forcible annexation of territory in Europe since the Second World War.¹⁰⁶

Russia's annexation of Crimea has effectively cut Ukraine's coastline in half, and Russia has claimed rights to underwater resources off the Crimean Peninsula. ¹⁰⁷ In May 2018, Russia inaugurated the first portion of a \$7.5 billion, 11.8-mile bridge connecting Russia with Kerch in occupied Crimea. The project will be completed in 2023. ¹⁰⁸ The effect on Ukraine's regional economic interests can be seen in the fact that 30 percent of the cargo ships that served Mariupol could not clear the span. ¹⁰⁹

Russia has deployed 28,000 troops to Crimea and has embarked on a major program to build housing, restore airfields, and install new radars there. ¹¹⁰ Deployment of the Monolit-B radar system, for instance, which has a passive range of 450 km, "provides the Russian military with an excellent real-time picture of

the positions of foreign surface vessels operating in the Black Sea."¹¹¹ In addition, "Russian equipment there includes 40 main battle tanks, 680 armored personnel carriers and 174 artillery systems of various kinds" along with 113 combat aircraft. ¹¹² In March 2019, Russia announced the deployment of nuclear-capable Tupolev Tu-22M3 strategic bombers to Gvardeyskoye air base in occupied Crimea. ¹¹³

Control of Crimea has allowed Russia to use the Black Sea as a platform to launch and support naval operations in the Eastern Mediterranean. The Black Sea fleet has received six *Kilo* diesel submarines and three *Admiral Grigorovich*—class frigates equipped with Kalibr-NK long-range cruise missiles. Salibr cruise missiles have a range of at least 2,500 km, which places cities from Rome to Vilnius within range of Black Sea–based cruise missiles.

Russia has deployed five S-400 air defense systems with a potential range of around 250 miles to Crimea. In addition, local capabilities have been strengthened by the Pantsir-S1 (SA-22 Greyhound) short-to-medium-range surface-to-air missile (SAM) and anti-aircraft artillery weapons system, which particularly complements the S-400. Is Russia also deploys the Bastion P coastal defenses armed with the P-800 Oniks anti-ship cruise missile, which arange of up to 300 kilometers and travels at nearly mach 2.5, making it extraordinarily difficult to defeat with kinetic means.

In eastern Ukraine, Russia has helped to foment and sustain a separatist movement. Backed, armed, and trained by Russia, separatist leaders in eastern Ukraine have declared the so-called Lugansk People's Republic and Donetsk People's Republic. Russia has backed separatist factions in the Donbas region of eastern Ukraine with advanced weapons, technical and financial assistance, and Russian conventional and special operations forces. Around 3,000 Russian soldiers are operating in Ukraine. Russian-backed separatists daily violate the September 2014 and February 2015 cease-fire agreements, known respectively as Minsk I and Minsk II. 121 The Minsk cease-fire

agreements have led to the de facto partition of Ukraine and have created a frozen conflict that remains both deadly and advantageous for Russia. The war in Ukraine has cost 13,000 lives and left 30,000 people wounded.¹²²

On November 25, 2018, Russian forces blocked the passage of three Ukrainian naval vessels through the Kerch strait and opened fire on the ships before boarding and seizing them along with 24 Ukrainian sailors. ¹²³ Russian harassment of ships sailing through the Kerch strait and impeding of free movement had taken place consistently before the November 25 aggression and continued afterwards. ¹²⁴ Russian inspections of ships, blockages of the strait, and delays have coalesced to constrict the port of Mariupol, where shipping volumes in 2018 were 10 percent less than in 2017. ¹²⁵

In Moldova, Russia supports the breakaway enclave of Transnistria, where yet another frozen conflict festers to Moscow's liking. According to EUCOM's 2017 posture statement:

In addition to recent conventional and nuclear developments, Russia has employed a decades-long strategy of indirect action to coerce, destabilize, and otherwise exercise a malign influence over other nations. In neighboring states, Russia continues to fuel "protracted conflicts." In Moldova, for example, Russia has yet to follow through on its 1999 Istanbul summit commitments to withdraw an estimated 1,500 troops whose presence has no mandate—from the Moldovan breakaway region of Transnistria. Russia asserts that it will remove its force once a comprehensive settlement to the Transnistrian conflict has been reached. However, Russia continued to undermine the discussion of a comprehensive settlement to the Transnistrian conflict at the 5+2 negotiations. 126

Russia continues to occupy 12 percent of Moldova's territory. In August 2018, Russian and separatist forces equipped with APCs and armored reconnaissance vehicles exercised crossing the Dniester River in the demilitarized security zone. Moldovan authorities called the exercises "provocative," and the Organization for Security and Co-operation in Europe (OSCE) "expressed its concern." On January 22, 2019, in an effort to enhance its control of the breakaway region, Russia opened an office in Moscow for the Official Representation of the Pridnestrovian Moldavian Republic in the Russian Federation. 128

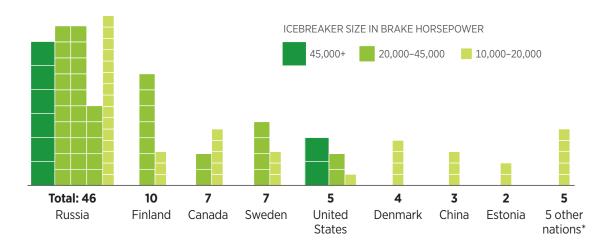
Russia's permanent stationing of Iskander missiles in Kaliningrad in 2018 occurred a year to the day after NATO's EFP deployed to Lithuania. Paussia reportedly has deployed tactical nuclear weapons, the S-400 air defense system, and P-800 anti-ship cruise missiles to Kaliningrad. Additionally, it plans to reestablish a tank brigade and a "fighter aviation regiment and naval assault aviation (bomber) regiment" in Kaliningrad and to reequip the artillery brigade with new systems. ¹³¹

Russia also has outfitted a missile brigade in Luga, Russia, a mere 74 miles from the Estonian city of Narva, with Iskander missiles. ¹³² Iskanders have been deployed to the Southern Military District at Mozdok near Georgia and Krasnodar near Ukraine as well, and Russian military officials have reportedly asked manufacturers to increase the Iskander missiles' range and improve their accuracy. ¹³³

Nor is Russia deploying missiles only in Europe. In November 2016, Russia announced that it had stationed Bal and Bastion missile systems on the Kurile Islands of Iturup and Kunashir, which are also claimed by Japan. ¹³⁴ In February 2018, Russia approved the deployment of warplanes to an airport on Iturup, one of the largest islands. ¹³⁵ Russia has stationed 3,500 troops on the Kurile Islands. In December 2018, Japan lodged a formal complaint over the building of four new barracks. ¹³⁶

Russia has deployed additional troops and capabilities near its western borders. Bruno Kahl, head of the German Federal Intelligence Service, stated in March 2017 that "Russia has doubled its fighting power on its Western border, which cannot be considered as defensive against the West." In January 2017, Russia's

Russia's Icebreaker Fleet Dominates the Arctic



^{*} Norway, Germany, Latvia, Japan, and South Korea.

NOTE: List includes both government-owned and privately owned icebreakers. List excludes icebreakers for southern hemisphere countries Chile, Australia, South Africa, and Argentina.

SOURCE: Ronald O'Rourke, "Coast Guard Polar Icebreaker Program: Background and Issues for Congress," Congressional Research Service *Report* RL34391, July 9, 2018, p. 10, https://fas.org/sgp/crs/weapons/RL34391.pdf (accessed August 1, 2018).

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Ministry of Defence announced that four S-400 air defense systems would be deployed to the Western Military District.138 In January 2016, Commander in Chief of Russian Ground Forces General Oleg Salyukov announced the formation of four new ground divisions, three of them based in the Western Military District, allegedly in response to "intensified exercises of NATO countries."139 According to an assessment published by the Carnegie Endowment for International Peace, "[t]he overall effect is to produce a line of substantial Russian combat forces along the western border, including opposite Belarus. By contrast with the ad hoc arrangements of the early stages of the conflict with Ukraine, these new forces are permanently established."140

Militarization of the High North. Russia has taken steps to militarize its presence in the Arctic region. In March 2017, a decree signed by Putin gave the Federal Security Service

(FSB), which controls law enforcement along the Northern Sea Route (NSR), an Arctic shipping route linking Asia and Europe, additional powers to confiscate land "in areas with special objects for land use, and in the border areas." Russia's Arctic territory is included within this FSB-controlled border zone. The FSB and its subordinate coast guard have added patrol vessels and built up Arctic bases, including a new coast guard base in Murmansk opened in December 2018. 142

The Russian National Guard, which reports to President Putin, ¹⁴³ is also taking on an increased role in the Arctic and is now charged with protecting infrastructure sites that are deemed to be of strategic importance, including a new liquefied natural gas (LNG) export terminal at Sabetta that opened in December 2017. ¹⁴⁴ The first shipment of LNG from the Sabetta terminal to China via the NSR took place in July 2018. ¹⁴⁵ The National Guard is also

reportedly tasked with security at a planned floating nuclear power plant, currently in Murmansk, that is slated to be towed to the town of Pevek this summer.¹⁴⁶

In May 2018, a presidential degree from Putin set a target of 80 million tons shipped across the NSR by 2024. 147 In 2018, only 18 million tons were shipped across the route.¹⁴⁸ To facilitate attainment of this goal, Russia's state-run Rosatom energy corporation was given nearly sole control of shipping across the NSR in 2018, with the Ministry of Transport retaining only some administrative responsibilities. 149 In March 2019, Russian media reported that the government was drafting stringent navigation rules for the entire length of the NSR outside Russian territorial waters. Under these rules, for example, foreign navies would be required to "post a request with Russian authorities to pass through the Sevmorput [NSR] 45 days in advance, providing detailed technical information about the ship, its crew and destination."150

The Arctic factors into Russia's basing, procurement, and military structuring. The Arctic-based Northern Fleet accounts for two-thirds of the Russian Navy. A new Arctic command was established in 2015 to coordinate all Russian military activities in the Arctic region. Two Arctic brigades have been formed, and Arctic Coastal Defense divisions, which will be under the command of the Northern Fleet and stationed in the Kola Peninsula and in Russia's eastern Arctic, are planned. A naval deep-water division, based in Gadzhiyevo in the Murmansk region and directly subordinate to the Minister of Defense, was established in January 2018.

Russia is also investing in military bases in the Arctic. Its base on Alexandra Land, commissioned in 2017, can house 150 soldiers autonomously for up to 18 months. ¹⁵⁴ In addition, old Soviet-era facilities have been reopened. The airfield on Kotelny Island, for example, was reactivated in 2013 for the first time in 20 years and "will be manned by 250 personnel and equipped with air defense missiles." ¹⁵⁵

In September 2018, the northern fleet announced construction plans for a new military complex to house a 100-soldier garrison and anti-aircraft units at Tiksi; in January 2019, Russian authorities claimed that the base was 95 percent completed. ¹⁵⁶ Also in 2018, Russia opened an Arctic airfield at Nagurskoye that is equipped with a 2,500-meter landing strip and a fleet of MiG-31 or Su-34 Russian fighters. ¹⁵⁷

In fact, air power in the Arctic is increasingly important to Russia, which has 14 operational airfields in the region along with 16 deep-water ports. In March 2019, Mayor General Igor Kozhin, head of the Russian Naval Air Force, claimed that Russia had successfully tested a new airstrip cover that is effective in "temperatures down to minus 30 centigrades." In 2018, according to the Russian Ministry of Defense, "Russian Tu-142 Bear and Il-38 May maritime patrol and anti-submarine warfare aircraft, as well as Su-24MR Fencer tactical reconnaissance jets, flew more than 100 sorties in total above the Arctic circle."

Russia also intends to undertake regular fighter jet combat patrols in the Arctic in 2019. 161 As an example, the Russian Ministry of Defense announced that in January 2019, two Tu-160 bombers flew for 15 hours in international airspace over the Arctic. 162 Over the course of one week in April 2019, Russian fighter and bomber jets flew near the coast of Norway twice. In one instance, two TU-60 bombers and a MiG-31 flew 13 hours over the Barents, Norwegian, and North Seas. British and Danish jets scrambled to meet the Russian aircraft. 163

Russian Arctic flights are often aggressive. In March 2017, nine Russian bombers simulated an attack on the U.S.-funded, Norwegian-run radar installation at Vardø, Norway, above the Arctic Circle. In May 2017, 12 Russian aircraft simulated an attack against NATO naval forces taking part in the EASTLANT17 exercise near Tromsø, Norway, and later that month, Russian aircraft targeted aircraft from 12 nations, including the U.S., that took part in the Arctic Challenge 2017 exercise near Bodø. In April 2018, Maritime Patrol Aircraft from Russia's Pacific Fleet for the first time exercised locating and bombing enemy submarines

in the Arctic, while fighter jets exercised repelling an air invasion in the Arctic region. 166

The 45th Air Force and Air Defense Army of the Northern Fleet was formed in December 2015, and Russia reportedly has placed radar and S-300 missiles on the Arctic bases at Franz Joseph Land, New Siberian Islands, Novaya Zemlya, and Severnaya Zemlya. 167 In 2017, Russia activated a new radar complex on Wrangel Island. 168 This year, Russia plans to lay a nearly 8,000-mile fiber optic cable across its Arctic coast, linking military installations along the way from the Kola Peninsula through Vladivostok.¹⁶⁹ In November 2019, Russia announced rocket firings in the Norwegian Sea 20 to 40 nautical miles from the Norwegian coast. The test firings, with little advance notice, were designed to send a message as they took place in an area through which NATO ships were sailing during the Trident Juncture exercise. 170

Russia's ultimate goal is to have a combined Russian armed force deployed in the Arctic by 2020,¹⁷¹ and it appears that Moscow is on track to accomplish this. Russia is developing equipment optimized for Arctic conditions like the Mi-38 helicopter and three new nuclear icebreakers to add to the 40 icebreakers already in service, six of which are nuclear.¹⁷² Former U.S. Coast Guard Commandant Admiral Paul F. Zukunft has expressed concern that "Russia is probably going to launch two icebreaking corvettes with cruise missiles on them over the course of the next several years."¹⁷³

In July 2017, Russia released a new naval doctrine citing the alleged "ambition of a range of states, and foremost the United States of America and its allies, to dominate the high seas, including in the Arctic, and to press for overwhelming superiority of their naval forces." In May 2017, Russia announced that its buildup of the Northern Fleet's nuclear capacity is intended "to phase 'NATO out of [the] Arctic." 175

Russia's Northern Fleet is also building newly refitted submarines, including a newly converted *Belgorod* nuclear-powered submarine that is expected to be launched in the summer of 2019 and to enter active duty in 2020.¹⁷⁶

The *Belgorod* is expected to carry six Poseidon drones, also known as nuclear torpedoes, and will carry out "covert missions." The submarine will have a smaller mini-sub potentially capable of tampering with or destroying undersea telecommunications cables. According to Russian media reports, the *Belgorod* "will be engaged in studying the bottom of the Russian Arctic shelf, searching for minerals at great depths, and also laying underwater communications." A similar submarine, the *Khabarovsk*, is under construction and could enter active duty as early as 2022. 180

Russian Destabilization in the South Caucasus. The South Caucasus sits at a crucial geographical and cultural crossroads and has proven to be strategically important, both militarily and economically, for centuries. Although the countries in the region (Armenia, Georgia, and Azerbaijan) are not part of NATO and therefore do not receive a security guarantee from the United States, they have participated to varying degrees in NATO and U.S.-led operations. This is especially true of Georgia, which aspires to join NATO.

Russia views the South Caucasus as part of its natural sphere of influence and stands ready to exert its influence in the region by force if necessary. In August 2008, Russia invaded Georgia, coming as close as 15 miles to the capital city of Tbilisi. A decade later, several thousand Russian troops occupied the two Georgian regions of South Ossetia and Abkhazia.

Russia has sought to deepen its relationship with the two occupied regions. In 2015, it signed so-called integration treaties with South Ossetia and Abkhazia that, among other things, call for a coordinated foreign policy, creation of a common security and defense space, and implementation of a streamlined process for Abkhazians and South Ossetians to receive Russian citizenship. The Georgian Foreign Ministry criticized the treaties as a step toward "annexation of Georgia's occupied territories," both of which are still internationally recognized as part of Georgia. In January 2018, Russia ratified an agreement with the de facto leaders of South Ossetia to create

a joint military force—an agreement that the U.S. condemned. Is In November 2017, the U.S. State Department approved an estimated \$75 million sale of Javelin missiles to Georgia. 184

Russia's "creeping annexation" of Georgia has left towns split in two and families separated by military occupation and the imposition of an internal border (known as "borderization"). As summarized in a previous Heritage Foundation study:

The most egregious example of "borderization" since the 2008 war took place in July and August 2015, when Russia annexed an additional 300 acres of Georgian territory. During this time Russia built a fence within 550 yards of Georgia's E60 highway, which is the main road in the South Caucasus linking the Black Sea to Azerbaijan. A "State Border" sign installed by Russian authorities is also visible from the highway. This annexation placed a one-mile segment of the BP-operated Baku-Supsa pipeline inside Russian-occupied territory. 186

Today, Moscow continues to exploit ethnic divisions and tensions in the South Caucasus to advance pro-Russian policies that are often at odds with America's or NATO's goals in the region, but Russia's influence is not restricted to soft power. In the South Caucasus, the coin of the realm is military might. It is a rough neighborhood surrounded by instability and insecurity reflected in terrorism, religious fanaticism, centuries-old sectarian divides, and competition for natural resources.

Russia maintains a sizable military presence in Armenia based on an agreement that gives Moscow access to bases in that country until at least 2044. The bulk of Russia's forces, consisting of 3,300 soldiers, dozens of fighter planes and attack helicopters, 74 T-72 tanks, almost 200 armored personnel carriers, and an S-300 air defense system, are based around the 102nd Military Base. Russia and Armenia have also signed a Combined Regional Air Defense System agreement. Even after

the election of Prime Minister Nikol Pashinyan following the so-called Velvet Revolution, Armenia's cozy relationship with Moscow remains unchanged.¹⁸⁹ Armenian troops have even deployed alongside Russian troops in Syria to the dismay of U.S. policymakers.¹⁹⁰

Another source of regional instability is the Nagorno-Karabakh conflict, which began in 1988 when Armenia made territorial claims to Azerbaijan's Nagorno-Karabakh Autonomous Oblast.191 By 1992, Armenian forces and Armenian-backed militias had occupied 20 percent of Azerbaijan, including the Nagorno-Karabakh region and seven surrounding districts. A cease-fire agreement was signed in 1994, and the conflict has been described as frozen since then. Since August 2014, violence has increased noticeably along the Line of Contact between Armenian and Azerbaijani forces. Intense fighting in April 2016 left 200 dead.192 In early summer 2018, Azerbaijani forces successfully launched an operation to retake territory around Günnüt, a small village strategically located in the mountainous region of Azerbaijan's Nakhchivan Autonomous Republic.193 The 2016 and 2018 incidents marked the only changes in territory since 1994.194

This conflict offers another opportunity for Russia to exert malign influence and consolidate power in the region. While its sympathies lie with Armenia, Russia is the largest supplier of weapons to both Armenia and Azerbaijan. ¹⁹⁵ As noted by the late Dr. Alexandros Petersen, a highly respected expert on Eurasian security, it is no secret "that the Nagorno–Karabakh dispute is a Russian proxy conflict, maintained in simmering stasis by Russian arms sales to both sides so that Moscow can sustain leverage over Armenia, Azerbaijan and by its geographic proximity Georgia." ¹⁹⁶

The South Caucasus might seem distant to many American policymakers, but the spill-over effect of ongoing conflict in the region can have a direct impact both on U.S. interests and on the security of America's partners, as well as on Turkey and other countries that depend on oil and gas transiting the region.

Increased Russian Activity in the Mediterranean. Although Russia has had a military presence in Syria for decades, in September 2015, it became the decisive actor in Syria's ongoing civil war, having saved Bashar al-Assad from being overthrown and strengthened his hand militarily, thus enabling government forces to retake territory lost during the war. Russia's activities in Syria, by allowing Assad to stay in power, have made achievement of a peaceful political settlement with rebel groups nearly impossible as a practical matter.

In January 2017, Russia signed an agreement with the Assad regime to expand the naval facility at Tartus (Russia's only naval base on the Mediterranean) "under a 49-year lease that could automatically renew for a further 25 years." The planned expansion reportedly would "provide simultaneous berthing for up to 11 warships, including nuclear-powered vessels, more than doubling [the facility's] present known capacity." It was subsequently reported that Russia was expanding the Tartus base to include a submarine maintenance facility. 198

The agreement with Syria also includes upgrades to the Hmeymim air base at Latakia, including repairs to a second runway.¹⁹⁹ Russia deployed the S-400 anti-aircraft missile system to Hmeymim in late 2015.200 It also has deployed the Pantsir S1 system. "The two systems working in tandem provide a 'layered defense,'" according to one account, "with the S-400 providing long-ranged protection against bombers, fighter jets, and ballistic missiles, and the Pantsir providing medium-ranged protection against cruise missiles, low-flying strike aircraft, and drones."201 Russia currently operates out of Hmeymim air base on a 40-year agreement and continues to entrench its position there, as demonstrated by its recent building of reinforced concrete aircraft shelters.²⁰²

Russia is using Syria as a testing ground for new weapons systems while obtaining valuable combat experience for its troops. According to Lieutenant General Ben Hodges, former Commander, U.S. Army Europe, Russia has used its intervention in Syria as a "live-fire training opportunity."²⁰³ According to the IISS, Russia has used Syria as "a test bed for the development of joint operations and new weapons and tactics."²⁰⁴ Russia has tested hundreds of pieces of new equipment in Syria. In December 2018:

Russian Deputy Prime Minister Yury Borisov detailed to local media...the various new weapons systems [that] have been introduced to the conflict. These included the Pantsir S1 anti-aircraft and Iskander-M ballistic missile systems on the ground, Tupolev Tu-160 supersonic strategic bombers, Tu-22M3 supersonic bombers and Tu-95 propeller-driven bombers, as well as Mikoyan MiG-29K fighters and Ka-52K Katran helicopters in the air.²⁰⁵

Despite this display of Russian arms in Syria, however, Russian weapons exports have declined, in part because India and China are developing more weapons systems domestically, thereby reducing their desire to purchase items from Russia. ²⁰⁶ According to the Stockholm International Peace Research Institute, "[a]rms exports by Russia decreased by 17 percent between 2009–13 and 2014–18."

Russian pilots have occasionally acted dangerously in the skies over Syria. In May 2017, for example, a Russian fighter jet intercepted a U.S. KC-10 tanker, performing a barrel roll over the top of the KC-10.208 That same month, Russia stated that U.S. and allied aircraft would be banned from flying over large areas of Syria because of a deal agreed to by Russia, Iran, and Turkey. The U.S. responded that the deal does not "preclude anyone from going after terrorists wherever they may be in Syria."209 The U.S. and Russia have a deconfliction hotline to avoid midair collisions and incidents, but incidents have occurred on the ground as well as in the air. In November 2018, Ambassador James Jeffrey, U.S. Special Representative for Syria Engagement, told news media that "American and Russian forces have clashed a dozen times in Syria—sometimes with exchanges of fire."210

In October 2018, Egyptian President Abdel Fattah al-Sisi signed a strategic cooperation treaty with Russia.²¹¹ In November 2018,

Russia sought to solidify its relations with Egypt, approving a five-year agreement for the two countries to use each other's air bases. ²¹² Russia is a major exporter of arms to Egypt, which agreed to purchase 20 Su-35 fighter jets in 2018 for \$2 billion. ²¹³ In Libya, Russia continues to support Field Marshal Khalifa Haftar with weapons and military advisers. Russian Special Forces reportedly have been deployed to assist Haftar, and 300 mercenaries from Russia's Wagner Group are believed to be in Libya. ²¹⁴ Despite its ties to Haftar, Russia has also focused on growing business ties with the Libyan government in Tripoli. ²¹⁵

Russia has stepped up its military operations in the Mediterranean significantly, often harassing U.S. and allied vessels taking part in counter-IS operations. In April 2018, for example, a fully armed Russian Su-24M Fencer and Su-30SM Flanker fighter aircraft flew aggressively low over the *Aquitaine*, a French frigate operating in the eastern Mediterranean. ²¹⁶ That same month, one or two improved *Kilo*-class submarines, two Russian frigates, and Russian anti-submarine aircraft pursued a British *Astute*-class attack submarine operating in the Mediterranean near Syria. The British sub received assistance from U.S. P-8As operating in the region. ²¹⁷

In addition, the U.S., along with British, Dutch, and Spanish allies, tracked the *Krasnodar*, a *Kilo*-class submarine, as it sailed from the Baltic Sea to a Russian base in occupied Crimea from April–August 2017. The submarine stopped twice in the eastern Mediterranean to launch cruise missiles into Syria and conducted drills in the Baltic Sea and off the coast of Libya. This was one of the first times since the Cold War that the U.S. and NATO allies had tracked a Russian submarine during combat operations. ²¹⁸ In March 2019, General Scaparrotti testified that:

The Kremlin has also demonstrated the ability and political will to deploy its modernized military and expand its operational footprint. Last year we observed a historically high combat maritime

presence in the East Mediterranean along with military deployments and demonstrations in Syria. Their most advanced and quietest guided missile submarine, the Severodvinsk, conducted extended deployments in the northern Atlantic.²¹⁹

The Balkans. Security has improved dramatically in the Balkans since the 1990s, but violence based on religious and ethnic differences remains an ongoing possibility. These tensions are exacerbated by sluggish economies, high unemployment, and political corruption.

Russia's interests in the Western Balkans are at odds with the ongoing desire of the U.S. and its European allies to encourage closer ties between the region and the transatlantic community:

Russia seeks to sever the transatlantic bond forged with the Western Balkans... by sowing instability. Chiefly Russia has sought to inflame preexisting ethnic, historic, and religious tensions. Russian propaganda magnifies this toxic ethnic and religious messaging, fans public disillusionment with the West, as well as institutions inside the Balkan nations, and misinforms the public about Russia's intentions and interests in the region.²²⁰

Senior members of the Russian government have alleged that NATO enlargement in the Balkans is one of the biggest threats to Russia.²²¹ In June 2017, Montenegro became NATO's 29th member state, joining Albania and Croatia (and soon probably North Macedonia) as NATO members in the Balkans. Russia stands accused of being behind a failed plot to break into Montenegro's parliament on election day in 2016, assassinate its former prime minister, and install a pro-Russian government. Two Russian nationals believed to be the masterminds behind the plot were convicted in absentia in May 2019 along with 12 other individuals for organizing and carrying out the failed coup. The trial judge stated that

the convicted Russians who organized the plot "knowingly tried to terrorize Montenegrins, attack others, threaten and hurt basic constitutional and social structures."

After Russia annexed Crimea, the Montenegrin government backed European sanctions against Moscow and even implemented its own sanctions. Nevertheless, Russia has significant economic influence in Montenegro and in 2015 sought unsuccessfully to gain access to Montenegrin ports for the Russian navy to refuel and perform maintenance. In 2018, "Russia account[ed] for one-third of [foreign direct investment] to Montenegro, and Russian nationals or companies own 40 percent of real estate in the nation—as well as almost one-third of all Montenegrin companies."223

Similarly, North Macedonia's accession to NATO has been heavily targeted by Russia, which had warned the nation against joining the alliance²²⁴ and sought to derail the Prespa agreement that paved the way for membership by settling long-standing Greek objections to Macedonia's name. In 2018, after North Macedonia was invited to join NATO, Russia's ambassador to the EU stated that "there are errors that have consequences."225 In July 2018, Greece expelled two Russian diplomats and banned entry by two Russian nationals because of their efforts to undermine the name agreement; Russian actions in Macedonia included disinformation surrounding the vote, websites and social media posts opposing the Prespa agreement, and payments to protesters as well as politicians and organizations opposing the agreement.²²⁶

Serbia in particular has long served as Russia's foothold in the Balkans:

Russia's influence in the Balkans centers on Serbia, a fellow religiously orthodox nation with whom it enjoys a close economic, political, and military relationship. Serbia and Russia have an agreement in place allowing Russian soldiers to be based at Niš airport in Serbia. The two countries signed a 15-year military cooperation agreement in 2013 that includes sharing of intelligence, officer exchanges,

and joint military exercises. In October, Russia gave Serbia six MiG-29 fighters (which while free, will require Serbia to spend \$235 million to have them overhauled). Additionally, Russia plans to supply Serbia with helicopters, T-72 tanks, armored vehicles, and potentially even surface-to-air missile systems.²²⁷

The so-called Russian–Serbian Humanitarian Center at Niš is "widely believed to be a Russian spy base" and is located "only 58 miles from NATO's Kosovo Force mission based in Pristina." Russia has used its cultural ties to Serbia to increase its role in the nation, positioning itself as the defender of orthodoxy and investing funds in the refurbishing of orthodox churches. Additionally, Russia has helped to establish more than 100 pro-Russian NGOs and media outlets in Macedonia. 229

Serbia and Russia have signed a strategic partnership agreement focused on economic issues. Russia's inward investment is focused on the transport and energy sectors. Except for those in the Commonwealth of Independent States, Serbia is the only country in Europe that has a free trade deal with Russia. In January 2019, Serbia and Russia signed 26 agreements relating to energy, railway construction, and strategic education cooperation.²³⁰

In a January 2019 state visit to Serbia, Vladimir Putin stated a desire for a free trade agreement between Serbia and the Russian-led Eurasian Economic Union, to be signed by the end of the year. Additionally, Russia has held out the possibility of \$1.4 billion in infrastructure aid to Serbia aimed at building the Turk Stream pipeline and increasing Russia's energy leverage in the region. Russia also has continued to oppose Kosovo's recognition as an independent sovereign country and has condemned Kosovo's creation of its own army. ²³¹

However, Serbia still participates in military exercises far more without Russia than with Russia. "In 2017," for example, "Serbian forces participated in 2 joint exercises with Russia and Belarus but held 13 exercises with NATO members and 7 with U.S. units."²³² Like

Russia, Serbia is a member of NATO's Partnership for Peace program. Additionally, Serbia has been part of the U.S. National Guard's State Partnership Program, partnering with the State of Ohio since 2006.

Russia is also active in Bosnia and Herzegovina—specifically, the ethnically Serb Republika Srpska, one of two substate entities inside Bosnia and Herzegovina that emerged from that country's civil war in the 1990s. Moscow knows that exploiting internal ethnic and religious divisions among the country's Bosniak, Croat, and Serb populations is the easiest way to prevent Bosnia and Herzegovina from entering the transatlantic community.

Republika Srpska's leader, Milorad Dodik, has long advocated independence for the region and has enjoyed a very close relationship with the Kremlin. Recent events in Ukraine, especially the annexation of Crimea, have inspired more separatist rhetoric in Republika Srpska. In September 2018, two weeks before elections in Bosnia-Herzegovina, Russian Foreign Minister Lavrov visited Sarajevo, but he also visited Banja Luka in Republika Srpska, where he visited the site of "a future Serbian-Russian Orthodox cultural center." ²³³

In many ways, Russia's relationship with Republika Srpska is akin to its relationship with Georgia's South Ossetia and Abkhazia autonomous regions: more like a relationship with another sovereign state than a relationship with a semiautonomous region inside Bosnia and Herzegovina. When Putin visited Serbia in October 2014, Dodik was treated like a head of state and invited to Belgrade to meet with him. More recently, in September 2016, Dodik was treated like a head of state on a visit to Moscow just days before a referendum that chose January 9 as Republika Srpska's "statehood day," a date filled with religious and ethnic symbolism for the Serbs.²³⁴ In October 2018, just days before elections, Dodik again visited Russia where he watched the Russian Grand Prix in a VIP box with Putin. 235 Republika Srpska continues to host its "statehood day" in defiance of a ruling by Bosnia's federal constitutional court that both the celebration

and the referendum establishing it were illegal.²³⁶ The U.S. sanctioned Dodik in January 2017, saying that "by obstructing the Dayton accords, Milorad Dodik poses a significant threat to the sovereignty and territorial integrity of Bosnia–Herzegovina."²³⁷

On January 9, 2019, Bosnian Serbs again held "statehood day." 238 At the 2018 "statehood day," Dodik and the self-proclaimed leaders of South Ossetia "signed a memorandum on cooperation between the 'states." Russia has reportedly trained a Republika Srpska paramilitary force in Russia at the nearby Niš airbase to defend the Serbian entity. It has been reported that "[s] ome of its members fought as mercenaries alongside the Kremlin's proxy separatists in Ukraine." Veterans organizations in Russia and Republika Srpska have developed close ties. 241

Russia has cultivated strong ties with the security forces of Republika Srpska. Russian police take part in exchanges with the security forces, and Russian intelligence officers reportedly teach at the police academy and local university. In addition:

The Republika Srpska authorities are also opening a new \$4 million dollar training center at the site of a former army barracks in Zaluzani, outside Banja Luka. Russia has already committed to provide Serb forces with anti-terrorism training at the center, which will serve as the headquarters for new anti-terrorist units, logistics units, and a department to combat organized crime. These additions will put the Serbian police closer on par with Bosnia's national security forces.

There is also ongoing discussion in Republika Srpska of creating of a Russian "humanitarian" center similar to one already established in the Serbian city of Nis. Officially, its purpose is to help the local government with natural disasters such as floods and fires. But the center in Nis has been suspected of serving as a Russian intelligence center and an unofficial

military base—not least because Russia has requested diplomatic immunity for its personnel stationed there.²⁴²

Russia does not want Kosovo to be seen as a successful nation pointed toward the West. Rather, it seeks to derail Kosovo's efforts to integrate into the West, often by exploiting the Serbian minority's grievances. In the most jarring example, in January 2017, a train traveling from Belgrade to Mitrovica, a heavily Serb town in Kosovo, was stopped at the Kosovar border. The Russian-made train was "painted in the colors of the Serbian flag and featured pictures of churches, monasteries, and medieval towns, as well as the words 'Kosovo is Serbian' in 21 languages."

The U.S. has invested heavily in the Balkans since the end of the Cold War. Tens of thousands of U.S. servicemembers have served in the Balkans, and the U.S. has spent billions of dollars in aid there, all in the hope of creating a secure and prosperous region that will someday be part of the transatlantic community.

Threats to the Commons

Other than cyberspace and (to some extent) airspace, the commons are relatively secure in the European region. Despite Russia's periodic aggressive maneuvers near U.S. and NATO vessels, this remains largely true with respect to the security of and free passage through shipping lanes (with the significant exception of the Kerch strait). The maritime domain is heavily patrolled by the navies and coast guards of NATO and NATO partner countries; except in remote areas in the Arctic Sea, search and rescue capabilities are readily available; maritime-launched terrorism is not a significant problem; and piracy is virtually nonexistent.

Sea. In May 2018, 17 Russian fighter jets buzzed the HMS *Duncan*, which was serving as the flagship of Standing NATO Maritime Group Two (SNMG2), operating in the Black Sea. Commodore Mike Utley, who was leading SNMG2, stated that the ship was "probably the only maritime asset that has seen a raid of that magnitude in the last 25 years," and

then-British Defense Minister Gavin Williamson described the behavior as "brazen Russian hostility."²⁴⁴ In April 2018, a fully armed Russian jet buzzed a French frigate operating in the eastern Mediterranean.²⁴⁵

Russian threats to the maritime theater also include activity near undersea fiber optic cables. In December 2017, Rear Admiral Andrew Lennon, Commander, Submarines NATO, stated that "[w]e are now seeing Russian underwater activity in the vicinity of undersea cables that I don't believe we have ever seen." On any given day, undersea cables "carry some \$10 trillion of financial transfers and process some 15 million financial transactions," to say nothing of the breadth of nonfinancial information and communications that they carry.

The *Yantar*, a mother ship to two Russian mini submersibles, is often seen near undersea cables, which it is capable of tapping or cutting, and has been observed collecting intelligence near U.S. naval facilities, including the submarine base at Kings Bay, Georgia.²⁴⁸ The Russian spy ship *Viktor Leonov* was spotted collecting intelligence within 20 miles of Kings Bay in March 2017 and within 30 miles of Groton, Connecticut, in February 2018.²⁴⁹

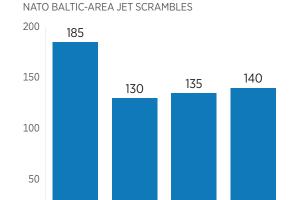
Airspace. Russia has continued its provocative military flights near U.S. and European airspace over the past year. In January 2018, a Russian Su-27 fighter intercepted a U.S. surveillance aircraft operating over the Black Sea, forcing it to return to base. "This interaction was determined to be unsafe," according to a statement from the U.S. 6th Fleet, "due to the SU-27 closing to within five feet and crossing directly through the EP-3's flight path, causing the EP-3 to fly through the SU-27's jet wash."

In November 2017, a Russian Su-30 fighter flew within 50 feet of a U.S. P-8A flying over the Black Sea in a 24-minute intercept that the U.S. also called "unsafe." Specifically, "the aircraft crossed in front of the US plane from right to left while engaging its afterburners, forcing the P-8 to enter its jet wash, an action that caused the US plane to experience 'a 15-degree roll and violent turbulence," according to a Pentagon spokeswoman.²⁵¹

NATO Frequently Scrambles Military Aircraft Over Baltics

NATO maintains a 24/7 air policing mission to safeguard the integrity of Baltic member states' airspace. NATO aircraft rotationally deployed are scrambled in response to aircraft that do not comply with international flight regulations and approach allies' airspace—such as common incursions by Russian jets.

SOURCE: Data provided by NATO's Supreme Headquarters Allied Power Europe.



2016

0

2015

★ heritage.org

2018

2017

In March and April 2019, the Royal Air Force scrambled fighters twice in five days to intercept Russian bombers flying near U.K. airspace off Scotland while the U.S., Australia, and 11 NATO allies were taking part in the Joint Warrior exercise in Scotland. For March 2019, Italian jets operating from Keflavík intercepted two Russian Tu-142 Bear bombers flying in Iceland's air surveillance area. In January 2019, a day after a new government was formed in Stockholm, a Russian IL-20 reconnaissance plane escorted by two Russian Su-27 fighter jets violated Swedish airspace, flying with transponders turned off.

Aggressive Russian flying has occurred near North American airspace as well. In January 2019, two U.S. F-22s and two Canadian CF-18 fighters scrambled when two Russian Tu-160 Blackjack bombers flew into Arctic airspace patrolled by the Royal Canadian Air Force.²⁵⁵

Russian flights have also targeted U.S. ally Japan. In incidents in January, March, and May 2019, Japan scrambled fighter jets to intercept a Russian Il-38N maritime patrol aircraft (MPA) flying over the Sea of Japan. ²⁵⁶ Nor is it only MPA that fly near Japan; for instance, Russian Su-24 attack aircraft were intercepted

in December 2018 and January 2019 incidents.²⁵⁷ Between April 1, 2018, and March 31, 2019, Japan had to scramble jets 343 times to intercept Russian aircraft, although that was 47 times less than the year prior.²⁵⁸

The main threat from Russian airspace incursions, however, remains near NATO territory in Eastern Europe, specifically in the Black Sea and Baltic regions. In the Baltics, through mid-November, NATO aircraft had conducted 85 Alpha scrambles in 2018, compared with 130 Alpha scrambles of Russian military aircraft in 2017. The situation remains the same in 2019. In one week in March, NATO jets scrambled six times to escort Russian aircraft flying over the Baltic Sea. The Lithuanian Defense Ministry reported that "several of them had not kept in radio contact with regional air traffic control, nor filed a pre-flight plan, nor had onboard transponders functioning."

In July 2018, Vladimir Putin's plane briefly flew over Estonian airspace without either filing a flight plan or contacting Estonian air traffic control on the way to Helsinki for a meeting with President Trump.²⁶¹ Similar provocative flights took place in the Black Sea region in 2018, including one in August when

two British Typhoons that were taking part in NATO's enhanced air policing mission scrambled to intercept and escort two Russian planes that were flying in Romanian airspace.²⁶²

In addition, there have been several incidents involving Russian military aircraft flying in Europe without using their transponders. In February 2015, for example, civilian aircraft in Ireland had to be diverted or were prevented from taking off when Russian bombers flying with their transponders turned off flew across civilian air lanes.²⁶³ Similarly, in March 2014, a Scandinavian Airlines plane almost collided with a Russian signals intelligence (SIGINT) plane when the two came within 90 meters of each other.264 In a December 2014 incident, a Cimber Airlines flight from Copenhagen to Poznan nearly collided with a Russian intelligence plane that was flying with its transponder turned off.265

Cyber. Russian cyber capabilities are sophisticated and active, regularly threatening economic, social, and political targets around the world. Even more, Moscow appears to be increasingly aggressive in its use of digital techniques, often employing only the slightest veneer of deniability in an effort to intimidate targets and openly defy international norms and organizations. Russia clearly believes that these online operations will be essential to its domestic and foreign policy for the foreseeable future. As former Chief of the Russian General Staff General Yuri Baluyevsky has observed, "[cyberattacks are] much more important than victory in a classical military conflict, because it is bloodless, yet the impact is overwhelming and can paralyze all of the enemy state's power structures."266

Russia continues to probe U.S. critical infrastructure. According to former Director of National Intelligence Daniel R. Coats:

Russia has the ability to execute cyber attacks in the United States that generate localized, temporary disruptive effects on critical infrastructure—such as disrupting an electrical distribution network for at least a few hours—similar to those

demonstrated in Ukraine in 2015 and 2016. Moscow is mapping our critical infrastructure with the long-term goal of being able to cause substantial damage.²⁶⁷

Russia has continued to conduct cyberattacks on government and private entities in 2019. In January, hackers affiliated with the Russian intelligence services hacked the Center for Strategic and International Studies. Also in 2019, the Democratic National Committee revealed that it had been hacked by Russia following the 2018 midterm elections.²⁶⁸

In June 2018, the U.S. Treasury Department sanctioned five Russian entities and three Russian individuals for "malign and destabilizing" cyber activities, including "the destructive NotPetya cyber-attack; cyber intrusions against the U.S. energy grid to potentially enable future offensive operations; and global compromises of network infrastructure devices, including routers and switches, also to potentially enable disruptive cyber-attacks."269 These sanctions built on a joint assessment by the Department of Homeland Security and the FBI that Russian hackers were behind a series of attacks against American network infrastructure devices and the U.S. energy and critical infrastructure sectors.²⁷⁰

But the United States is not Russia's only target. In April 2018 alone, Germany's head of domestic intelligence accused Moscow of attacking his government's computer networks, and the U.K.'s National Cyber Security Center warned that Russian hackers were targeting Britain's critical infrastructure supply chains. Russia continues to employ cyber as a key tool in manipulating and undermining democratic elections in Europe and elsewhere.

In addition to official intelligence and military cyber assets, Russia continues to employ allied criminal organizations (so-called patriotic hackers) to help it engage in cyber aggression. Using these hackers gives Russia greater resources and can help to shield their true capabilities. Patriotic hackers also give the Russian government deniability when it is desired. In June 2017, for example, Putin stated

that "[i]f they (hackers) are patriotically-minded, they start to make their own contribution to what they believe is the good fight against those who speak badly about Russia. Is that possible? Theoretically it is possible."²⁷¹

Conclusion

Overall, the threat to the U.S. homeland originating from Europe remains low, but the threat to America's interests and allies in the region remains significant. Behind this threat lies Russia. Although Russia has the military capability to harm and (in the case of its nuclear arsenal) to pose an existential threat to the U.S., it has not conclusively demonstrated the intent to do so.

The situation is different when it comes to America's allies in the region. Through NATO, the U.S. is obliged by treaty to come to the aid of the alliance's European members. Russia continues its efforts to undermine the NATO alliance and presents an existential threat to U.S. allies in Eastern Europe. NATO has been the cornerstone of European security and stability ever since its creation in 1949, and it is in America's interest to ensure that it maintains both the military capability and the political will to fulfill its treaty obligations.

While Russia is not the threat to U.S. global interests that the Soviet Union was during the Cold War, it does pose challenges to a range of America's interests and those of its allies and friends closest to Russia's borders. Russia possesses a full range of capabilities from ground

forces to air, naval, space, and cyber. It still maintains the world's largest nuclear arsenal, and although a strike on the U.S. is highly unlikely, the latent potential for such a strike still gives these weapons enough strategic value vis-à-vis America's NATO allies and interests in Europe to keep them relevant.

Russian provocations that are much less serious than any scenario involving a nuclear exchange pose the most serious challenge to American interests, particularly in Central and Eastern Europe, the Arctic, the Balkans, and the South Caucasus. As the 2019 Worldwide Threat Assessment states:

Moscow will continue pursuing a range of objectives to expand its reach, including undermining the US-led liberal international order, dividing Western political and security institutions, demonstrating Russia's ability to shape global issues, and bolstering Putin's domestic legitimacy. Russia seeks to capitalize on perceptions of US retrenchment and power vacuums, which it views the United States is unwilling or unable to fill, by pursuing relatively low-cost options, including influence campaigns, cyber tools, and limited military interventions.²⁷²

For these reasons, this *Index* continues to assess the threat from Russia as "aggressive" and "formidable."

Threats: Russia

	HOSTILE	AGGRESSIVE	TESTING	ASSERTIVE	BENIGN
Behavior		✓			
	FORMIDABLE	GATHERING	CAPABLE	ASPIRATIONAL	MARGINAL
Capability	✓				

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China

Asia (also referred to as the Indo-Pacific) hosts a variety of threats to the U.S. homeland and the global commons, as well as a general threat of regional war that stems from a handful of inter-state rivalries. Included in this range of threats is a growing and increasingly multifaceted set of threats from a rising China. America's forward-deployed military at bases throughout the Western Pacific, five treaty allies, security partners in Taiwan and Singapore, and growing security partnership with India are keys to the U.S. strategic footprint in Asia. However:

- Taiwan is under a long-standing, wellequipped, purposely positioned, and increasingly active military threat from China;
- Japan, Vietnam, and the Philippines, by virtue of maritime territorial disputes, are under paramilitary, military, and political pressure from China; and
- India is geographically positioned between two major security threats: Pakistan to its west and China to its northeast.

Threats to the Homeland

In the 2017 National Security Strategy, the Trump Administration made clear that it was shifting the focus of American security planning away from counterterrorism and back toward great-power competition. In particular, it noted that:

China and Russia challenge American power, influence, and interests, attempting to erode American security and prosperity. They are determined to make economies less free and less fair, to grow their militaries, and to control information and data to repress their societies and expand their influence.¹

Both China and Russia are seen as revisionist powers, but they pose very different challenges to the United States. The People's Republic of China (PRC) has a far larger economy, as well as the world's second-largest gross domestic product (GDP), and is intertwined in the global supply chain for crucial technologies, especially those relating to information and communications technology (ICT). As a result, it has the resources to support its ongoing comprehensive military modernization program, which has been underway for over two decades and spans the conventional, space, and cyber realms as well as WMD capabilities, including a multipronged nuclear modernization effort.

At the same time, however, the PRC has been acting more assertively, even aggressively, against more of its neighbors. Unresolved border and territorial claims have led Beijing to adopt an increasingly confrontational attitude with regard to the South China Sea and India, and cross-Straits tensions have reemerged as a result of Beijing's reaction to the Democratic Progressive Party's victory in Taiwan's 2016 elections.

Growing Conventional Capabilities. The Chinese People's Liberation Army (PLA) remains one of the world's largest militaries,

but its days of largely obsolescent equipment are in the past. Nearly two decades of officially acknowledged double-digit growth in the Chinese defense budget have resulted in a comprehensive modernization program that has benefited every part of the PLA. This has been complemented by improvements in Chinese military training and, at the end of 2015, the largest reorganization in the PLA's history.² The PLA's overall size has shrunk, including a 300,000-person cut in the past two years, but its overall capabilities have increased as older platforms have been replaced with newer systems that are much more sophisticated.

A major part of the 2015 reorganization was the establishment of a separate ground forces headquarters and bureaucracy; previously, the ground forces had been the default service providing staffs and commanders. Now the PLA Army (PLAA), responsible for the PLA's ground forces, is no longer automatically in charge of war zones or higher headquarters functions. At the same time, the PLAA has steadily modernized its capabilities, incorporating both new equipment and a new organization. It has shifted from a division-based structure toward a brigade-based structure and has been improving its mobility, including heliborne infantry and fire support.3 These forces are increasingly equipped with modern armored fighting vehicles, air defenses, both tube and rocket artillery, and electronic support equipment.

The PLA Navy (PLAN) is Asia's largest navy. While the total number of ships has dropped, the PLAN has fielded increasingly sophisticated and capable multi-role ships. Multiple classes of surface combatants are now in series production, including the Type 055 cruiser and the Type 052C and Type 052D guided missile destroyers, each of which fields longrange SAM and anti-ship cruise missile systems, as well as the Type 054 frigate and Type 056 corvette.

The PLAN has similarly been modernizing its submarine force. Since 2000, the PLAN has consistently fielded between 50 and 60 diesel-electric submarines, but the age and capability of the force has been improving as older

boats, especially 1950s-vintage *Romeo*-class boats, are replaced with newer designs. These include a dozen *Kilo*-class submarines purchased from Russia and domestically designed and manufactured *Song* and *Yuan* classes. All of these are believed to be capable of firing both torpedoes and anti-ship cruise missiles.⁴ The Chinese have also developed variants of the *Yuan*, with an air-independent propulsion (AIP) system that reduces the boats' vulnerability by removing the need to use noisy diesel engines to recharge batteries.⁵

The PLAN has also been expanding its amphibious assault capabilities. The Chinese have announced a plan to triple the size of the PLA naval infantry force (their counterpart to the U.S. Marine Corps) from two brigades totaling 10,000 troops to seven brigades with 30,000 personnel.⁶ To move this force, the Chinese have begun to build more amphibious assault ships, including the Type 071 amphibious transport docks.⁷ Each can carry about 800 naval infantrymen and move them to shore by means of four air-cushion landing craft and four helicopters.

Supporting these expanded naval combat forces is a growing fleet of support and logistics vessels. The 2010 PRC defense white paper noted the accelerated construction of "large support vessels." It also specifically noted that the navy is exploring "new methods of logistics support for sustaining long-time maritime missions." These include tankers and fast combat support ships that extend the range of Chinese surface groups and allow them to operate for more prolonged periods away from main ports. Chinese naval task forces dispatched to the Gulf of Aden have typically included such vessels.

The PLAN has also been expanding its naval aviation capabilities, the most publicized element of which has been the growing Chinese carrier fleet. This currently includes not only the *Liaoning*, purchased from Ukraine over a decade ago, but a domestically produced copy that is in workups. While both of these ships have ski jumps for their air wing, the Chinese are also building several conventional takeoff/barrier

landing (CATOBAR) carriers (like American or French aircraft carriers) that will employ catapults and therefore allow their air complement to carry more ordnance and/or fuel.⁹

The land-based element of the PLAN is modernizing as well, with a variety of longrange strike aircraft, anti-ship cruise missiles, and unmanned aerial vehicles (UAVs) entering the inventory. In addition to more modern versions of the H-6 twin-engine bombers (a version of the Soviet/Russian Tu-16 Badger), the PLAN's Naval Aviation force has added a range of other strike aircraft to its inventory. These include the JH-7/FBC-1 Flying Leopard, which can carry between two and four YJ-82 anti-ship cruise missiles, and the Su-30 strike fighter.

The PLA Air Force (PLAAF), with over 1,700 combat aircraft, is Asia's largest air force. It has shifted steadily from a force focused on homeland air defense to one capable of power projection, including long-range precision strikes against both land and maritime targets. The PLAAF currently has over 600 fourth-generation fighters (comparable to the U.S. F-15/F-16/F-18). They include the domestically designed and produced J-10 as well as the Su-27/Su-30/J-11 system (comparable to the F-15 or F-18) that dominates both the fighter and strike missions.¹⁰ China is also believed to be preparing to field two stealthy fifth-generation fighter designs. The J-20 is the larger aircraft and resembles the American F-22 fighter. The J-31 appears to resemble the F-35 but with two engines rather than one. The production of advanced combat aircraft engines remains one of the greatest challenges to Chinese fighter design.

The PLAAF is also deploying increasing numbers of H-6 bombers, which can undertake longer-range strike operations, including operations employing land-attack cruise missiles. Although, like the American B-52 and Russian Tu-95, the H-6 is a 1950s-era design (copied from the Soviet-era Tu-16 Badger bomber), the latest versions (H-6K) are equipped with updated electronics and engines and are made of carbon composites.

Equally important, the PLAAF has been introducing a variety of support aircraft, including airborne early warning (AEW), command and control (C2), and electronic warfare (EW) aircraft. These systems field state-of-the-art radars and electronic surveillance systems, allowing Chinese air commanders to detect potential targets, including low-flying aircraft and cruise missiles, more quickly and gather additional intelligence on adversary radars and electronic emissions. More and more of China's combat aircraft are also capable of undertaking mid-air refueling, allowing them to conduct extended, sustained operations, and the Chinese aerial tanker fleet (based on the H-6 aircraft) has been also expanding.

At the biennial Zhuhai Air Show, Chinese companies have displayed a variety of unmanned aerial vehicles that reflect substantial investments and research and development efforts. The surveillance and armed UAV systems include the Xianglong (Soaring Dragon) and Sky Saber systems. The 2014 DOD report on Chinese capabilities also reported that China had tested a stealthy flying-wing UAV, the Lijian.11 Chinese UAVs have been included in various military parades over the past several years, suggesting that they are being incorporated into Chinese forces, and the 2018 DOD report on Chinese capabilities states that "China's development, production and deployment of domestically-developed reconnaissance and combat UAVs continues to expand."12

The PLAAF is also responsible for the Chinese homeland's strategic air defenses. Its array of surface-to-air (SAM) missile batteries is one of the largest in the world and includes the S-300 (SA-10B/SA-20) and its Chinese counterpart, the Hongqi-9 long-range SAM. In 2018, the Russians began to deliver the S-400 series of long-range SAMs to China. These will mark a substantial improvement in PLAAF air defense capabilities, as the S-400 has both anti-aircraft and anti-missile capabilities. China has deployed these SAM systems in a dense, overlapping belt along its coast, protecting the nation's economic center of gravity. Key

industrial and military centers such as Beijing are also heavily defended by SAM systems.

Unlike the U.S. military, China's airborne forces are part of the PLAAF. The 15th Airborne Corps has been reorganized from three airborne divisions to six airborne brigades in addition to a special operations brigade, an aviation brigade, and a support brigade. The force has been incorporating indigenously developed airborne mechanized combat vehicles for the past decade, giving them more mobility and a better ability to engage armored forces.

Nuclear Capability. Chinese nuclear forces are the responsibility of the PLA Rocket Forces (PLARF), one of the three new services created on December 31, 2015. China's nuclear ballistic missile forces include land-based missiles with a range of 13,000 kilometers that can reach the U.S. (CSS-4) and submarine-based missiles that can reach the U.S. when the submarine is deployed within missile range.

The PRC became a nuclear power in 1964 when it exploded its first atomic bomb as part of its "two bombs, one satellite" effort. In quick succession, China then exploded its first thermonuclear bomb in 1967 and orbited its first satellite in 1970, demonstrating the capability to build a delivery system that can reach the ends of the Earth. China chose to rely primarily on a land-based nuclear deterrent instead of developing two or three different basing systems as the United States did.

Furthermore, unlike the United States or the Soviet Union, China chose to pursue only a minimal nuclear deterrent. The PRC fielded only a small number of nuclear weapons, with estimates of about 100–150 weapons on medium-range ballistic missiles and about 60 ICBMs. ¹⁴ Its only ballistic missile submarine (SSBN) conducted relatively few deterrence patrols (perhaps none), ¹⁵ and its first-generation SLBM, the JL-1, if it ever attained full operational capability had limited reach. The JL-1's 1,700-kilometer range makes it comparable to the first-generation Polaris A1 missile fielded by the U.S. in the 1960s.

While China's nuclear force remained stable for several decades, it has been part of the modernization effort of the past 20 years. The result has been modernization and some expansion of the Chinese nuclear deterrent. The core of China's ICBM force is the DF-31 series, a solid-fueled, road-mobile system, along with a growing number of longer-range, road-mobile DF-41 missiles that may already be in the PLA operational inventory. The DF-41 may be deployed with multiple independently targetable reentry vehicles (MIRVs). China's medium-range nuclear forces have similarly shifted to mobile, solid-rocket systems so that they are both more survivable and more easily maintained.

Notably, the Chinese are expanding their ballistic missile submarine fleet. Replacing the one Type 092 *Xia*-class SSBN are several Type 094 *Jin*-class SSBNs, four of which are already operational. They will likely be equipped with the new, longer-range JL-2 SLBM.¹⁷ Such a system would give the PRC a "secure second-strike" capability, substantially enhancing its nuclear deterrent.

There is also some possibility that the Chinese nuclear arsenal now contains land-attack cruise missiles. The CJ-20, a long-range, airlaunched cruise missile carried on China's H-6 bomber, may be nuclear tipped, although there is not much evidence at this time that China has pursued such a capability. China is also believed to be working on a cruise missile submarine that, if equipped with nuclear cruise missiles, would further expand the range of its nuclear attack options.¹⁸

As a result of its modernization efforts, China's nuclear forces appear to be shifting from a minimal deterrent posture (one suited only to responding to an attack and even then with only limited numbers) to a more robust but still limited deterrent posture. While the PRC will still likely field fewer nuclear weapons than either the United States or Russia, it will field a more modern and diverse set of capabilities than India, Pakistan, or North Korea, its nuclear-armed neighbors. If there are corresponding changes in doctrine, modernization will enable China to engage in limited nuclear options in the event of a conflict.

In addition to strategic nuclear forces, the PLARF has responsibility for medium-range and intermediate-range ballistic missile (MRBM and IRBM) forces. These include the DF-21 and DF-26 missiles, which can reach as far as Guam and southern India. ¹⁹ It is believed that Chinese missile brigades equipped with these systems may have both nuclear and conventional responsibilities, making any deployment from garrison much more ambiguous from a stability perspective. The expansion of these forces also raises questions about the total number of Chinese nuclear warheads.

Cyber and Space Capabilities. The major 2015 reorganization of the PLA included the creation of the PLA Strategic Support Force (PLASSF), which brings the Chinese military's electronic warfare, network warfare (including cyber), and space warfare forces under a single service umbrella. Previously, these capabilities had been embedded in different departments across the PLA's General Staff Department and General Armaments Department. By consolidating them into a single service, the PLA has created a Chinese "information warfare" force that is responsible for offensive and defensive operations in the electromagnetic and space domains.

Chinese network warfare forces have been identified as conducting a variety of cyber and network reconnaissance operations as well as cyber economic espionage. In 2014, the U.S. Department of Justice charged PLA officers from Unit 61398, then of the General Staff Department's 3rd Department, with theft of intellectual property (IP) and implanting of malware in various commercial firms. Members of that unit are thought also to be part of "Advanced Persistent Threat-1," a group of computer hackers believed to be operating on behalf of a nation-state rather than a criminal group.

Chinese space capabilities gained public prominence in 2007 when the PLA conducted an anti-satellite (ASAT) test in low-Earth orbit against a defunct Chinese weather satellite. The test became one of the worst debris-generating incidents of the Space Age, with several

thousand pieces of debris generated, many of which will remain in orbit for over a century. However, the PRC has been conducting space operations since 1970 when it first orbited a satellite. Equally important, Chinese counter-space efforts have been expanding steadily. The PLA has not only tested ASATs against low-Earth orbit systems, but is also believed to have tested a system designed to attack targets at geosynchronous orbit (GEO), approximately 22,000 miles above the Earth. As many vital satellites are at GEO, including communications and missile early-warning systems, China's ability to target such systems constitutes a major threat.

The creation of the PLASSF, incorporating counter-space forces, reflects the movement of counter-space systems, including direct-ascent ASATs, out of the testing phase to fielding them with units. A recent report from the U.S. National Air and Space Intelligence Center (NASIC) notes that Chinese units are now training with anti-satellite missiles.²¹

Threat of Regional War

Three issues, all involving China, threaten American interests and embody the "general threat of regional war" noted at the outset of this section: the status of Taiwan, the escalation of maritime and territorial disputes, and border conflict with India.

Taiwan. China's long-standing threat to end the de facto independence of Taiwan and ultimately to bring it under the authority of Beijing—if necessary, by force—is both a threat to a major American security partner and a threat to the American interest in peace and stability in the Western Pacific.

After easing for eight years, tensions across the Taiwan Strait have resumed as a result of Beijing's reaction to the outcome of Taiwan's 2016 presidential election. Beijing has suspended most direct government-to-government discussions with Taipei and is using a variety of aid and investment efforts to draw away Taiwan's remaining diplomatic partners.

Beijing has also undertaken significantly escalated military activities directed at Taiwan. In March 2019, two Chinese J-11 fighters (a domestic version of the Su-27) crossed the median or center line of the Taiwan Strait, which has been informally considered a boundary for the two sides. This marked the first PLAAF incursion in over a decade and followed a series of PLAN circumnavigations of the island that were intended to demonstrate the PLA's ability to isolate Taiwan. These actions have raised tensions between Taipei and Beijing.²²

Regardless of the state of the relationship at any given time, Chinese leaders from Deng Xiaoping and Mao Zedong to Xi Jinping have consistently emphasized the importance of ultimately reclaiming Taiwan. The island—along with Tibet—is the clearest example of a geographical "core interest" in Chinese policy. China has never renounced the use of force, and it continues to employ political warfare against Taiwan's political and military leadership.

For the Chinese leadership, the failure to effect unification, whether peacefully or through the use of force, would reflect fundamental political weakness in the PRC. For this reason, China's leaders cannot back away from the stance of having to unify the island with the mainland, and the island remains an essential part of the People's Liberation Army's "new historic missions," shaping PLA acquisitions and military planning.

It is widely posited that China's anti-access/ area-denial (A2/AD) strategy-the deployment of an array of overlapping capabilities, including anti-ship ballistic missiles (ASBMs), submarines, and long-range cruise missiles, satellites, and cyber weapons—is aimed largely at forestalling American intervention in support of friends and allies in the Western Pacific, including Taiwan. By holding at risk key American platforms and systems (e.g., aircraft carriers), the Chinese seek to delay or even deter American intervention in support of key friends and allies, allowing the PRC to achieve a fait accompli. The growth of China's military capabilities is specifically oriented toward countering America's ability to assist in the defense of Taiwan.

Chinese efforts to reclaim Taiwan are not limited to overt military means. The "three warfares" highlight Chinese political warfare methods, including legal warfare/lawfare, public opinion warfare, and psychological warfare. The PRC employs such approaches to undermine both Taiwan's will to resist and America's willingness to support Taiwan. The Chinese goal would be to "win without fighting"—to take Taiwan without firing a shot or with only minimal resistance before the United States could organize an effective response.

Escalation of Maritime and Territorial Disputes. Because the PRC and other countries in the region see active disputes over the East and South China Seas not as differences regarding the administration of international common spaces, but rather as matters of territorial sovereignty, there exists the threat of armed conflict between China and American allies who are also claimants, particularly Japan and the Philippines.

Moreover, because its economic center of gravity is now in the coastal region, China has had to emphasize maritime power to defend key assets and areas. This is exacerbated by China's status as the world's foremost trading state. China increasingly depends on the seas for its economic well-being. Its factories are powered increasingly by imported oil, and its diets contain a growing percentage of imported food. Chinese products rely on the seas to be moved to markets. Consequently, China not only has steadily expanded its maritime power, including its merchant marine and maritime law enforcement capabilities, but also has acted to secure the "near seas" (jinhai; 近海) as a Chinese preserve.

Beijing prefers to accomplish its objectives quietly and through nonmilitary means. In both the East and South China Seas, China has sought to exploit "gray zones," gaining control incrementally and deterring others without resorting to the lethal use of force. It uses military and economic threats, bombastic language, and enforcement through legal warfare (including the employment of Chinese maritime law enforcement vessels) as well as

military bullying. Chinese paramilitary-implemented, military-backed encroachment in support of expansive extralegal claims could lead to an unplanned armed clash.

Especially risky are the growing tensions between China and Japan and among a number of claimants in the South China Sea. In the former case, the most proximate cause is the dispute over the Senkakus. China has intensified its efforts to assert claims of sovereignty over the Senkaku Islands of Japan in the East China Sea. Beijing asserts both exclusive economic rights within the disputed waters and recognition of "historic" rights to dominate and control those areas as part of its territory.²³ Chinese fishing boats (often believed to be elements of the Chinese maritime militia) and Chinese Coast Guard (CCG) vessels have been encroaching steadily on the territorial waters within 12 nautical miles of the uninhabited islands. In the summer of 2016, China began to deploy naval units into the area.24

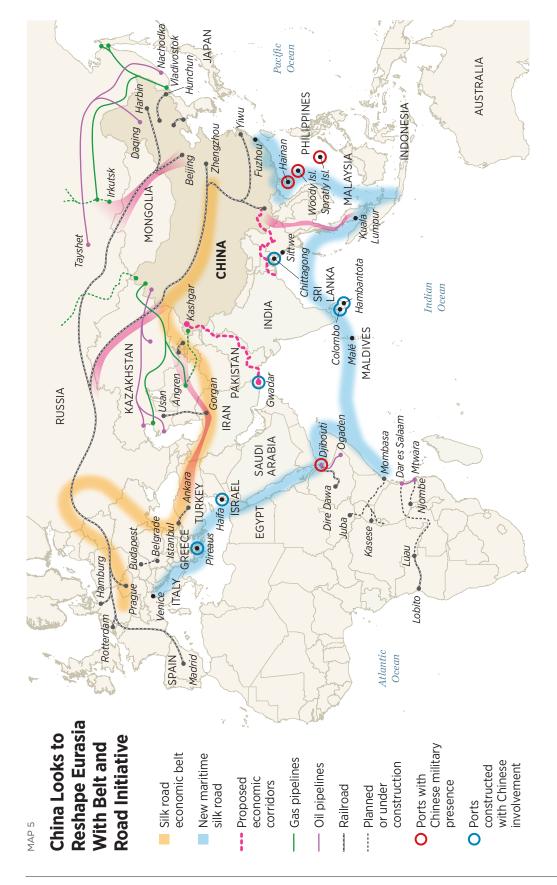
In November 2013, China declared an air defense identification zone (ADIZ) in the East China Sea that largely aligned with its claimed maritime Exclusive Economic Zone (EEZ). The People's Liberation Army declared that it would "adopt defense emergency measures to respond to aircraft that do not cooperate in identification or refuse to follow the instructions." The announcement was a provocative act and another Chinese attempt to change the status quo unilaterally.

The ADIZ declaration is part of a broader Chinese pattern of using intimidation and coercion to assert expansive extralegal claims of sovereignty and/or control incrementally. In June 2016, a Chinese fighter made an "unsafe" pass near a U.S. RC-135 reconnaissance aircraft in the East China Sea area. In March 2017, Chinese authorities warned the crew of an American B-1B bomber operating in the area of the ADIZ that they were flying illegally in PRC airspace. In response to the incident, the Chinese Foreign Ministry called for the U.S. to respect the ADIZ.²⁶ In May, the Chinese intercepted an American WC-135, also over the East China Sea.²⁷

In the South China Sea, the most salient issue is the Spratlys, where overlapping Chinese, Philippine, Malaysian, Vietnamese, and Taiwanese claims raise the prospect of confrontation. This volatile situation has led to a variety of confrontations between China and other claimants.

China-Vietnam tensions in the region, for example, were on starkest display in 2014 when state-owned China National Offshore Oil Corporation (CNOOC) deployed an oil rig inside Vietnam's EEZ. The Chinese platform was accompanied by dozens of ships including naval vessels. The resulting escalation saw Chinese ships ramming Vietnamese law enforcement ships and using water cannon against the crews of Vietnamese ships. It also resulted in massive and sometimes violent demonstrations in Vietnam. The oil rig was ultimately withdrawn, and relations were restored, but the occasional reappearance of the same rig has served to underscore the continuing volatility of this issue, which involves the same area over which China and Vietnam engaged in armed battle in 1974.

Because of the relationship between the Philippines and the United States, tensions between Beijing and Manila are the most likely to lead to American participation. There have been a number of incidents. In 2012, for example, a Philippine naval ship operating on behalf of the country's coast guard challenged private Chinese poachers in waters around Scarborough Shoal. The resulting escalation left Chinese government ships in control of the shoal. In 2016, there were reports that the Chinese intended to consolidate their gains in the area by reclaiming the sea around the shoal, but there is no indication that this has happened. Furthermore, with the election of Philippine President Rodrigo Duterte in 2016, there has been a general warming in China-Philippines relations. Duterte has sought to set aside the dispute over the South China Sea, and the Chinese, while not accepting the authority of a 2016 ruling by the Permanent Court of Arbitration (PCA) that favored a range of the Philippines' positions, have allowed Filipino



SOURCES: Reuters, "Reviving the Silk Road," May 10, 2017, map, https://pictures.reuters.com/archive/CHINA-SILKROAD--C-ETIED5AIMD43P.html (accessed July 3, 2018), and Heritage Foundation research.

fishermen access to Scarborough Shoal in accordance with it.

In all of these cases, the situation is exacerbated by rising nationalism. In the face of persistent economic challenges, nationalist themes are becoming an increasingly strong undercurrent and affecting policymaking. Although the nationalist phenomenon is not new, it is gaining force and complicating efforts to maintain regional stability.

Governments may choose to exploit nationalism for domestic political purposes, but they also run the risk of being unable to control the genie that they have released. Nationalist rhetoric is mutually reinforcing, which makes countries less likely to back down than in the past. The increasing power that the Internet and social media provide to the populace, largely outside of government control, adds elements of unpredictability to future clashes. China's refusal to accept the 2016 Permanent Court of Arbitration findings (which were overwhelmingly in favor of the Philippines) despite both Chinese and Philippine accession to the U.N. Convention on the Law of the Sea (UNCLOS) is a partial reflection of such trends.

In case of armed conflict between China and the Philippines or between China and Japan, either by intention or as a result of an accidental incident at sea, the U.S. could be required to exercise its treaty commitments. Escalation of a direct U.S.–China incident is also not unthinkable. Keeping an inadvertent incident from escalating into a broader military confrontation would be difficult. This is particularly true in the East and South China Seas, where naval as well as civilian law enforcement vessels from both China and the U.S. operate in what the U.S. considers to be international waters.

The most significant development in the South China Sea during the past three years has been Chinese reclamation and militarization of seven artificial islands or outposts. In 2015, President Xi promised President Barack Obama that China had no intention of militarizing the islands. In fact, however, as described by Admiral Harry Harris, Commander,

U.S. Pacific Command, in his April 2017 posture statement to the Senate Committee on Armed Services:

China's military-specific construction in the Spratly islands includes the construction of 72 fighter aircraft hangars—which could support three fighter regiments and about ten larger hangars that could support larger airframes, such as bombers or special mission aircraft. All of these hangars should be completed this year. During the initial phases of construction China emplaced tank farms, presumably for fuel and water, at Fiery Cross, Mischief and Subi reefs. These could support substantial numbers of personnel as well as deployed aircraft and/or ships. All seven outposts are armed with a large number of artillery and gun systems, ostensibly for defensive missions. The recent identification of buildings that appear to have been built specifically to house long-rang surface-to-air missiles is the latest indication China intends to deploy military systems to the Spratlys.29

There is the possibility that China will ultimately declare an ADIZ above the South China Sea in an effort to assert its authority over the entire area. There are also concerns that in the event of a downturn in its relationship with the Philippines, China will take action against vulnerable targets like Philippines-occupied Second Thomas Shoal or Reed Bank, which the PCA determined are part of the Philippines' EEZ and continental shelf, or proceed with the reclamation at Scarborough. The latter development in particular would facilitate the physical assertion of Beijing's claims and enforcement of an ADIZ, regardless of the UNCLOS award.

Border Conflict with India. The possibility of armed conflict between India and China, while currently remote, poses an indirect threat to U.S. interests because it could disrupt the territorial status quo and raise nuclear tensions in the region. A border conflict between

India and China could also prompt Pakistan to try to take advantage of the situation, further contributing to regional instability.

Long-standing border disputes that led to a Sino-Indian War in 1962 have again become a flashpoint in recent years. In April 2013, the most serious border incident between India and China in over two decades occurred when Chinese troops settled for three weeks several miles inside northern Indian territory on the Depsang Plains in Ladakh. A visit to India by Chinese President Xi Jinping in September 2014 was overshadowed by another flare-up in border tensions when hundreds of Chinese PLA forces reportedly set up camps in the mountainous regions of Ladakh, prompting Indian forces to deploy to forward positions in the region. This border standoff lasted three weeks and was defused when both sides agreed to pull their troops back to previous positions.

In 2017, Chinese military engineers were building a road to the Doklam plateau, an area claimed by both Bhutan and China, and this led to a confrontation between Chinese and Indian forces, the latter requested by Bhutanese authorities to provide assistance. The crisis lasted 73 days; both sides pledged to pull back, and Chinese construction efforts in the area have continued. Improved Chinese infrastructure not only would give Beijing the diplomatic advantage over Bhutan, but also could make the Siliguri corridor that links the eastern Indian states with the rest of the country more vulnerable.

India claims that China occupies more than 14,000 square miles of Indian territory in the Aksai Chin along its northern border in Kashmir, and China lays claim to more than 34,000 square miles of India's northeastern state of Arunachal Pradesh. The issue is also closely related to China's concern for its control of Tibet and the presence in India of the Tibetan government in exile and Tibet's spiritual leader, the Dalai Lama.

The Chinese are building up military infrastructure and expanding a network of road, rail, and air links in its southwestern border areas. To meet these challenges, the Indian government has also committed to expanding infrastructure development along the disputed border, although China currently holds a decisive military edge.

Threats to the Commons

The U.S. has critical sea, air, space, and cyber interests at stake in the East Asia and South Asia international common spaces. These interests include an economic interest in the free flow of commerce and the military use of the commons to safeguard America's own security and contribute to the security of its allies and partners.

Washington has long provided the security backbone in these areas, and this in turn has supported the region's remarkable economic development. However, China is taking increasingly assertive steps to secure its own interests in these areas independent of U.S. efforts to maintain freedom of the commons for all in the region. Given this behavior, which includes the construction of islands atop previously submerged features, it cannot be assumed that China shares a common conception of international space with the United States or an interest in perpetuating American predominance in securing international common spaces.

In addition, as China expands its naval capabilities, it will be present farther and farther away from its home shores. China has now established its first formal overseas military base, having initialed an agreement with the government of Djibouti in January 2017. Chinese officials appear also to be in discussions with Pakistan about allowing military access to the port of Gwadar.

Dangerous Behavior in the Maritime and Airspace Common Spaces. The aggressiveness of the Chinese navy, maritime law enforcement forces, and air forces in and over the waters of the East China Sea and South China Sea, coupled with ambiguous, extralegal territorial claims and assertion of control there, poses an incipient threat to American and overlapping allied interests. Chinese military writings emphasize the importance of

establishing dominance of the air and maritime domains in any future conflict.

Although the Chinese do not necessarily have sufficient capacity to deny the U.S. the ability to operate in local waters and airspace, they equal or overmatch all of their neighbors. China is not yet in a position to enforce an ADIZ consistently in either area, but the steady two-decade improvement of the PLAAF and PLAN naval aviation will eventually provide the necessary capabilities. Chinese observations of recent conflicts, including wars in the Persian Gulf, the Balkans, and Afghanistan, have emphasized the growing role of airpower and missiles in conducting "non-contact, non-linear, non-symmetrical" warfare.31 This growing parity, if not superiority, constitutes a radical shift from the Cold War era, when the U.S., with its allies, clearly would have dominated air and naval operations in the Pacific.

To underscore its growing capabilities, China also seems to have made a point of publicizing its air force modernization, unveiling new aircraft prototypes, including two new stealthy fighters, on the eve of visits by American Secretaries of Defense. Secretary Chuck Hagel's visit in 2014, for example, was preceded by the unveiling of the J-15 naval fighter. Moreover, these aircraft have often been used very aggressively. In April 2018, for example, China conducted "live fire exercises" in the East China Sea with its *Liaoning* aircraft carrier and J-15 fighters. According to China's Xinhua news agency, "the drill...included multiple take-offs from the deck of the Liaoning by J15 fighter jets and... 'anti-air missiles were fired from ships surrounding the carrier'."32

Increasing Chinese Military Space Activities. One of the key force multipliers for the United States is its extensive array of space-based assets. Through its various satellite constellations, the U.S. military can track opponents, coordinate friendly forces, engage in precision strikes against enemy forces, and conduct battle-damage assessments so that its munitions are expended efficiently.

The American military is more reliant than many others on space-based systems because

it is also an expeditionary military (i.e., its wars are conducted far from the homeland). Consequently, it requires global rather than regional reconnaissance, communications and data transmission, and meteorological information and support. At this point, only space-based systems can provide this sort of information on a real-time basis. No other country is capable of leveraging space as the U.S. does, and this is a major advantage, but this heavy reliance on space systems is also a key American vulnerability.

China fields an array of space capabilities, including its own navigation and timing satellites, the Beidou/Compass system, and has claimed a capacity to refuel satellites.³³ It has three satellite launch centers and is constructing a fourth. China's interest in space dominance includes not only accessing space, but also denying opponents the ability to do the same. As one Chinese assessment notes, space capabilities provided 70 percent of battlefield communications, over 80 percent of battlefield reconnaissance and surveillance, and 100 percent of meteorological information for American operations in Kosovo. Moreover, 98 percent of precision munitions relied on space for guidance information. In fact, "[i]t may be said that America's victory in the Kosovo War could not [have been] achieved without fully exploiting space."34

To this end, the PLA has been developing a range of anti-satellite capabilities that include both hard-kill and soft-kill systems. The former include direct-ascent kinetic-kill vehicles (DA-KKV) such as the system tested in 2007, but they also include more advanced systems that are believed to be capable of reaching targets in mid-Earth orbit and even geosynchronous orbit.³⁵ The latter include anti-satellite lasers for either dazzling or blinding purposes.³⁶ This is consistent with PLA doctrinal writings, which emphasize the need to control space in future conflicts. "Securing space dominance has already become the prerequisite for establishing information, air, and maritime dominance," says one Chinese teaching manual, "and will directly affect the course and outcome of wars."37

Soft-kill attacks need not come only from dedicated weapons, however. The case of Galaxy-15, a communications satellite owned by Intelsat Corporation, showed how a satellite could effectively disrupt communications simply by always being in "switched on" mode. ³⁸ Before it was finally brought under control, it had drifted through a portion of the geosynchronous belt, forcing other satellite owners to move their assets and juggle frequencies. A deliberate such attempt by China (or any other country) could prove far harder to handle, especially if conducted in conjunction with attacks by kinetic systems or directed-energy weapons.

Most recently, China has landed an unmanned probe at the lunar south pole, on the far side of the Moon. This is a major accomplishment because the probe is the first spacecraft ever to land at either of the Moon's poles. To support this mission, the Chinese deployed a data relay satellite to Lagrange Point-2, one of five points where the gravity wells of the Earth and Sun "cancel out" each other, allowing a satellite to remain in a relatively fixed location with minimal fuel consumption. While the satellite itself may or may not have military roles, the deployment highlights that China will now be using the enormous volume of cis-lunar space (the region between the Earth and Moon) for various deployments. This will greatly complicate American space situational awareness efforts, as it force the U.S. to monitor a vastly greater area of space for possible Chinese spacecraft.

Cyber Activities and the Electromagnetic Domain. In 2013, the Verizon Risk Center found that China was responsible for the largest percentage (30 percent) of external breaches in which "the threat actor's country of origin was discoverable" and that "96% of espionage cases were attributed to threat actors in China and the remaining 4% were unknown."³⁹ In addition, efforts by "[s]tate-affiliated actors tied to China...to steal IP comprise[d] about one-fifth of all breaches in [Verizon's] dataset."⁴⁰ Given the difficulties of attribution, country of origin should not necessarily be conflated with the perpetrator, but forensic efforts have

associated at least one Chinese military unit with cyber intrusions.⁴¹

Since the 2015 Xi–Obama summit where the two sides reached an understanding to reduce cyber economic espionage, Chinese cyber actions have shifted. Although the overall level of activity appears to be unabated, the Chinese seem to have moved toward more focused attacks mounted from new sites.

China's cyber-espionage efforts are often aimed at economic targets, reflecting the much more holistic Chinese view of both security and information. Rather than creating an artificial dividing line between military security and civilian security, much less information, the PLA plays a role in supporting both aspects and seeks to obtain economic IP as well as military electronic information.

This is not to suggest that the PLA has not emphasized the military importance of cyber warfare. Chinese military writings since the 1990s have emphasized a fundamental transformation in global military affairs (shijie junshi gaige). Future wars will be conducted through joint operations involving multiple services rather than through combined operations focused on multiple branches within a single service. These future wars will span not only the traditional land, sea, and air domains, but also outer space and cyberspace. The latter two arenas will be of special importance because warfare has shifted from an effort to establish material dominance (characteristic of Industrial Age warfare) to establishing information dominance (zhi xinxi quan). This is due to the rise of the information age and the resulting introduction of information technology into all areas of military operations.

Consequently, according to PLA analysis, future wars will most likely be "local wars under informationized conditions." That is, they will be wars in which information and information technology will be both widely applied and a key basis of victory. The ability to gather, transmit, analyze, manage, and exploit information will be central to winning such wars: The side that is able to do these things more accurately and more quickly will be the side that

wins. This means that future conflicts will no longer be determined by platform-versus-platform performance and not even by system against system (*xitong*). Rather, conflicts are now clashes between rival arrays of systems of systems (*tixi*).⁴²

Chinese military writings suggest that a great deal of attention has been focused on developing an integrated computer network and electronic warfare (INEW) capability. This would allow the PLA to reconnoiter a potential adversary's computer systems in peacetime, influence opponent decision-makers by threatening those same systems in times of crisis, and disrupt or destroy information networks and systems by cyber and electronic warfare means in the event of conflict. INEW capabilities would complement psychological warfare and physical attack efforts to secure "information dominance," which Chinese military writings emphasize as essential for fighting and winning future wars.

It is essential to recognize, however, that the PLA views computer network operations as part of information operations (xinxi zuozhan), or information combat. With obvious implications for the U.S., the PLA emphasizes the need to suppress and destroy an enemy's information systems while preserving one's own, as well as the importance of computer and electronic warfare in both the offensive and defensive roles. Methods to secure information dominance would include establishing an information blockade; deception, including through electronic means; information contamination; and information paralysis.43 China sees cyber as part of an integrated capability for achieving strategic dominance in the Western Pacific region.

Information operations are specific operational activities that are associated with striving to establish information dominance. They are conducted in both peacetime and wartime, with the peacetime focus on collecting information, improving its flow and application, influencing opposing decision-making, and effecting information deterrence. These operations involve four mission areas:

- Command and Control Missions. An essential part of information operations is the ability of commanders to control joint operations by disparate forces. Thus, command, control, communications, computers, intelligence, surveillance, and reconnaissance structures constitute a key part of information operations, providing the means for collecting, transmitting, and managing information.
- Offensive Information Missions. These are intended to disrupt the enemy's battlefield command and control systems and communications networks, as well as to strike the enemy's psychological defenses.
- Defensive Information Missions. Such missions are aimed at ensuring the survival and continued operation of information systems. They include deterring an opponent from attacking one's own information systems, concealing information, and combating attacks when they do occur.
- Information Support and Information-Safeguarding Missions. The ability to provide the myriad types of information necessary to support extensive joint operations and to do so on a continuous basis is essential to their success. 44

Computer network operations are integral to all four of these overall mission areas. They can include both strategic and battlefield network operations and can incorporate both offensive and defensive measures. They also include protection not only of data, but also of information hardware and operating software.

Computer network operations will not stand alone, however, but will be integrated with electronic warfare operations, as reflected in the phrase "network and electronics unified" (wangdian yiti). Electronic warfare operations are aimed at weakening or destroying enemy electronic facilities and systems while defending one's own.⁴⁵ The combination of electronic and computer network attacks will produce

synergies that affect everything from finding and assessing the adversary to locating one's own forces to weapons guidance to logistical support and command and control. The creation of the PLASSF is intended to integrate these forces and make them more complementary and effective in future "local wars under informationized conditions."

Conclusion

China presents the United States with the most comprehensive security challenge in the region. It poses various threat contingencies across all three areas of vital American national interests: homeland; regional war (including potential attacks on overseas U.S. bases as well as against allies and friends); and international common spaces. China's provocative behavior is well documented: It is challenging the U.S. and its allies such as Japan at sea, in the air, and in cyberspace; it has raised concerns on its border with India; and it is a standing

threat to Taiwan. Despite a lack of official transparency, publicly available sources shed considerable light on China's rapidly growing military capabilities.

The Chinese launched their first homegrown aircraft carrier during the past year and are fielding large numbers of new platforms for their land, sea, air, and outer space forces, as well as in the electromagnetic domain. The PLA has been staging larger and more comprehensive exercises, including major exercises in the East China Sea near Taiwan, that are improving the ability of the Chinese to operate their plethora of new systems. It has also continued to conduct probes of both the South Korean and Japanese air defense identification zones, drawing rebukes from both Seoul and Tokyo.

This *Index* assesses the overall threat from China, considering the range of contingencies, as "aggressive" for level of provocation of behavior and "formidable" for level of capability.

Threats: China

	HOSTILE	AGGRESSIVE	TESTING	ASSERTIVE	BENIGN
Behavior		✓			
	FORMIDABLE	GATHERING	CAPABLE	ASPIRATIONAL	MARGINAL
Capability	✓				

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Iran

adical Islamist terrorism in its many Corms remains the most immediate global threat to the safety and security of U.S. citizens at home and abroad, and Iran-supported terrorists pose some of the greatest potential threats. The Lebanon-based Hezbollah has a long history of executing terrorist attacks against American targets in the Middle East at Iran's direction and could be activated to launch attacks inside the United States in the event of a conflict with Iran. Such state-sponsored terrorist attacks pose the greatest potential Iranian threats to the U.S. homeland, at least until Iran develops a long-range ballistic missile capable of targeting the United States.

Threats to the Homeland

Hezbollah Terrorism. Hezbollah (Party of God), the radical Lebanon-based Shia revolutionary movement, poses a clear terrorist threat to international security. Hezbollah terrorists have murdered Americans, Israelis, Lebanese, Europeans, and citizens of many other nations. Originally founded with support from Iran in 1982, this Lebanese group has evolved from a local menace into a global terrorist network that is strongly backed by regimes in Iran and Syria. Its political wing has dominated Lebanese politics and is funded by Iran and a web of charitable organizations, criminal activities, and front companies.

Hezbollah regards terrorism not only as a useful tool for advancing its revolutionary agenda, but also as a religious duty as part of a "global jihad." It helped to introduce and popularize the tactic of suicide bombings in Lebanon in the 1980s, developed a strong guerrilla force and a political apparatus in the 1990s, provoked a war with Israel in 2006, intervened in the Syrian civil war after 2011 at Iran's direction, and has become a major destabilizing influence in the ongoing Arab–Israeli conflict.

Before September 11, 2001, Hezbollah had murdered more Americans than any other terrorist group. Despite al-Qaeda's increased visibility since then, Hezbollah remains a bigger, better equipped, better organized, and potentially more dangerous terrorist organization, partly because it enjoys the support of the world's two chief state sponsors of terrorism: Iran and Syria. Hezbollah's demonstrated capabilities led former Deputy Secretary of State Richard Armitage to dub it "the A-Team of Terrorists."

Hezbollah has expanded its operations from Lebanon to targets in the Middle East and far beyond the region. It now is a global terrorist threat that draws financial and logistical support from its Iranian patrons as well as from the Lebanese Shiite diaspora in the Middle East, Europe, Africa, Southeast Asia, North America, and South America. Hezbollah fundraising and equipment procurement cells have been detected and broken up in the United States and Canada, and Europe is believed to contain many more of these cells.

Hezbollah has been involved in numerous terrorist attacks against Americans, including:

 The April 18, 1983, bombing of the U.S. embassy in Beirut, which killed 63 people including 17 Americans;

- The October 23, 1983, suicide truck bombing of the Marine barracks at Beirut Airport, which killed 241 Marines and other personnel deployed as part of the multinational peacekeeping force in Lebanon;
- The September 20, 1984, suicide truck bombing of the U.S. embassy annex in Lebanon, which killed 23 people including two Americans; and
- The June 25, 1996, Khobar Towers bombing, which killed 19 American servicemen stationed in Saudi Arabia.

Hezbollah also was involved in the kidnapping of several dozen Westerners, including 14 Americans, who were held as hostages in Lebanon in the 1980s. The American hostages eventually became pawns that Iran used as leverage in the secret negotiations that led to the Iran–Contra affair in the mid-1980s.

Hezbollah has launched numerous attacks outside of the Middle East. It perpetrated the two deadliest terrorist attacks in the history of South America: the March 1992 bombing of the Israeli embassy in Buenos Aires, Argentina, which killed 29 people, and the July 1994 bombing of a Jewish community center in Buenos Aires that killed 96 people. The trial of those who were implicated in the 1994 bombing revealed an extensive Hezbollah presence in Argentina and other countries in South America.

Hezbollah has escalated its terrorist attacks against Israeli targets in recent years as part of Iran's intensifying shadow war against Israel. In 2012, Hezbollah killed five Israeli tourists and a Bulgarian bus driver in a suicide bombing near Burgas, Bulgaria. Hezbollah terrorist plots against Israelis were foiled in Thailand and Cyprus during that same year.

In 2013, Hezbollah admitted that it had deployed several thousand militia members to fight in Syria on behalf of the Assad regime. By 2015, Hezbollah forces had become crucial in propping up the Assad regime after the Syrian army was hamstrung by casualties, defections,

and low morale. Hezbollah also deployed personnel to Iraq after the 2003 U.S. intervention to assist pro-Iranian Iraqi Shia militias that were battling the U.S.-led coalition. In addition, Hezbollah has deployed personnel in Yemen to train and assist the Iran-backed Houthi rebels.

Although Hezbollah operates mostly in the Middle East, it has a global reach and has established a presence inside the United States. Cells in the United States generally are focused on fundraising, including criminal activities such as those perpetrated by over 70 used-car dealerships identified as part of a scheme to launder hundreds of millions of dollars of cocaine-generated revenue that flowed back to Hezbollah.²

Covert Hezbollah cells could morph into other forms and launch terrorist operations inside the United States. Given Hezbollah's close ties to Iran and past record of executing terrorist attacks on Tehran's behalf, there is a real danger that Hezbollah terrorist cells could be activated inside the United States in the event of a conflict between Iran and the U.S. or between Iran and Israel. On June 1, 2017, two naturalized U.S. citizens were arrested and charged with providing material support to Hezbollah and conducting preoperational surveillance of military and law enforcement sites in New York City and at Kennedy Airport, the Panama Canal, and the American and Israeli embassies in Panama.3 Nicholas Rasmussen, Director of the National Counterterrorism Center, noted that the June arrests were a "stark reminder" of Hezbollah's global reach and warned that Hezbollah "is determined to give itself a potential homeland option as a critical component of its terrorism playbook," which "is something that those of us in the counterterrorism community take very, very seriously."4

Iran's Ballistic Missile Threat. Iran has an extensive missile development program that has received key assistance from North Korea, as well as more limited support from Russia and China until the imposition of sanctions by the U.N. Security Council. Although the U.S. intelligence community assesses that

Iran does not have an ICBM capability (an intercontinental ballistic missile with a range of 5,500 kilometers or about 2,900 miles), Tehran could develop one in the future. Iran has launched several satellites with space launch vehicles that use similar technology, which could also be adapted to develop an ICBM capability.⁵ Tehran's missile arsenal primarily threatens U.S. bases and allies in the Middle East, but Iran eventually could expand the range of its missiles to include the continental United States.

Threat of Regional War

The Middle East region is one of the most complex and volatile threat environments faced by the United States and its allies. Iran, Hezbollah, and Iran-supported proxy groups pose actual or potential threats both to America's interests and to those of its allies.

Iranian Threats in the Middle East. Iran is led by an anti-Western revolutionary regime that seeks to tilt the regional balance of power in its favor by driving out the Western presence, undermining and overthrowing opposing governments, and establishing its hegemony over the oil-rich Persian Gulf region. It also seeks to radicalize Shiite communities and advance their interests against Sunni rivals. Iran has a long record of sponsoring terrorist attacks against American allies and other interests in the region.

Iran's conventional military forces, although relatively weak by Western standards, loom large over Iran's smaller neighbors. Iran's armed forces remain dependent on major weapons systems and equipment that date back to before its 1979 revolution. Iran's ability to replace these aging weapons systems, many of which were depleted in the 1980–1988 Iran–Iraq war, has been limited by Western sanctions. Iran has not been able to acquire large numbers of modern armor, combat aircraft, longer-range surface-to-surface missiles, or major naval warships.

Tehran, however, has managed to import modern Russian and Chinese air-to-air, air-toground, air defense, anti-armor, and anti-ship missiles to upgrade its conventional military and asymmetric forces.6 It also has developed its capacity to reverse engineer and build its own versions of ballistic missiles, rockets, unmanned aerial vehicles (UAVs), minisubmarines, and other weapon systems. To compensate for its limited capability to project conventional military power, Tehran has focused on building up its asymmetric warfare capabilities, proxy forces, and ballistic missile and cruise missile capabilities. For example, in part because of the limited capabilities of its air force, Iran developed UAVs during the Iran-Iraq war, including at least one armed model that carried up to six RPG-7 rounds in what was perhaps the world's first use of UAVs in combat.7

The July 2015 Iran nuclear agreement, which lifted nuclear-related sanctions on Iran in January 2016, gave Tehran access to about \$100 billion in restricted assets and allowed Iran to expand its oil and gas exports, the chief source of its state revenues. Relief from the burden of sanctions helped Iran's economy and enabled Iran to enhance its strategic position, military capabilities, and support for surrogate networks and terrorist groups. In May 2016, Tehran announced that it was increasing its military budget for 2016-2017 to \$19 billion—90 percent more than the previous year's budget.8 Estimating total defense spending is difficult because of Tehran's opaque budget process and the fact that spending on some categories, including Iran's ballistic missile program and military intervention in Syria, is hidden, but the International Institute for Strategic Studies estimates that Iran's defense spending fell from \$21 billion in 2017 to \$19.6 billion in 2018.9

The lifting of sanctions also enabled Tehran to emerge from diplomatic isolation and strengthen strategic ties with Russia. Russian President Vladimir Putin traveled to Iran in November 2015 to meet with Supreme Leader Ayatollah Ali Khamenei and other officials. Both regimes called for enhanced military cooperation. During Iranian President Hassan Rouhani's visit to Russia in March 2017, Putin

proclaimed his intention to raise bilateral relations to the level of a "strategic partnership." Putin met with Rouhani again on June 9, 2018, on the sidelines of the Shanghai Cooperation Organization (SCO) summit, where he noted that Iran and Russia were "working well together to settle the Syrian crisis" and promised to support Iran's entry into the SCO. 11

This growing strategic relationship has strengthened Iran's military capabilities. Tehran announced in April 2016 that Russia had begun deliveries of up to five S-300 Favorit long-range surface-to-air missile systems, which can track up to 100 aircraft and engage six of them simultaneously at a range of 200 kilometers. The missile system, which was considered a defensive weapon not included in the U.N. arms embargo on Iran, was deployed and became operational in 2017, giving Iran a "generational improvement in capabilities" according to Defense Intelligence Agency Director Lieutenant General Robert Ashley. 13

Moscow also began negotiations to sell Iran an unspecified number of T-90 tanks and advanced Sukhoi Su-30 Flanker fighter jets. 14 These warplanes would significantly improve Iran's air defense and long-range strike capabilities, although under the terms of the 2015 Iran nuclear agreement, they cannot be delivered until after the U.N. arms embargo on Iran has expired. The agreement is scheduled to expire in October 2020. If Tehran pulled out of the agreement, however, the embargo would continue, precluding the sales.

After the nuclear agreement, Iran and Russia escalated their strategic cooperation in propping up Syria's embattled Assad regime. Iran's growing military intervention in Syria was partly eclipsed by Russia's military intervention and launching of an air campaign against Assad's enemies in September 2015, but Iran's Islamic Revolutionary Guard Corps (IRGC) and surrogate militia groups have played the leading role in spearheading the ground offensives that have retaken territory from Syrian rebel groups and tilted the military balance in favor of the Assad regime. By October 2015, Iran had deployed an estimated

7,000 IRGC troops and paramilitary forces in Syria, along with an estimated 20,000 foreign fighters from Iran-backed Shiite militias from Lebanon, Iraq, Afghanistan, and Pakistan. Tehran escalated to deploy a force of almost 80,000 Shia militia fighters commanded by nearly 2,000 IRGC officers. 16

Iran, working closely with Russia, then expanded its military efforts and helped to consolidate a costly victory for the Assad regime. At the height of the fighting in August 2016, Russia temporarily deployed Tu-22M3 bombers and Su-34 strike fighters to an air base at Hamedan in western Iran in order to strike rebel targets in Syria.¹⁷ After the fall of Aleppo in December 2016, which inflicted a crushing defeat on the armed opposition, Tehran sought to entrench a permanent Iranian military presence in Syria, establishing an elaborate infrastructure of military bases, intelligence centers, UAV airfields, missile sites, and logistical facilities. The IRGC also sought to secure a logistical corridor to enable the movement of heavy equipment, arms, and matériel through Iraq and Syria to bolster Hezbollah in Lebanon.

Iran's military presence in Syria and continued efforts to provide advanced weapons to Hezbollah through Syria have fueled tensions with Israel. Israel has launched over two hundred air strikes against Hezbollah and Iranian forces to prevent the transfer of sophisticated arms and prevent Iran-backed militias from deploying near Israel's border. On February 10, 2018, Iranian forces in Syria launched an armed drone that penetrated Israeli airspace before it was shot down. Israel responded with air strikes on IRGC facilities in Syria. Iranian forces in Syria later launched a salvo of 20 rockets against Israeli military positions in the Golan Heights on May 9, 2018, provoking Israel to launch ground-to-ground missiles, artillery salvos, and air strikes against all known Iranian bases in Syria.¹⁸

Although Russia has sought to calm the situation, reportedly helping to arrange the withdrawal of Iranian heavy weapons 85 kilometers from Israeli military positions in the Golan Heights, Moscow has turned a blind eye

to Iranian redeployments and the threat that long-range Iranian weapon systems deployed in Syria pose to Israel. On January 13, 2019, Israel launched an air strike against an Iranian arms depot at Damascus International Airport, and the Israeli government revealed that it had launched over 2,000 missiles at various targets in Syria in 2018. Israel remains determined to prevent Iran from establishing forward bases near its borders, and another clash could rapidly escalate into a regional conflict.

Iran's Proxy Warfare. Iran has adopted a political warfare strategy that emphasizes irregular warfare, asymmetric tactics, and the extensive use of proxy forces. The Islamic Revolutionary Guard Corps has trained, armed, supported, and collaborated with a wide variety of radical Shia and Sunni militant groups, as well as Arab, Palestinian, Kurdish, and Afghan groups that do not share its radical Islamist ideology. The IRGC's elite Quds (Jerusalem) Force has cultivated, trained, armed, and supported numerous proxies, particularly the Lebanon-based Hezbollah; Iraqi Shia militant groups; Palestinian groups such as Hamas and Palestinian Islamic Jihad; and groups that have fought against the governments of Afghanistan, Bahrain, Egypt, Israel, Iraq, Jordan, Kuwait, Morocco, Saudi Arabia, Turkey, the United Arab Emirates (UAE), and Yemen.

Iran is the world's foremost state sponsor of terrorism and has made extensive efforts to export its radical Shia brand of Islamist revolution. It has established a network of powerful Shia revolutionary groups in Lebanon and Iraq; has cultivated links with Afghan Shia and Taliban militants; and has stirred Shia unrest in Bahrain, Iraq, Lebanon, Saudi Arabia, and Yemen. In recent years, Iranian arms shipments have been intercepted regularly by naval forces off the coasts of Bahrain and Yemen, and Israel has repeatedly intercepted arms shipments, including long-range rockets, bound for Palestinian militants in Gaza.

U.S. troops in the Middle East have been targeted by Iranian proxies in Lebanon in the 1980s, Saudi Arabia in 1996, and Iraq in the 2000s. In April 2019, the Pentagon released

an updated estimate of the number of U.S. personnel killed by Iran-backed militias in Iraq, revising the number upward to at least 603 dead between 2003 and 2011. These casualties, about 17 percent of the American death toll in Iraq, "were the result of explosively formed penetrators (EFP), other improvised explosive devices (IED), improvised rocket-assisted munitions (IRAM), rockets, mortars, rocket-propelled grenades (RPG), small-arms, sniper, and other attacks in Iraq," according to a Pentagon spokesman.²¹

Terrorist Threats from Hezbollah. Hezbollah is a close ally of, frequent surrogate for, and terrorist subcontractor for Iran's revolutionary Islamist regime. Iran played a crucial role in creating Hezbollah in 1982 as a vehicle for exporting its revolution, mobilizing Lebanese Shia, and developing a terrorist surrogate for attacks on its enemies.

Tehran provides the bulk of Hezbollah's foreign support: arms, training, logistical support, and money. The Pentagon has estimated that Iran provides up to \$200 million in annual financial support for Hezbollah; other estimates made before the 2015 nuclear deal ran as high as \$350 million annually.22 After the nuclear deal, which offered Tehran substantial relief from sanctions, Tehran increased its aid to Hezbollah, providing as much as \$800 million per year according to Israeli officials.²³ Tehran has been lavish in stocking Hezbollah's expensive and extensive arsenal of rockets, sophisticated land mines, small arms, ammunition, explosives, anti-ship missiles, anti-aircraft missiles, and even unmanned aerial vehicles that Hezbollah can use for aerial surveillance or remotely piloted terrorist attacks. Iranian Revolutionary Guards have trained Hezbollah terrorists in Lebanon's Bekaa Valley and in Iran.

Iran has used Hezbollah as a club to hit not only Israel and Tehran's Western enemies, but also many Arab countries. Tehran's revolutionary ideology has fueled Iran's hostility to other Middle Eastern states, many of which it seeks to overthrow and replace with radical allies. During the Iran–Iraq war, Iran used Hezbollah to launch terrorist attacks against Iraqi

targets and against Arab states that sided with Iraq. Hezbollah launched numerous terrorist attacks against Saudi Arabia and Kuwait, which extended strong financial support to Iraq's war effort, and participated in several other terrorist operations in Bahrain and the UAE.

Iranian Revolutionary Guards conspired with the branch of Hezbollah in Saudi Arabia to conduct the 1996 Khobar Towers bombing. Hezbollah collaborated with the IRGC's Quds Force to destabilize Iraq after the 2003 U.S. occupation and helped to train and advise the Mahdi Army, the radical anti-Western Shiite militia led by militant Iraqi cleric Moqtada al-Sadr. Hezbollah detachments also have cooperated with IRGC forces in Yemen to train and assist the Houthi rebel movement.

Hezbollah threatens the security and stability of the Middle East and Western interests in the Middle East on a number of fronts. In addition to its murderous actions against Israel, Hezbollah has used violence to impose its radical Islamist agenda and subvert democracy in Lebanon. Some experts believed that Hezbollah's participation in the 1992 Lebanese elections and subsequent inclusion in Lebanon's parliament and coalition governments would moderate its behavior, but political inclusion did not lead it to renounce terrorism.

Hezbollah also poses a potential threat to America's NATO allies in Europe. Hezbollah established a presence inside European countries in the 1980s amid the influx of Lebanese citizens seeking to escape Lebanon's civil war and took root among Lebanese Shiite immigrant communities throughout Europe. German intelligence officials estimate that roughly 900 Hezbollah members live in Germany alone. Hezbollah also has developed an extensive web of fundraising and logistical support cells throughout Europe.²⁴

France and Britain have been the principal European targets of Hezbollah terrorism, partly because both countries opposed Hezbollah's agenda in Lebanon and were perceived as enemies of Iran, Hezbollah's chief patron. Hezbollah has been involved in many terrorist attacks against Europeans, including:

- The October 1983 bombing of the French contingent of the multinational peacekeeping force in Lebanon (on the same day the U.S. Marine barracks was bombed), which killed 58 French soldiers;
- The December 1983 bombing of the French embassy in Kuwait;
- The April 1985 bombing of a restaurant near a U.S. base in Madrid, Spain, which killed 18 Spanish citizens;
- A campaign of 13 bombings in France in 1986 that targeted shopping centers and railroad facilities, killing 13 people and wounding more than 250; and
- A March 1989 attempt to assassinate
 British novelist Salman Rushdie that
 failed when a bomb exploded prematurely,
 killing a terrorist in London.

Hezbollah's attacks in Europe trailed off in the 1990s after Hezbollah's Iranian sponsors accepted a truce in their bloody 1980–1988 war with Iraq and no longer needed a surrogate to punish states that Tehran perceived as supporting Iraq. Significantly, European participation in Lebanese peacekeeping operations, which became a lightning rod for Hezbollah terrorist attacks in the 1980s, could become an issue again if Hezbollah attempts to revive its aggressive operations in southern Lebanon. Troops from EU member states could someday find themselves attacked by Hezbollah with weapons financed by Hezbollah supporters in their home countries.

Hezbollah operatives have been deployed in countries throughout Europe, including Belgium, Bulgaria, Cyprus, France, Germany, and Greece.²⁵

Growing Missile Threat. Iran possesses the largest number of deployed missiles in the Middle East.²⁶ In June 2017, Iran launched mid-range missiles from its territory that struck opposition targets in Syria. This was the first such operational use of mid-range

missiles by Iran in almost 30 years, but it was not as successful as Tehran might have hoped. It was reported that three of the five missiles launched missed Syria altogether and landed in Iraq and that the remaining two landed in Syria but missed their intended targets by miles.²⁷

The backbone of the Iranian ballistic missile force is the Shahab series of road-mobile surface-to-surface missiles, which are based on Soviet-designed Scud missiles. The Shahab missiles are potentially capable of carrying nuclear, chemical, or biological warheads in addition to conventional high-explosive warheads. Their relative inaccuracy (compared to NATO ballistic missiles) limits their effectiveness unless they are employed against large, soft targets like cities.

Tehran's heavy investment in such weapons has fueled speculation that the Iranians intend eventually to replace the conventional warheads on their longer-range missiles with nuclear warheads. As the Nuclear Threat Initiative has observed, "Iran's rapidly improving missile capabilities have prompted concern from international actors such as the United Nations, the United States and Iran's regional neighbors." ²⁸

Iran is not a member of the Missile Technology Control Regime, and it has sought aggressively to acquire, develop, and deploy a wide spectrum of ballistic missile, cruise missile, and space launch capabilities. During the 1980–1988 Iran–Iraq war, Iran acquired Soviet-made Scud-B missiles from Libya and later acquired North Korean–designed Scud-C and No-dong missiles, which it renamed the Shahab-2 (with an estimated range of 500 kilometers or 310 miles) and Shahab-3 (with an estimated range of 900 kilometers or 560 miles). It now can produce its own variants of these missiles as well as longer-range Ghadr-1 and Qiam missiles.²⁹

Iran's Shahab-3 and Ghadr-1, which is a modified version of the Shahab-3 with a smaller warhead but greater range (about 1,600 kilometers or 1,000 miles), are considered more reliable and advanced than the North Korean

No-dong missile from which they are derived. Although early variants of the Shahab-3 missile were relatively inaccurate, Tehran was able to adapt and employ Chinese guidance technology to improve strike accuracy significantly. In 2014, then-Defense Intelligence Agency Director Lieutenant General Michael T. Flynn warned that:

Iran can strike targets throughout the region and into Eastern Europe. In addition to its growing missile and rocket inventories, Iran is seeking to enhance lethality and effectiveness of existing systems with improvements in accuracy and warhead designs. Iran is developing the Khalij Fars, an anti-ship ballistic missile which could threaten maritime activity throughout the Persian Gulf and Strait of Hormuz.³¹

Iran's ballistic missiles pose a growing threat to U.S. bases and allies from Turkey, Israel, and Egypt to the west, to Saudi Arabia and the other Gulf states to the south, to Afghanistan and Pakistan to the east. Iran also has become a center for missile proliferation by exporting a wide variety of ballistic missiles, cruise missiles, and rockets to the Assad regime in Syria and proxy groups such as Hezbollah, Hamas, Palestinian Islamic Jihad, the Houthi rebels in Yemen, and Iraqi militias. The Houthi Ansar Allah group has launched ballistic missiles and armed drones against targets in Saudi Arabia and the UAE, which launched a military campaign against them in 2015 in support of Yemen's government.

However, it is Israel, which has fought a shadow war with Iran and its terrorist proxies, that is most at risk from an Iranian missile attack. In case the Israeli government had any doubt about Iran's implacable hostility, the Revolutionary Guards, which control most of Iran's strategic missile systems, displayed a message written in Hebrew on the side of one of the Iranian missiles tested in March 2016: "Israel must be wiped off the earth." The development of nuclear warheads for Iran's

ballistic missiles would significantly degrade Israel's ability to deter major Iranian attacks, an ability that the existing (but not officially acknowledged) Israeli monopoly on nuclear weapons in the Middle East currently provides.

For Iran's radical regime, hostility to Israel, which Iran sometimes calls the "Little Satan," is second only to hostility to the United States, which the leader of Iran's 1979 revolution, Ayatollah Khomeini, dubbed the "Great Satan." But Iran poses a greater immediate threat to Israel than it does to the United States: Israel is a smaller country with fewer military capabilities, is located much closer to Iran, and already is within range of Iran's Shahab-3 missiles. Moreover, all of Israel can be hit with the thousands of shorter-range rockets that Iran has provided to Hezbollah in Lebanon and to Hamas and Palestinian Islamic Jihad in Gaza.

Weapons of Mass Destruction. Tehran has invested tens of billions of dollars since the 1980s in a nuclear weapons program that is concealed within its civilian nuclear power program. It built clandestine but subsequently discovered underground uranium-enrichment facilities near Natanz and Fordow and a heavy-water reactor near Arak that would give it a second potential route to nuclear weapons.³³

Before the 2015 nuclear deal, Iran had accumulated enough low-enriched uranium to build eight nuclear bombs (assuming the uranium was enriched to weapon-grade levels); "[b]y using the approximately 9,000 first generation centrifuges operating at its Natanz Fuel Enrichment Plant as of October 2015, Iran could theoretically produce enough weapon-grade uranium to fuel a single nuclear warhead in less than 2 months."34 Clearly, the development of a nuclear bomb would greatly amplify the threat posed by Iran. Even if Iran did not use a nuclear weapon or pass it on to one of its terrorist surrogates to use, the regime could become emboldened to expand its support for terrorism, subversion, and intimidation, assuming that its nuclear arsenal would protect it from retaliation as has been the case with North Korea.

On July 14, 2015, President Barack Obama announced that the United States and Iran, along with China, France, Germany, Russia, the United Kingdom, and the European Union High Representative for Foreign Affairs and Security Policy, had reached a "comprehensive, long-term deal with Iran that will prevent it from obtaining a nuclear weapon."35 The shortlived agreement, however, did a much better job of dismantling sanctions against Iran than it did of dismantling Iran's nuclear infrastructure, much of which was allowed to remain functional subject to weak restrictions, some of them only temporary. This flaw led President Donald Trump to withdraw the U.S. from the agreement on May 8, 2018, and reimpose sanctions.36

In fact, the agreement did not require that any of Iran's covertly built facilities would have to be dismantled. The Natanz and Fordow uranium enrichment facilities were allowed to remain in operation, although the latter facility was to be repurposed at least temporarily as a research site. The heavy-water reactor at Arak was also retained with modifications that will reduce its yield of plutonium. All of these facilities, built covertly and housing operations prohibited by multiple U.N. Security Council resolutions, were legitimized by the agreement.

The Iran nuclear agreement marked a risky departure from more than five decades of U.S. nonproliferation efforts under which Washington opposed the spread of sensitive nuclear technologies, such as uranium enrichment, even for allies. Iran got a better deal on uranium enrichment under the agreement than such U.S. allies as the United Arab Emirates, South Korea, and Taiwan have received from Washington in the past. In fact, the Obama Administration gave Iran better terms on uranium enrichment than President Gerald Ford's Administration gave the Shah of Iran, a close U.S. ally before the 1979 revolution.

President Trump's decision to withdraw from the nuclear agreement marked a return to long-standing U.S. nonproliferation policy. Iran, Britain, France, Germany, the European Union, China, and Russia sought to salvage the agreement, but this is unlikely, given the strength of the U.S. nuclear sanctions that were fully reimposed by November 4, 2018, after a 180-day wind-down period.

Iran initially adopted a policy of "strategic patience," seeking to preserve as much of the agreement's sanctions relief as it could while hoping to outlast the Trump Administration and deal with a presumably more pliable successor Administration after the 2020 elections. The Trump Administration, however, ratcheted up sanctions to unprecedented levels under its "maximum pressure" campaign. On April 8, 2019, it designated Iran's Revolutionary Guards as a foreign terrorist organization; because the Revolutionary Guards are extensively involved in Iran's oil, construction, and defense industries, this allowed U.S. sanctions to hit harder at strategic sectors of Iran's economy.³⁷ On April 22, 2019, Secretary of State Mike Pompeo announced that the Administration would eliminate waivers for Iran's remaining oil exports on May 2 and seek to zero them out entirely.38

Although President Trump has made it clear that he seeks a new agreement on Iran's nuclear program, Tehran has refused to return to the negotiating table. Instead, it has sought to pressure European states to protect it from the effects of U.S. sanctions. On May 8, 2019, Iranian President Rouhani announced that Iran would no longer comply with the 2015 nuclear agreement's restrictions on the size of Iran's stockpiles of enriched uranium and heavy water.39 Tehran gave the Europeans 60 days to deliver greater sanctions relief, specifically with respect to oil sales and banking transactions, and warned that if this ultimatum was not met by July 7, 2019, it would both resume construction of its unfinished heavy-water reactor at Arak and resume uranium enrichment at higher levels than permitted by the agreement.

Iran also is a declared chemical weapons power that claims to have destroyed all of its chemical weapon stockpiles, but it has never fully complied with the Chemical Weapons Convention or declared its holdings.⁴⁰ U.S.

intelligence agencies have assessed that Iran maintains "the capability to produce chemical warfare (CW) agents and 'probably' has the capability to produce some biological warfare agents for offensive purposes, if it made the decision to do so."⁴¹

Iranian Threats to Israel. In addition to ballistic missile threats from Iran, Israel faces the constant threat of attack from Palestinian, Lebanese, Egyptian, Syrian, and other Arab terrorist groups, including many supported by Iran. The threat posed by Arab states, which lost four wars against Israel in 1948, 1956, 1967, and 1973 (Syria and the PLO lost a fifth war in 1982 in Lebanon), has gradually declined. Egypt and Jordan have signed peace treaties with Israel, and Iraq, Libya, Syria, and Yemen have been distracted by civil wars. Although the conventional military threat to Israel from Arab states has declined, unconventional military and terrorist threats, especially from an expanding number of sub-state actors, have risen substantially.

Iran has systematically bolstered many of these groups even when it did not necessarily share their ideology. Today, Iran's surrogates, Hezbollah and Palestinian Islamic Jihad, along with more distant ally Hamas, pose the chief immediate security threats to Israel. After Israel's May 2000 withdrawal from southern Lebanon and the September 2000 outbreak of fighting between Israelis and Palestinians, Hezbollah stepped up its support for such Palestinian extremist groups as Hamas, Palestinian Islamic Jihad, the al-Aqsa Martyrs' Brigades, and the Popular Front for the Liberation of Palestine. It also expanded its own operations in the West Bank and Gaza and provided funding for specific attacks launched by other groups.

In July 2006, Hezbollah forces crossed the Lebanese border in an effort to kidnap Israeli soldiers inside Israel, igniting a military clash that claimed hundreds of lives and severely damaged the economies on both sides of the border. Hezbollah has since rebuilt its depleted arsenal with help from Iran and Syria. According to official Israeli estimates, Hezbollah has

amassed around 150,000 rockets, including a number of long-range Iranian-made missiles capable of striking cities throughout Israel.⁴² In recent years, under cover of the war in Syria, Iran and Hezbollah have established another potential front against Israel in addition to Lebanon and Gaza.

Since Israel's withdrawal from the Gaza Strip in 2005, Hamas, Palestinian Islamic Jihad, and other terrorist groups have fired more than 11,000 rockets into Israel, sparking wars in 2008-2009, 2012, and 2014.43 Over 5 million Israelis out of a total population of 8.1 million live within range of rocket attacks from Gaza, although the successful operation of the Iron Dome anti-missile system greatly mitigated this threat during the Gaza conflict in 2014. In that war, Hamas also unveiled a sophisticated tunnel network that it used to infiltrate Israel to launch attacks on Israeli civilians and military personnel. In early May 2019, Palestinian Islamic Jihad ignited another round of fighting in Gaza in which about 700 rockets were fired at Israel.44

Threats to Saudi Arabia and Other **Members of the Gulf Cooperation Coun**cil. Saudi Arabia and the five other Arab Gulf States-Bahrain, Kuwait, Oman, Qatar, and the United Arab Emirates—formed the Gulf Cooperation Council (GCC) in 1981 to deter and defend against Iranian aggression. Iran remains the primary external threat to their security. Tehran has supported groups that launched terrorist attacks against Bahrain, Kuwait, Saudi Arabia, and Yemen. It sponsored the Islamic Front for the Liberation of Bahrain, a surrogate group that plotted a failed 1981 coup against Bahrain's ruling Al Khalifa family, the Sunni rulers of the predominantly Shia country. Iran also has long backed Bahraini branches of Hezbollah and the Dawa Party.

However, in recent years, some members of the GCC, led mainly by Saudi Arabia, have shown concern over Qatar's support for the Muslim Brotherhood and its perceived coziness with Iran, with which Doha shares a major gas field in the Gulf. This led to the breakdown of diplomatic relations between many Arab

states and Qatar in June 2017 and the imposition of economic sanctions as part of a diplomatic standoff that shows no signs of ending.⁴⁵

When Bahrain was engulfed in a wave of Arab Spring protests in 2011, its government charged that Iran again exploited the protests to back the efforts of Shia radicals to overthrow the royal family. Saudi Arabia, fearing that a Shia revolution in Bahrain would incite its own restive Shia minority, led a March 2011 GCC intervention that backed Bahrain's government with about 1,000 Saudi troops and 500 police from the UAE.

Bahrain has repeatedly intercepted shipments of Iranian arms, including sophisticated bombs employing explosively formed penetrators. The government withdrew its ambassador to Tehran when two Bahrainis with ties to the IRGC were arrested after their arms shipment was intercepted off Bahrain's coast in July 2015. Iranian hardliners have steadily escalated pressure on Bahrain. In March 2016, a former IRGC general who is a close adviser to Ayatollah Khamenei stated that "Bahrain is a province of Iran that should be annexed to the Islamic Republic of Iran."46 After Bahrain stripped a senior Shiite cleric, Sheikh Isa Qassim, of his citizenship, General Qassim Suleimani, commander of the IRGC's Quds Force, threatened to make Bahrain's royal family "pay the price and disappear."47

Saudi Arabia has criticized Iran for supporting radical Saudi Shiites, intervening in Syria, and supporting Shiite Islamists in Lebanon, Iraq, and Yemen. In January 2016, Saudi Arabia executed a Shiite cleric charged with sparking anti-government protests and cut diplomatic ties with Iran after Iranian mobs enraged by the execution attacked and set fire to the Saudi embassy in Tehran.⁴⁸

In addition to terrorist threats and possible rebellions by Shia or other disaffected internal groups, Saudi Arabia and the other GCC states face possible military threats from Iran. Because of their close security ties with the United States, Tehran is unlikely to launch direct military attacks against these countries, but it has backed Shiite terrorist groups like Saudi

Hezbollah within GCC states and has supported the Shiite Houthi rebels in Yemen. In March 2015, Saudi Arabia led a 10-country coalition that launched a military campaign against Houthi forces and provided support for ousted Yemeni President Abdu Rabu Mansour Hadi, who took refuge in Saudi Arabia. The Saudi Navy also established a blockade of Yemeni ports to prevent Iran from aiding the rebels.

The Houthis have retaliated by launching Iranian-supplied missiles at military and civilian targets in Saudi Arabia and the UAE, including ballistic missile attacks on airports, Riyadh, and other cities, as well as cruise missile strikes. In December 2017, the Houthis launched a cruise missile attack on an unfinished nuclear reactor in Abu Dhabi. The Houthis also have made extensive use of UAVs and UCAVs (unmanned combat aerial vehicles, or armed drones). A Houthi UCAV attacked a military parade in Yemen in January 2019, killing at least six people including Yemen's commander of military intelligence, and longer-range UCAVs were used in a coordinated attack on Saudi Arabia's East-West pipeline on May 14, 2019.49

Threats to the Commons

The United States has critical interests at stake in the Middle Eastern commons: sea, air, space, and cyber. The U.S. has long provided the security backbone in these areas, and this security in turn has supported the region's economic development and political stability.

Maritime. Maintaining the security of the sea lines of communication in the Persian Gulf, Arabian Sea, Red Sea, and Mediterranean Sea is a high priority for strategic, economic, and energy security purposes. The Persian Gulf region contains approximately 50 percent of the world's oil reserves and is a crucial source of oil and gas for energy-importing states, particularly China, India, Japan, South Korea, and many European countries. Interstate conflict or terrorist attacks could easily interrupt the flow of that oil.

Bottlenecks such as the Strait of Hormuz, Suez Canal, and Bab el-Mandeb Strait are potential choke points for restricting the flow of oil, international trade, and the deployment of U.S. Navy warships. The chief potential threat to the free passage of ships through the Strait of Hormuz, one of the world's most important maritime choke points, is Iran. According to one recent account:

The U.S. Energy Information Administration estimated that 18.5 million barrels per day (bpd) of seaborne oil passed through the waterway in 2016. That was about 30 percent of crude and other oil liquids traded by sea in 2016.

About 17.2 million bpd of crude and condensates were estimated to have been shipped through the Strait in 2017 and about 17.4 million bpd in the first half of 2018, according to oil analytics firm Vortexa.

With global oil consumption standing at about 100 million bpd, that means almost a fifth passes through the Strait.

Most crude exported from Saudi Arabia, Iran, the UAE, Kuwait and Iraq — all members of the Organization of the Petroleum Exporting Countries — is shipped through the waterway.

It is also the route used for nearly all the liquefied natural gas (LNG) produced by the world's biggest LNG exporter, Qatar.⁵⁰

Iran has trumpeted the threat that it could pose to the free flow of oil exports from the Gulf if it is attacked or if a cutoff of its own oil exports is threatened. Iran's leaders have threatened to close the Strait of Hormuz, the jugular vein through which most Gulf oil exports flow to Asia and Europe. Although the United States has greatly reduced its dependence on oil exports from the Gulf, it still would sustain economic damage in the event of a spike in world oil prices, and many of its European and Asian allies and trading partners

import a substantial portion of their oil needs from the region.

Supreme Leader Ayatollah Ali Khamenei has repeatedly played up Iran's threat to international energy security, proclaiming in 2006 that "[i]f the Americans make a wrong move toward Iran, the shipment of energy will definitely face danger, and the Americans would not be able to protect energy supply in the region." Iranian officials often reiterate these threats during periods of heightened tension. For example, the chief of staff of Iran's army, Major General Mohammad Baqeri, warned on April 28, 2019, that "if our oil does not pass, the oil of others shall not pass the Strait of Hormuz either." 52

Iran has established a precedent for attacking oil shipments in the Gulf. During the Iran–Iraq war, each side targeted the other's oil facilities, ports, and oil exports. Iran escalated attacks to include neutral Kuwaiti oil tankers and terminals and clandestinely laid mines in Persian Gulf shipping lanes while its ally Libya clandestinely laid mines in the Red Sea. The United States defeated Iran's tactics by reflagging Kuwaiti oil tankers, clearing the mines, and escorting ships through the Persian Gulf, but a large number of commercial vessels were damaged during the "Tanker War" from 1984 to 1987.

Iran's demonstrated willingness to disrupt oil traffic through the Persian Gulf in the past to place economic pressure on Iraq is a red flag to U.S. military planners. During the 1980s Tanker War, Iran's ability to strike at Gulf shipping was limited by its aging and outdated weapons systems and the arms embargo imposed by the U.S. after the 1979 revolution, but since the 1990s, Iran has been upgrading its military with new weapons from North Korea, China, and Russia, as well as with weapons manufactured domestically.

Since the Iran-Iraq war, Tehran has invested heavily in developing its naval forces, particularly the IRGC Navy, along unconventional lines. Today, Iran boasts an arsenal of Iranian-built missiles based on Russian and Chinese designs that pose significant threats

to oil tankers as well as warships. Iran has deployed mobile anti-ship missile batteries along its 1,500-mile gulf coast and on many of the 17 Iranian-controlled islands in the gulf, as well as modern anti-ship missiles mounted on fast attack boats, submarines, oil platforms, and vessels disguised as civilian fishing boats. Six of Iran's 17 islands in the gulf are particularly important because they are located close to the shipping channels that all ships must use near the Strait of Hormuz: Forur, Bani Forur and Sirri, and three islands seized from the United Arab Emirates: Abu Musa, Greater Tunb, and Lesser Tunb.

Iran has imported Russian submarines, North Korean minisubmarines, and a wide variety of advanced Chinese anti-ship missiles and has a significant stock of Chinese-designed anti-ship cruise missiles, including the older HY-2 Seersucker and the more modern CSS-N-4 Sardine and CSS-N-8 Saccade models. It also has reverse engineered Chinese missiles to produce its own Ra'ad and Noor anti-ship cruise missiles. More recently, Tehran has produced and deployed more advanced anti-ship cruise missiles, the Nasir and Qadir.⁵³ Shore-based missiles deployed along Iran's coast would be augmented by aircraft-delivered laser-guided bombs and missiles as well as by television-guided bombs.

Iran has a large supply of anti-ship mines, including modern mines that are far superior to the simple World War I–style contact mines that it used in the 1980s. In addition to expanding the quantity of its mines from an estimated 1,500 during the Iran–Iraq war to at least 6,000 and possibly up to 20,000, Tehran has increased their quality. It has acquired significant stocks of "smart mines" including versions of the Russian MDM-6, Chinese MC-52, and Chinese EM-11, EM-31, and EM-55 mines. ⁵⁴ One of Iran's most lethal mines is the Chinese-designed EM-52 "rocket" mine, which remains stationary on the sea floor and fires a homing rocket when a ship passes overhead.

Iran can deploy mines or torpedoes from its three *Kilo*-class submarines, purchased from Russia, which are based at Bandar Abbas, Iran's largest seaport and naval base. These submarines could be difficult to detect for brief periods when running silent and remaining stationary on a shallow bottom just outside the Strait of Hormuz.⁵⁵ Iran could also deploy mines by minisubmarines, helicopters, or small boats disguised as fishing vessels. Iran's robust mine warfare capability and the limited capacity for countermine operations by the U.S. Navy and allied navies pose a major challenge to gulf maritime security.⁵⁶

Iran has developed two separate naval forces. The regular navy takes the lead in the Caspian Sea and outside the Strait of Hormuz in the Gulf of Oman, while the Islamic Revolutionary Guard Corps Navy is Iran's dominant force inside the Persian Gulf. The IRGC Navy has developed an effective asymmetric naval warfare strategy that could enable it to counter the superior firepower and technology of the U.S. Navy and its GCC allies, at least for a short period, and has adopted swarming tactics using well-armed fast attack boats to launch surprise attacks against larger and more heavily armed naval adversaries.

The commander of the IRGC Navy bragged in 2008 that it had brought guerilla warfare tactics to naval warfare: "We are everywhere and at the same time nowhere." The IRGC has honed such unconventional tactics as deploying remote-controlled radar decoy boats and boats packed with explosives to confuse defenses and attack adversaries. The IRGC also could deploy naval commandos trained to attack using small boats, minisubmarines, and even jet skis, as well as underwater demolition teams that could attack offshore oil platforms, moored ships, ports, and other facilities.

On April 28, 2015, the Revolutionary Guard naval force seized the *Maersk Tigris*, a container ship registered in the Marshall Islands, near the Strait of Hormuz. Tehran claimed that it seized the ship because of a previous court ruling ordering the Maersk Line, which charters the ship, to make a payment to settle a dispute with a private Iranian company. The ship was later released after being held for more than a week. ⁵⁸ On May 14, 2015, the *Alpine Eternity*,

an oil tanker flagged in Singapore, was surrounded and attacked by Revolutionary Guard gunboats in the strait when it refused to be boarded. Iranian authorities alleged that it had damaged an Iranian oil platform in March, but the ship's owners maintained that it had hit an uncharted submerged structure.⁵⁹

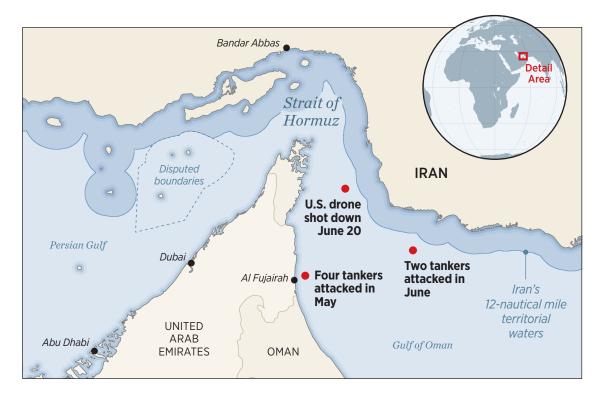
The Revolutionary Guard's aggressive tactics in using commercial disputes as pretexts for illegal seizures of transiting vessels prompted the U.S. Navy to escort American and British-flagged ships through the Strait of Hormuz for several weeks in May before tensions eased.

The July 2015 nuclear agreement did not alter the confrontational tactics of the Revolutionary Guards in the Gulf.60 IRGC naval forces frequently challenged U.S. naval forces in a series of incidents. IRGC missile boats launched rockets within 1,500 yards of the carrier Harry S. Truman near the Strait of Hormuz in late December 2015, flew drones over U.S. warships, and detained and humiliated 10 American sailors in a provocative January 12, 2016, incident.⁶¹ Despite the fact that the two U.S. Navy boats carrying the sailors had drifted inadvertently into Iranian territorial waters, the vessels had the right of innocent passage, and their crews should not have been disarmed, forced onto their knees, filmed, and exploited in propaganda videos.

Iran halted the harassment of U.S. Navy ships in 2017 for unknown reasons. According to U.S. Navy reports, Iran instigated 23 "unsafe and/or unprofessional" interactions with U.S. Navy ships in 2015, 35 in 2016, and 14 in the first eight months of 2017, with the last incident occurring on August 14, 2017.⁶² Although this was a welcome development, the provocations could resume suddenly if U.S.–Iran relations deteriorate.

Iran apparently already has escalated its intimidation tactics against international shipping near the gulf. On May 12, 2019, four oil tankers were damaged by mysterious explosions off the coast of the UAE in the Gulf of Oman. Then-U.S. National Security Adviser John Bolton stated that "naval mines almost

Iranian Aggression in the Strait of Hormuz



NOTE: Locations of incidents are approximate.

SOURCES: Weiyi Cai, Denise Lu, and Anjali Singhvi, "Three Attacks in the World's Oil Choke Point," *The New York Times*, June 21, 2019, https://www.nytimes.com/interactive/2019/06/21/world/middleeast/map-us-iran-drone-attack.html (accessed July 8, 2019), and other media reports.

certainly from Iran" were the cause of the damage. ⁶³ On June 13, two more tankers were attacked in the Gulf of Oman. Even though Iranian Revolutionary Guards were filmed removing an unexploded limpet mine from one of the damaged ships, Tehran continued to deny its involvement in all of the attacks. ⁶⁴ An IRGC surface-to-air missile shot down a U.S. surveillance drone in international air space on June 19. The U.S. initially planned to launch retaliatory strikes, but President Trump called off the operation. ⁶⁵

If Tehran were to attack ships transiting the Strait of Hormuz, the United States and its allies have the capacity to counter Iran's maritime threats and restore the flow of oil exports, but "the effort would likely take some time—days, weeks, or perhaps months—particularly if a large number of Iranian mines need to be cleared from the Gulf." Naval warfare experts estimated in May 2019 that Iran could close the strait for up to four weeks with its combined forces, using coastal missile batteries, mines, submarines, and naval forces. Such an aggressive move would be very costly and risky for Tehran. Closing the strait would also block Iran's oil exports and many of its imports, including food and medicine. Moreover, most

of Iran's naval forces, naval bases, and other military assets could be destroyed in the resulting conflict.

In addition to using its own forces, Tehran could use its extensive network of clients in the region to sabotage oil pipelines and other infrastructure or to strike oil tankers in port or at sea. Iranian Revolutionary Guards deployed in Yemen reportedly played a role in the unsuccessful October 9 and 12, 2016, missile attacks launched by Houthi rebels against the USS *Mason*, a U.S. Navy warship, near the Bab el-Mandeb Strait in the Red Sea. ⁶⁸ The Houthis denied that they launched the missiles, but they did claim responsibility for an October 1, 2016, attack on a UAE naval vessel and the suicide bombing of a Saudi warship in February 2017.

Houthi irregular forces have deployed mines along Yemen's coast, used a remote-controlled boat packed with explosives in an unsuccessful attack on the Yemeni port of Mokha in July 2017, and have launched several unsuccessful naval attacks against ships in the Red Sea. Houthi gunboats also attacked and damaged a Saudi oil tanker near the port of Hodeidah on April 3, 2018.

U.N. investigators have concluded that the Houthis also operate UAVs with a range of up to 1,500 kilometers (930 miles), several of which were used to attack Saudi Arabia's East–West pipeline on May 14, 2019.⁶⁹ This attack, along with attacks on oil tankers in the Gulf of Oman two days earlier, likely was a signal from Tehran that it can also disrupt oil shipments outside the Persian Gulf in a crisis.

Airspace. The Middle East is particularly vulnerable to attacks on civilian aircraft. Large quantities of arms, including man-portable air defense systems, were looted from arms depots in Libya, Iraq, Syria, and Yemen during civil wars and could find their way into the hands of Iranian-supported groups. Iran has provided anti-aircraft missiles to Hezbollah, Iraqi militias, and the Houthi rebels in Yemen. The Houthis also have attacked Saudi airports with ballistic missiles and armed drones, although they may have been targeting military facilities located nearby.⁷⁰

Perhaps the greatest Iranian threat to civil aviation would come in the event of a military clash in the crowded skies over the Persian Gulf. The U.S. Federal Aviation Administration issued a warning to commercial airlines on May 16, 2019, during a period of heightened tensions with Iran, explaining that civilian planes risked being targeted by "miscalculation or misidentification" from the Iranian military.⁷¹

Space. Iran has launched satellites into orbit, but there is no evidence that it has an offensive space capability. Tehran successfully launched three satellites in February 2009, June 2011, and February 2012 using the Safir space launch vehicle, which uses a modified Ghadr-1 missile for its first stage and has a second stage that is based on an obsolete Soviet submarine-launched ballistic missile, the R-27.⁷² The technology probably was transferred by North Korea, which built its BM-25 missiles using the R-27 as a model.⁷³ Safir technology could be used to develop long-range ballistic missiles.

Iran claimed that it launched a monkey into space and returned it safely to Earth twice in 2013.⁷⁴ Tehran also announced in June 2013 that it had established its first space tracking center to monitor objects in "very remote space" and help manage the "activities of satellites."⁷⁵ On July 27, 2017, Iran tested a Simorgh (Phoenix) space launch vehicle that it claimed could place a satellite weighing up to 250 kilograms (550 pounds) in an orbit of 500 kilometers (311 miles).⁷⁶

Cyber Threats. Iranian cyber capabilities present a significant threat to the U.S. and its allies. Iran has developed offensive cyber capabilities as a tool of espionage and sabotage and claims "to possess the 'fourth largest' cyber force in the world—a broad network of quasi-official elements, as well as regime-aligned 'hacktivists,' who engage in cyber activities broadly consistent with the Islamic Republic's interests and views."

The creation of the "Iranian Cyber Army" in 2009 marked the beginning of a cyber offensive against those whom the Iranian government regards as enemies. A hacking group dubbed the Ajax Security Team, believed to be operating out of Iran, has used malware-based attacks to target U.S. defense organizations and has breached the Navy Marine Corps Intranet. The group also has targeted dissidents within Iran, seeding versions of anti-censorship tools with malware and gathering information about users of those programs. Iran has invested heavily in cyber activity, reportedly spending over \$1 billion on its cyber capabilities in 2012 alone.

According to an April 2015 report released by the American Enterprise Institute, hostile Iranian cyber activity has increased significantly since the beginning of 2014 and could threaten U.S. critical infrastructure. The Islamic Revolutionary Guard Corps and Sharif University of Technology are two Iranian institutions that investigators have linked to efforts to infiltrate U.S. computer networks.⁸¹

Iran allegedly has used cyber weapons to engage in economic warfare, most notably the sophisticated and debilitating "[distributed] denial-of-service (DDoS) attacks against a number of U.S. financial institutions, including the Bank of America, JPMorgan Chase, and Citigroup."82 In February 2014, Iran launched a crippling cyberattack against the Sands Casino in Las Vegas, owned by Sheldon Adelson, a leading supporter of Israel who is known to be critical of the Iranian regime.83 In 2012, Tehran was suspected of launching both the "Shamoon" virus attack on Saudi Aramco, the world's largest oil-producing company—an attack that destroyed approximately 30,000 computers-and an attack on Qatari natural gas company Rasgas's computer networks.84

U.S. officials warned of a surge of sophisticated computer espionage by Iran in the fall of 2015 that included a series of cyberattacks against State Department officials. State Department indicted seven Iranian hackers for penetrating the computer system that controlled a dam in the State of New York. Se

The sophistication of these and other Iranian cyberattacks, together with Iran's willingness to use these weapons, has led various experts to characterize Iran as one of America's most cyber-capable opponents. Iranian cyber forces have gone so far as to create fake online personas in order to extract information from U.S. officials through such accounts as LinkedIn, YouTube, Facebook, and Twitter.⁸⁷ Significantly, the FBI sent the following cyber alert to American businesses on May 22, 2018:

The FBI assesses [that] foreign cyber actors operating in the Islamic Republic of Iran could potentially use a range of computer network operations—from scanning networks for potential vulnerabilities to data deletion attacks—against U.S.-based networks in response to the U.S. government's withdrawal from the Joint Comprehensive Plan of Action (JCPOA).88

Conclusion

Iran represents by far the most significant security challenge to the United States, its allies, and its interests in the greater Middle East. Its open hostility to the United States and Israel, sponsorship of terrorist groups like Hezbollah, and history of threatening the commons underscore the problem it could pose. Today, Iran's provocations are mostly a concern for the region and America's allies, friends, and assets there. Iran relies heavily on irregular (to include political) warfare against others in the region and fields more ballistic missiles than any of its neighbors. The development of its ballistic missiles and potential nuclear capability also mean that it poses a long-term threat to the security of the U.S. homeland.

According to the International Institute for Strategic Studies, among the key weapons in Iran's inventory are up to 50 medium-range ballistic missile launchers, as many as 100 short-range ballistic missile launchers, 336 combat-capable aircraft, 1,513 or more main battle tanks, 640 or more armored personnel carriers, 21 tactical submarines, six corvettes, and 15 amphibious landing ships. There are 523,000 personnel in the armed forces,

including 350,000 in the Army, upwards of 125,000 in the Islamic Revolutionary Guard Corps, 30,000 in the Air Force, and 18,000 in the Navy. With regard to these capabilities, the IISS assesses that:

The armed forces are numerous by regional standards and its personnel are reasonably well trained, with some benefitting from operational experience. The IRGC's Quds Force is a principal element of Iran's military power abroad, while elements of the Basij militia also

play a foreign role. The regular navy has limited power-projection capabilities, while the IRGC navy is responsible for maritime security close to home. The armed forces struggle with an aging inventory of primary combat equipment that ingenuity and asymmetric warfare techniques can only partially offset.⁸⁹

This *Index* assesses the overall threat from Iran, considering the range of contingencies, as "aggressive." Iran's capability score holds at "gathering." ⁹⁰

Threats: Iran

	HOSTILE	AGGRESSIVE	TESTING	ASSERTIVE	BENIGN
Behavior		✓			
	FORMIDABLE	GATHERING	CAPABLE	ASPIRATIONAL	MARGINAL
Capability		~			

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- 90. This *Index* scores threat capability as it relates to the vital national interests of the U.S. and the role and utility of U.S. military forces. Terrorist groups clearly have the ability to conduct attacks using improvised explosive devices (IEDs), firearms, and even hijacked airplanes. The bombing of the Boston Marathon in April 2013, an attempted car bomb attack in New York City's Times Square in May 2010, and al-Qaeda's attacks on September 11, 2001, are stark examples. Often, the U.S. has handled terrorism as a law enforcement and intelligence collection matter, especially within the United States and when it presents a threat to particular U.S. interests in other countries. Compared to the types of threats posed by states such as China or Russia, terrorism is a lesser sort of threat to the security and viability of the U.S. as a global power. This *Index* does not dismiss the deaths, injuries, and damage that terrorists can inflict on Americans at home and abroad; it places the threat posed by terrorism in context with substantial threats to the U.S. homeland, the potential for major regional conflict, and the potential to deny U.S. access to the global commons. With this in mind, terrorist groups seldom have the physical ability either to accomplish the extreme objectives they state or to present a physical threat that rises to a level that threatens U.S. vital security interests. Of course, terrorist organizations can commit acts of war on a continuing basis, as reflected in their conduct in the war against al-Qaeda and its associates in which the United States has been engaged for more than a decade.

North Korea

7 ith its active and growing ballistic missile capability, North Korea poses definite threats to the U.S. homeland in addition to contributing to the general threat of regional war in Asia and threatening U.S. bases in South Korea, Japan, and Guam. North Korean belligerence toward the United States has included military and diplomatic threats. Pyongyang's provocative behavior also includes nuclear and missile tests and tactical-level attacks on South Korea, a critical American ally that remains under active threat of attack and invasion from the North, and Japan faces both intimidation attacks intended to deny the U.S. its base access to Japan and nuclear attacks on U.S. bases in the case of conflict on the Korean Peninsula.1

Threats to the Homeland

In 2017, North Korea conducted three successful tests of two variants of its road-mobile intercontinental ballistic missile (ICBM). All launches were flown in an elevated trajectory so as not to fly over Japan and to allow testing of a reentry vehicle to protect a nuclear warhead during an attack. Experts assess that the Hwasong-14 ICBM has the capability to fly 10,000 or perhaps 11,000 kilometers. At that range, Los Angeles, Denver, and Chicago (and possibly New York City, Boston, and Washington, D.C.) are within range.2 The Hwasong-15 has a range of 13,000 kilometers and could reach the entire continental U.S.3 North Korea conducted its fourth and fifth nuclear tests in 2016 and its sixth—the first test of a much more powerful hydrogen bomb-in 2017.

These events clearly signaled that new leader Kim Jong-un had no intention of abiding

by U.N. resolutions that require a cessation of Pyongyang's nuclear and missile programs. North Korea has declared that it already has a full nuclear strike capability, even altering its constitution to enshrine itself as a nuclear-armed state. In 2017, Kim Jong-un declared that North Korea had completed development of a nuclear ICBM to threaten the American homeland and vowed to "bolster up the nuclear force in quality and quantity."

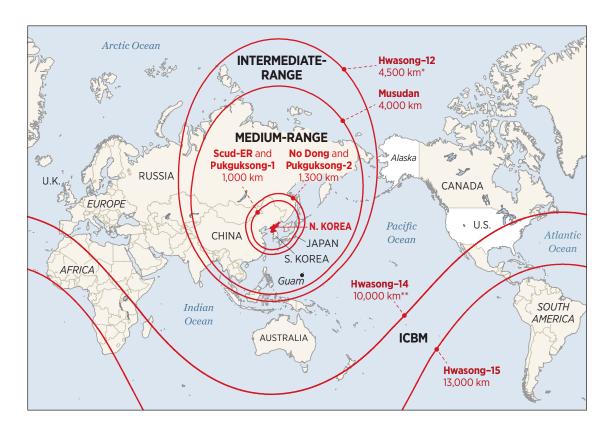
In January 2018, then-CIA Director Mike Pompeo assessed that North Korea would attain an ICBM capability within a "handful of months." Several U.S. military commanders, however, have stated their assessment that North Korea already has that capability, including U.S. Forces Korea in its 2019 Strategic Digest.

In 2016 and 2017, North Korea had breakthrough successes with many missiles in development. It successfully test-launched the Hwasong 12 intermediate-range ballistic missile, which can target critical U.S. bases in Guam, and both the Pukguksong-2 road-mobile medium-range ballistic missile and the Pukguksong-1 submarine-launched ballistic missile (SLBM).8

In June 2018, President Trump met with Kim Jong-un in Singapore and subsequently declared that "there is no longer a nuclear threat from North Korea" and that "total denuclearization already start[ed] taking place." Secretary of State Michael Pompeo repeatedly claimed that North Korean leader Kim Jong-un had accepted U.N.-mandated complete, verifiable, and irreversible dismantling of his nuclear, missile, and biological and chemical

North Korean Missiles

North Korean missiles can target South Korea, Japan, and U.S. bases in Guam and can now reach the United States



* First tested May 2017. ** First tested July 2017. **SOURCE:** Heritage Foundation research and media reports.

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weapons (BCW) programs. However, during the February 2019 Trump–Kim summit, it became clear that Kim has not agreed to do so and that the two sides still do not even have a common definition of "denuclearization" or what constitutes the Korean Peninsula.

Despite two U.S.-North Korea summit meetings, there has been no decrease in North Korea's weapons of mass destruction (WMD) arsenal or production capabilities. The U.S. Intelligence Community subsequently assessed that Pyongyang had increased its production of fissile material for nuclear weapons, and

satellite imagery showed upgrades to missile, reentry vehicle, missile launcher, and nuclear weapon production facilities. The Intelligence Community continues to assess that North Korea "is unlikely to give up all of its WMD stockpiles, delivery systems, and production capabilities."

Threat of Regional War

North Korea's conventional and nuclear missile forces threaten U.S. bases in South Korea, Japan, and Guam. Beyond its nuclear weapons programs, North Korea poses additional risks to its neighbors. North Korea has an extensive conventional ballistic missile force and has deployed approximately 800 Scud short-range tactical ballistic missiles, 300 No-dong medium-range missiles, and 50 Musudan intermediate-range ballistic missiles. The Scud missiles threaten South Korea, the No-dong can target all of Japan and South Korea, and the Musudan and Hwasong-12 intermediate-range ballistic missiles can hit U.S. bases on Okinawa and Guam. Pyongyang continues to develop several different ICBMs with enough range to hit the continental U.S.¹²

North Korea has "more than 1 million soldiers, making it the world's fourth-largest military," with reserves numbering several million more. In addition, "[a]bout 70 percent of [its] ground forces and 50 percent of its air and naval forces are deployed within approximately 60 miles of the Demilitarized Zone (DMZ)," making it possible to attack "with little to no warning," which is of particular concern because South Korea's capital, Seoul, is only 30 miles south of the DMZ.¹³

The April 2018 inter-Korean summit led to bilateral pledges of nonaggression and mutual force reduction. Similar pledges were also contained in the 1972, 1992, 2000, and 2007 joint statements, all of which Pyongyang subsequently violated or abrogated. None of those pledges prevented North Korea from conducting provocations, attempted assassinations of South Korea's president, terrorist acts, military and cyberattacks, and acts of war.

In September 2018, the two Koreas signed a Comprehensive Military Agreement to ease military tension and build confidence. The agreement seeks to reduce the danger that inadvertent tactical military clashes along the DMZ might escalate to larger strategic conflicts. However, static defensive positions like fixed concrete bunkers and minefields are not threatening and have never been the source of military clashes on the peninsula. Rather, the greatest danger arises from the forward, offensively oriented disposition of North Korea's forces and the regime's history of making threats and initiating hostilities. The

confidence-building measures implemented to date have not reduced North Korea's tactical or strategic conventional military threat to South Korea, nor do they represent progress in denuclearization.

Due to a predicted shortfall of 18-year-old conscripts by 2025, South Korea has initiated a comprehensive defense reform strategy to transform its military into a smaller but more capable force to deal with the North Korean threat. Overall, South Korean military manpower will be reduced approximately 25 percent, from 681,000 to 500,000. The army would face the largest cuts, disbanding four corps and 23 divisions and cutting troops from 560,000 in 2004 to 370,000 in 2020. Seoul planned to compensate for decreased troop levels by procuring advanced fighter and surveillance aircraft, naval platforms, and ground combat vehicles.14 Some advisers to the Moon Jae-in administration have suggested that force levels could be reduced further if progress is made in improving inter-Korean relations.

That North Korea's conventional forces are a very real threat to South Korea was vividly demonstrated by two deadly attacks on South Korea in 2010. In March, a North Korean submarine sank the South Korean naval corvette *Cheonan* in South Korean waters, killing 46 sailors. ¹⁵ In November, North Korean artillery shelled Yeonpyeong Island, killing four South Koreans. ¹⁶

Since the North Korean military is equipped predominantly with older ground force equipment, Pyongyang has prioritized deployment of strong asymmetric capabilities that include special operations forces, longrange artillery, and missiles. As noted, North Korea has deployed hundreds of Scud shortrange ballistic missiles that can target all of South Korea with explosive, chemical, and biological warheads. The land and sea borders between North and South Korea remain unsettled, heavily armed, and subject to occasional, limited armed conflict.

Most nongovernment experts assess that North Korea has perhaps 16–20 nuclear weapons. However, South Korean Minister of Unification Cho Myoung-gyon commented in October 2018 that North Korea could have as many as 60 nuclear weapons. ¹⁷ North Korea's September 2017 hydrogen bomb test—in excess of 150 kilotons—demonstrated a thermonuclear hydrogen bomb capability. ¹⁸

Conclusion

The North Korean military poses a security challenge for American allies South Korea and Japan, as well as for U.S. bases in those countries and Guam. North Korean officials are belligerent toward the United States, often issuing military and diplomatic threats. Pyongyang has also engaged in a range of provocative behavior, including nuclear and missile tests and tactical-level attacks on South Korea.

North Korean forces arrayed against American allies in South Korea and Japan are substantial, and North Korea's history of provocation is a consistent indicator of its intent to achieve its political objectives by at least the

threat of force. Its missile capabilities are advancing, and although it has fewer warheads and systems than China, as well as questionable means of delivery, it is also less stable and less predictable, with a vastly lower stake in the international system.

North Korea has used its missile and nuclear tests to enhance its prestige and importance domestically, regionally, and globally and to extract various concessions from the United States in negotiations over its nuclear program and various aid packages. Such developments also improve North Korea's military posture. Pyongyang likely has already achieved warhead miniaturization, the ability to place nuclear weapons on its medium-range missiles, and an ability to reach the continental United States with a missile.

This *Index* assesses the overall threat from North Korea, considering the range of contingencies, as "testing" for level of provocation of behavior and "gathering" for level of capability.

Threats: North Korea

	HOSTILE	AGGRESSIVE	TESTING	ASSERTIVE	BENIGN
Behavior			✓		
	FORMIDABLE	GATHERING	CAPABLE	ASPIRATIONAL	MARGINAL
Capability		✓			

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Afghanistan/Pakistan

Terrorist threats from non-state actors in ungoverned areas of Afghanistan and Pakistan are an ongoing threat to the U.S. homeland, and the threat of regional war is exacerbated by nuclear rivalry and territorial disputes between Pakistan and India. One of the keys to America's strategic footprint in Asia is its growing security partnership with India, which is geographically positioned between two major security threats: Pakistan to its west and China to its northeast. From Pakistan, India also faces the additional threat of terrorism, whether state-enabled or carried out without state knowledge or control.

Afghanistan War. On October 7, 2001, U.S. forces invaded Afghanistan in response to the September 11, 2001, terrorist attacks on the United States. This marked the beginning of Operation Enduring Freedom to combat al-Qaeda and its Taliban supporters. The U.S., in alliance with the United Kingdom and the anti-Taliban Afghan Northern Alliance forces, ousted the Taliban from power in December 2001. Most Taliban and al-Qaeda leaders fled across the border into Pakistan's Federally Administered Tribal Areas, where they regrouped and started an insurgency in Afghanistan in 2003.

In August 2003, NATO joined the war in Afghanistan and assumed control of the International Security Assistance Force (ISAF). At the height of the war in 2011, there were 50 troop-contributing nations and nearly 150,000 NATO and U.S. forces on the ground in Afghanistan.

On December 28, 2014, NATO formally ended combat operations and relinquished

responsibility to the Afghan security forces, which numbered around 352,000 (including army and police). After Afghan President Ashraf Ghani signed a bilateral security agreement with the U.S. and a Status of Forces Agreement with NATO, the international coalition launched Operation Resolute Support to train and support Afghan security forces.

In August 2017, while declining to announce specific troop levels, President Donald Trump recommitted America to the effort in Afghanistan and announced that "[c]onditions on the ground-not arbitrary timetables-will guide our strategy from now on."2 According to the most recent available public information, the U.S. currently has around 14,000 troops in Afghanistan, split between the roughly 5,500 for the U.S.-led Operation Freedom Sentinel counterterrorism mission and slightly less than 8,500 for the NATO-led Resolute Support training mission. The latter also includes another approximately 8,500 troops from various NATO countries, bringing the total U.S. and NATO troop presence in Afghanistan to approximately 17,000.3 Most U.S. and NATO forces are stationed at bases in Kabul, with tactical advise-and-assist teams located there and in Mazar-i-Sharif, Herat, Kandahar, and Laghman.

In 2018, U.S. Special Envoy Zalmay Khalilzad began negotiations with the Taliban in Qatar in an attempt to find a political solution to the fighting. To date, little progress has been made. The Afghan government has not participated in the talks because the Taliban has refused to meet with them. This has caused tension between the U.S. and Afghan governments. Whether the U.S. will be able to bring all parties to the table and achieve a politically acceptable conclusion to the war remains to be seen. Meanwhile, U.S. forces in Afghanistan continue to face regular attacks from Taliban militants and their allies, although casualties have fallen considerably in recent years, with less than a dozen U.S. troops killed in combat in 2015, 2016, and 2017.⁴ There were 14 U.S. troop casualties in Afghanistan in 2018.⁵

In the spring of 2019, the Administration was rumored to be considering a plan to reduce American troop levels in Afghanistan by half while shifting the focus from counterterrorism to the training of Afghan security forces,⁶ but no final decision has been made.

Threats to the Homeland

Terrorist Groups Operating in Afghanistan and Pakistan (AfPak). Terrorist groups operating from Pakistan continue to pose a direct threat to the U.S. homeland. Pakistan is home to a host of terrorist groups that keep the region unstable and contribute to the spread of global terrorism. The killing of Osama bin Laden at his hideout in Abbottabad, Pakistan, in May 2011 and an intensive drone campaign in Pakistan's tribal areas bordering Afghanistan have helped to degrade the al-Qaeda threat there, but the residual presence of al-Qaeda and the emergence of ISIS in neighboring Afghanistan remain serious concerns.

This is a deadly region. In December 2016, General John W. Nicholson, Jr., then-Commander, Resolute Support and U.S. Forces–Afghanistan, stated that "there are 98 U.S.-designated terrorist groups globally. Twenty of them are in the AfPak region. This represents the highest concentration of terrorist groups anywhere in the world...13 in Afghanistan, seven in Pakistan."

Efforts by ISIS to make inroads into Pakistan and Afghanistan have met with only limited success, most likely because of other terrorist groups' well-established roots in the region. The Afghan Taliban views ISIS as a direct competitor for financial resources, recruits, and ideological influence. This competition

was evident in a June 16, 2015, letter sent by the Taliban to ISIS leader Abu Bakr al-Baghdadi, urging his group not to take actions that could lead to "division of the Mujahideen's command." There also have been reports of clashes between ISIS militants and the Taliban in eastern and southern Afghanistan.

Reports of an ISIS presence in Afghanistan first began to surface in 2014, and the group has slowly gained a small foothold in the country. Though its actual numbers remain modest, its high-profile, high-casualty terrorist attacks have helped it to attract followers. In 2017 and 2018, several high-profile attacks in the Afghan capital and elsewhere targeted cultural centers, global charities, voter registration centers, and Afghan military and intelligence facilities, although they still pale in comparison to the number of attacks launched by the Taliban. In 2017 and 2018, ISIS representatives claimed responsibility for a series of attacks across Pakistan that killed over one hundred people and injured countless more.9

In April 2017, the U.S. military claimed that there were 700 ISIS fighters in Afghanistan; in November, however, General Nicholson said that 1,600 ISIS fighters had been "remov[ed]" from the battlefield since March.¹⁰ In June 2017, a U.S. air strike killed Abu Sayed, the head of ISIS-Khorasan. A report issued by the United Nations Security Council in February 2019 claimed that ISIS had "between 2,500 and 4,000" fighters in Afghanistan. 11 U.S. estimates are roughly in agreement; the Lead Inspector General's January 1, 2019-March 31, 2019, quarterly report on Operation Freedom's Sentinel specifies 3,000-5,000.12 In March 2019, General Joseph Votel, the head of CENTCOM, said that he believed "ISIS Khorasan does have ideations focused on external operations toward our homeland."13

Experts believe that there is little coordination between the ISIS-Khorasan branch operating in Afghanistan and the central command structure of the group located in the Middle East. Instead, it draws recruits from disaffected members of the Pakistani Taliban and other radicalized Afghans and has frequently

found itself at odds with the Afghan Taliban, with which it competes for resources, territory, and recruits.

Pakistan's continued support for terrorist groups that have links to al-Qaeda, the Taliban, and the Haqqani Network undermines U.S. counterterrorism goals in the region. Pakistan's military and intelligence leaders maintain a short-term tactical approach of fighting some terrorist groups that are deemed to be a threat to the state while supporting others that are aligned with Pakistan's goal of extending its influence and curbing India's.

A December 16, 2014, terrorist attack on a school in Peshawar that killed over 150 people, most of whom were children, shocked the Pakistani public and prompted Prime Minister Nawaz Sharif's government to introduce a National Action Plan (NAP) to reinvigorate the country's fight against terrorism. Implementation of the NAP and the Pakistani military's operations against TTP (Pakistani Taliban) hideouts in North Waziristan have helped to reduce Pakistan's internal terrorist threat to some degree. According to the India-based South Asia Terrorism Portal, total fatalities in Pakistan (including terrorists/insurgents) have been on a steady decline since 2009, when they peaked at 11,704. Since then, they have fallen to 5,496 in 2014, 1,803 in 2016, 1,260 in 2017, 691 in 2018, and 228 as of June 23, 2019.14

However, there are few signs that Pakistan's crackdown on terrorism extends to groups that target India, such as the Lashkar-e-Taiba (LeT), which was responsible for the 2008 Mumbai attacks, and the Jaish-e-Mohammed (JeM), which carried out an attack on the Indian parliament in 2001, another on the airbase at Pathankot in 2016, and the deadliest attack on Indian security forces in Kashmir in February 2019.¹⁵

Threat of Regional War

Pakistan's Nuclear Weapons Stockpile.

In September 2018, the *Bulletin of the Atomic Scientists* estimated that Pakistan "has a nuclear weapons stockpile of 140 to 150 warheads" that could "realistically grow to 220 to 250

warheads by 2025, if the current trend continues." The possibility that terrorists could gain effective access to Pakistani nuclear weapons is contingent on a complex chain of circumstances. In terms of consequence, however, it is the most dangerous regional threat scenario. Concern about the safety and security of Pakistan's nuclear weapons increases when India–Pakistan tensions increase. During the 1999 Kargil crisis, for example, U.S. intelligence indicated that Pakistan had made "nuclear preparations," and this spurred greater U.S. diplomatic involvement in defusing the crisis. ¹⁷

If Pakistan were to move around its nuclear assets or, worse, take steps to mate weapons with delivery systems, the likelihood of terrorist theft or infiltration would increase. Increased reliance on tactical nuclear weapons (TNWs) is of particular concern because launch authorities for TNWs are typically delegated to lower-tier field commanders far from the central authority in Islamabad. Another concern is the possibility that miscalculations could lead to regional nuclear war if India's leaders were to lose confidence that nuclear weapons in Pakistan are under government control or, conversely, were to assume that they were under Pakistani government control after they ceased to be.

There are additional concerns that Islamist extremist groups with links to the Pakistan security establishment could exploit those links to gain access to nuclear weapons technology, facilities, and/or materials. The realization that Osama bin Laden stayed for six years within a half-mile of Pakistan's premier defense academy has fueled concern that al-Qaeda can operate relatively freely in parts of Pakistan and might eventually gain access to Pakistan's nuclear arsenal. The Nuclear Threat Initiative's Nuclear Security Index ranks 22 countries with "weapons useable nuclear material" for their susceptibility to theft. Pakistan's weapons-grade materials were ranked the 20th least secure in 2018, with only Iran's and North Korea's ranking lower.18

There is the additional (though less likely) scenario of extremists gaining access through

a collapse of the state. While Pakistan remains unstable because of its weak economy, regular terrorist attacks, sectarian violence, civil–military tensions, and the growing influence of religious extremist groups, it is unlikely that the Pakistani state will collapse altogether. The country's most powerful institution, the 550,000-strong army that has ruled Pakistan for almost half of its existence, would almost certainly intervene and assume control once again if the political situation began to unravel. The potential breakup of the Pakistani state would have to be preceded by the disintegration of the army, which currently is not plausible.¹⁹

Pakistan–India Conflict. India and Pakistan have fought four wars since partition in 1947, including conflicts in 1947, 1965, 1971, and 1999. Deadly border skirmishes across the Line of Control in Kashmir, a disputed territory claimed in full by both India and Pakistan, are commonplace.

Another India-Pakistan conflict would jeopardize multiple U.S. interests in the region and could increase the threat of global terrorism if Pakistan were destabilized. Pakistan would rely on militant non-state actors to help it fight India, thereby creating a more permissive environment in which various terrorist groups could operate freely. The potential for a nuclear conflict would threaten U.S. businesses in the region and disrupt investment and trade flows, mainly between the U.S. and India, whose bilateral trade in goods and services "totaled an estimated \$142.1 billion in 2018."20 A conflict would also strain America's ties with one or both of the combatants at a time when Pakistan-U.S. ties are already under severe stress and America is trying to build a stronger partnership with India. The effects of an actual nuclear exchange-both the human lives lost and the long-term economic damage—would be devastating.

India and Pakistan are engaged in a nuclear competition that threatens stability throughout the subcontinent. Both countries tested nuclear weapons in 1998, establishing themselves as overtly nuclear weapons states,

although India first conducted a "peaceful" nuclear weapons test in 1974. Both countries also are developing naval nuclear weapons and already possess ballistic missile and aircraft-delivery platforms.²¹

As noted, Pakistan has a stockpile of 140 to 150 nuclear warheads. It also "has lowered the threshold for nuclear weapons use by developing tactical nuclear weapons capabilities to counter perceived Indian conventional military threats."²² This in turn affects India's nuclear use threshold, which could affect China and possibly others.

The broader military and strategic dynamic between India and Pakistan has grown more volatile since the May 2014 election of Bharatiya Janata Party (BJP) leader Narendra Modi as India's prime minister. Modi invited Pakistani Prime Minister Nawaz Sharif to his swearing-in ceremony but then later called off foreign secretary-level talks that were scheduled for August 2014 to express anger over a Pakistani official's meeting with Kashmiri separatist leaders. During the same month, the two sides engaged in intense firing and shelling along their international border (called the working boundary) and across the Line of Control that divides Kashmir. A similar escalation in border tensions occurred again in October 2014 when a series of firing incidents claimed more than a dozen casualties with several dozen more injured.23

On December 25, 2015, a meeting did occur when Modi made an impromptu visit to Lahore—the first visit to Pakistan by an Indian leader in 12 years—to meet with Sharif. The visit created enormous goodwill between the two countries and raised hope that official dialogue would soon resume. Again, however, violence marred the new opening. Six days after the meeting, militants attacked an Indian airbase at Pathankot, killing seven Indian security personnel.²⁴

As a result, official India-Pakistan dialogue remains deadlocked even though the two sides are reportedly communicating quietly through their foreign secretaries and national security advisers. With Prime Minister Modi's BJP

sweeping national elections in May 2019 and earning him a second term in office, few expect any major breakthroughs in the near term. As noted, Pakistan continues to harbor terrorist groups like Lashkar-e-Taiba and Jaish-e-Mohammed. The latter was responsible for a January 2, 2016, attack on the Indian airbase at Pathankot, a February 2018 attack on an Indian army camp in Kashmir, and a February 2019 attack on Indian security forces in Kashmir, the deadliest single terrorist attack in the disputed region since an insurgency erupted in 1989.²⁵

Hafez Muhammed Saeed, LeT's founder and the leader of its front organization Jamaat-ud-Dawa (JuD), has periodically been placed under arrest, only later to be released. Previously, he had operated freely in Pakistan, often holding press conferences and inciting violence against India during large public rallies.

Some observers remain concerned about the impact of an international troop drawdown in Afghanistan. Such a drawdown could enable the Taliban and other extremist groups to strengthen their grip in the region, further undermining stability in Kashmir and raising the chances of another major terrorist attack against India. A successful future attack on Indian interests in Afghanistan along the lines of the bombing of the Indian embassy in Kabul in 2008 would sharpen tensions between New Delhi and Islamabad.

With terrorist groups operating relatively freely in Pakistan and maintaining links to the country's military and intelligence services, there is a moderate risk that the two countries might eventually engage in all-out conflict. Pakistan's recent focus on incorporating tactical nuclear weapons into its warfighting doctrine has also raised concern that conflict now involves a higher risk of nuclear exchange. ²⁶

Pakistan's nuclear weapons capability appears to have acted as a deterrent against Indian military escalation, both during the 2001–2002 military crisis and following the 2008 Mumbai attacks, but the Indian government has been under growing pressure to react strongly to terrorist provocations. In 2016,

following an attack on an Indian army base in Uri, Kashmir, that killed 19 Indian soldiers, the Indian military reportedly launched surgical strikes on terrorist targets across the Line of Control in Pakistan-administered Kashmir. The Indian press indicated that up to 80 Indian commandos crossed the Line of Control on foot and destroyed seven "terror launch pads," with attack helicopters on standby.²⁷

Following a deadly attack on Indian security forces in Pulwama, Kashmir, in February 2019, India launched an even more daring cross-border raid. For the first time since the Third India–Pakistan War of 1971, the Indian air force crossed the Line of Control and dropped ordinance inside Pakistan proper (as opposed to disputed Kashmir), targeting several JeM training camps in Khyuber Pakhtunkhwa province. Delhi stressed that the "non-military" operation was designed to avoid civilian casualties and was preemptive in nature because it had credible intelligence that JeM was attempting other suicide attacks in the country.

In response, Pakistan launched fighter jets to conduct their own strike on targets located on India's side of the Line of Control in Kashmir, prompting a dogfight that resulted in the downing of an Indian MiG-21. Whether there were any casualties on either side in either strike is unclear. Pakistan released the captured MiG-21 pilot days later, putting an end to the brief but dangerous crisis.

Conclusion

The threat to the American homeland emanating from the AfPak region is diverse, complex, and mostly indirect, largely involving non-state actors. The intentions of non-state terrorist groups like the TTP, al-Qaeda, and ISIS toward the U.S. are demonstrably hostile. In addition, despite the broad and deep U.S. relationships with Pakistan's governing elites and military, it is likely that the political–military interplay in Pakistan and instability in Afghanistan will continue to result in an active threat to the American homeland.

Pakistan represents a paradox: It is both a security partner and a security challenge.

Islamabad provides a home and support to terrorist groups that are hostile to the U.S., to other U.S. partners in South Asia like India, and to the government in Afghanistan, which is particularly vulnerable to destabilization efforts. Both Pakistan and Afghanistan are already among the world's most unstable states, and the instability of the former, given its nuclear arsenal, has a direct bearing on U.S. security.

In addition, ongoing tensions between nuclear-armed rivals India and Pakistan could lead eventually to broader military conflict with some prospect of escalating to a nuclear

exchange. Neither side desires another general war, and both countries have limited objectives and have demonstrated their intent to avoid escalation. However, the likelihood of miscalculation and escalation has grown considerably since 2016 when India ended its policy of not responding to Pakistani-backed terrorist attacks.

This *Index* assesses the overall threat from AfPak-based actors to the U.S. homeland as "testing" for level of provocation of behavior and "capable" for level of capability.

Threats: Af-Pak Terrorism

	HOSTILE	AGGRESSIVE	TESTING	ASSERTIVE	BENIGN
Behavior			✓		
	FORMIDABLE	GATHERING	CAPABLE	ASPIRATIONAL	MARGINAL
Capability			✓		

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Non-State Actors

Terrorist groups come in many forms but have one thing in common: the use of violence to achieve their political objectives, whether their cause is driven by religious, ethnic, or ideological motivations. In general, these non-state actors operate in a very local context, usually within a specific country or sub-region. Sometimes a terrorist group's objectives extend beyond the internationally recognized borders of a state because their identity as a group transcends such legal or geographic boundaries.

Terrorist groups rarely pose a threat to the United States that rises to the threshold used by this *Index*: a substantial threat to the U.S. homeland; the ability to precipitate a war in a region of critical interest to the U.S.; or the ability to threaten the free movement of people, goods, or services through the global commons. Those that do meet these criteria are assessed in this section.

Terrorist Threats to the Homeland from the Middle East and North Africa

Radical Islamist terrorism in its various forms remains a global threat to the safety of U.S. citizens. Many terrorist groups operate in the Middle East, but those inspired by Islamist ideology also operate in Europe, Asia, and Africa.

The primary terrorist groups of concern to the U.S. homeland and to Americans abroad are the Islamic State of Iraq and al-Sham (ISIS) and al-Qaeda. Their threat is amplified when they can exploit areas with weak or nonexistent governance to plan, train, equip, and launch attacks. Al-Qaeda and Its Affiliates. Al-Qaeda was founded in 1988 by foreign veterans from among those who flocked to Afghanistan to join the war against the Soviet occupation in the 1980s. With Osama bin Laden appointed emir, al-Qaeda was envisaged as a fighting force that could defend Sunnis across the world and expand the Islamist struggle into a global revolutionary campaign.¹

After 9/11, al-Qaeda's leadership fled Afghanistan. Much of the original cadre has now been killed or captured, including Osama bin Laden, and other key al-Qaeda leaders have been killed by targeted strikes in Afghanistan, Pakistan, Syria, Yemen, and Somalia. However, segments of al-Qaeda's leadership, including its emir, Ayman al-Zawahiri, survived. Some al-Qaeda lieutenants are believed to remain in the Afghanistan-Pakistan (AfPak) region; others have taken refuge in Iran.² Al-Qaeda's central leadership therefore continues to pose a potential threat to the U.S. homeland.

Al-Qaeda also dispersed its fighters further afield, allowing for the development of regional affiliates that shared the long-term goals of al-Qaeda's general command and largely remained loyal to it. These affiliates have engaged with some success in local conflict environments. In particular, the Arab Spring uprisings that began in 2011 enabled al-Qaeda to advance its revolutionary agenda, taking advantage of failed or failing states in Iraq, Libya, Mali, Syria, and Yemen. It is through these affiliates that al-Qaeda is able to project regional strength most effectively.

Yemen. Yemen has long been a bastion of support for militant Islamism. Yemenis made

up a disproportionate number of the estimated 25,000 foreign Muslims in the Afghan jihad against the Soviet Union in the 1980s. After that conflict ended, Yemen also attracted Westerners into the country to carry out terrorist operations there. In 1998, several British citizens were jailed for planning to bomb Western targets, including hotels and a church.³

Al-Qaeda's first terrorist attack against Americans occurred in Yemen in December 1992 when a bomb was detonated in a hotel used by U.S. military personnel. Al-Qaeda launched a much deadlier attack in Yemen in October 2000 when it attacked the USS *Cole* in the port of Aden with a boat filled with explosives, killing 17 American sailors.⁴ The first U.S. drone strike outside Afghanistan after 9/11 also took place in Yemen, targeting those connected to the attack on the *Cole*.⁵

After 9/11, and following crackdowns in other countries, Yemen became increasingly important as a base of operations for al-Qaeda. In September 2008, it launched an attack on the U.S. embassy in Yemen that killed 19 people, including an American woman. Yemen's importance to al-Qaeda increased further in January 2009 when al-Qaeda members who had been pushed out of Saudi Arabia merged with the Yemeni branch to form Al-Qaeda in the Arabian Peninsula (AQAP). This affiliate quickly emerged as one of the leading terrorist threats to the U.S.

Much of this threat initially centered on AQAP's Anwar al-Awlaki, a charismatic American-born Yemeni cleric who directed several terrorist attacks on U.S. targets before being killed in a drone air strike in September 2011. He had an operational role in the plot executed by Umar Farouk Abdulmutallab, the failed suicide bomber who sought to destroy an airliner bound for Detroit on Christmas Day 2009.6 Awlaki was also tied to plots to poison food and water supplies, as well as to launch ricin and cyanide attacks,7 and is suspected of playing a role in the November 2010 plot to dispatch parcel bombs to the U.S. in cargo planes. Additionally, Awlaki was in contact with Major Nidal Hassan, who perpetrated the 2009 Fort Hood shootings that killed 13 soldiers.8

Since Awlaki's death, the number of AQAP-sanctioned external operations in the West has diminished. However, his videos on the Internet have continued to radicalize and recruit young Muslims, including the perpetrators of the April 2013 bombing of the Boston Marathon that killed three people. 10

AQAP's threat to Western security, while seemingly slightly reduced by Awlaki's death, is still pronounced. Another attempt to carry out a bombing of Western aviation using explosives concealed in an operative's underwear was thwarted by a U.S.-Saudi intelligence operation in May 2012.11 In August 2013, U.S. interception of al-Qaeda communications led to the closure of 19 U.S. embassies and consulates across the Middle East and Africa because of fears that AQAP was planning a massive attack.12 In January 2015, two AQAP-trained terrorists murdered staff members and nearby police at Charlie Hebdo magazine in Paris.13 Then, in 2017, aviation was targeted once again by a plan to conceal bombs in laptop batteries.14

Much of AQAP's recent activity has focused on exploiting the chaos of the Arab Spring in Yemen. AQAP acquired a significant amount of territory in 2011 and established governance in the country's South, finally relinquishing this territory only after a Yemeni military offensive in the summer of 2012. 15

AQAP further intensified its domestic activities after the overthrow of Yemen's government by Iran-backed Houthi rebels in 2015, seizing the city of al-Mukalla and expanding its control of rural areas in southern Yemen. AQAP withdrew from al-Mukalla and other parts of the South in the spring of 2016, reportedly after the U.S.-backed Saudi–United Arab Emirates coalition had cut deals with AQAP, paying it to leave certain territory and even integrating some of its fighters into its own forces targeting the Houthis. ¹⁶

More substantive progress has been achieved in the targeting of AQAP's leader-ship. Said al-Shehri, a top AQAP operative, was killed in a drone strike in 2013. The group's leader at the time, Nasir al-Wuhayshi, was killed in a drone strike in June 2015. Perhaps

most significantly, Ibrahim al-Asiri, AQAP's most notorious bomb maker, was killed in a U.S. strike in 2017. Since then, the tempo of U.S. drone strikes against AQAP has slowed.¹⁷

Despite U.S. drone activity, it is estimated that AQAP still has between 6,000 and 7,000 fighters. ¹⁸ It therefore remains a potent force that could capitalize on the anarchy of Yemen's multi-sided civil war to seize new territory and plan more attacks on the West.

Syria. Al-Qaeda's Syrian affiliate, the al-Nusra Front (ANF), was established as an offshoot of the Islamic State of Iraq (ISI), al-Qaeda's Iraq affiliate, in late 2011 by Abu Muhammad al-Julani, a lieutenant of ISI leader Abu Bakr al-Baghdadi. ANF had an estimated 5,000 to 10,000 members and emerged as one of the top rebel groups fighting the Assad dictatorship in Syria. Syria.

ANF had some success in attracting Americans to its cause. An American Muslim recruited by ANF, Moner Mohammad Abusalha, conducted a suicide truck bombing in northern Syria on May 25, 2014, in the first reported suicide attack by an American in that country. ²¹ At least five men have been arrested inside the U.S. for providing material assistance to ANF, including Abdirahman Sheik Mohamud, a naturalized U.S. citizen who was arrested in April 2015 after returning from training in Syria and was planning to launch a terrorist attack on U.S. soldiers based in Texas. ²²

In recent years, the al-Qaeda movement in Syria has undergone several name changes, allying itself with various Islamist rebel groups. This has made the degree of direct threat posed outside of Syria's borders harder to assess.

In a May 2015 interview, al-Julani stated that al-Nusra's intentions were purely local and that, "so as not to muddy the current war" in Syria, ANF was not planning to target the West. ²³ Then, in July 2016, al-Nusra rebranded itself as Jabhat Fath Al Sham (JFS), and al-Julani stated that it would have "no affiliation to any external entity," a move that some regarded as a break from al-Qaeda and others regarded as a move to obscure its ties to al-Qaeda and reduce U.S. military pressure on the group. ²⁴

In January 2017, JFS merged as part of an alliance with other Islamist extremist movements into a new anti-Assad coalition: Hayat Tahrir al-Sham (HTS, Organization for the Liberation of the Levant). It was estimated that HTS had 12,000 to 14,000 fighters in March 2017.²⁵ Further complicating matters surrounding al-Qaeda's presence, another group in Syria connected to al-Qaeda, Hurras al-Din (Guardians of the Religion), was formed in March 2018.²⁶ Among its ranks were those who defected from HTS, and its suspected emir is an Ayman al-Zawahiri acolyte.²⁷

HTS has adopted a more pragmatic course than its extremist parent organization and has cooperated with moderate Syrian rebel groups against the Assad regime, as well as against ISIS. However, the leadership of Abu Muhammad al-Julani and his tactical approach to the conflict, as well as the clear divisions within the Syrian jihad, have led to rebukes from Ayman al-Zawahiri and those loyal to him.²⁸ Zawahiri has stressed the need for unity while lambasting the jihadist movement in Syria and its emphasis on holding territory in northwest Syria at the expense of intensifying the struggle against Assad.²⁹

One entity that did pose a direct threat to the West was the Khorasan group, which was thought to comprise dozens of veterans of al-Qaeda's operations in Afghanistan and Pakistan. Al-Zawahiri had dispatched this cadre of operatives to Syria, where they were embedded with ANF and—despite al-Julani's statement that ANF was not targeting the West—charged with organizing terrorist attacks against Western targets. However, a series of U.S. air strikes in 2014–2015 degraded Khorasan's capacity to organize terrorist attacks.

Al-Qaeda's presence and activities in Syria, as well as the intent of those once aligned with it, are sometimes opaque, most likely on purpose. Even if offshoots of al-Qaeda are not currently emphasizing their hostility to the U.S., however, that will likely change if they succeed in further consolidating power in Syria.

The Sahel. Al-Qaeda in the Islamic Maghreb (AQIM) "has an estimated 1,000

fighters operating in the Sahel, including Algeria, northern Mali, southwest Libya, and Nigeria," and "is based in southern and eastern Algeria (including isolated parts of the Kabylie region), Burkina Faso, Cote D'Ivoire, Libya, northern Mali, Niger, and Tunisia." 31

AQIM's roots lie in the Algerian civil war of the 1990s, when the Algerian government cancelled the second round of elections following the victory of the Islamic Salvation Front (FIS) in the first round. The armed wing of the FIS, the Armed Islamic Group (GIA), responded by launching a series of attacks, executing those even suspected of working with the state. The group also attempted to implement sharia law in Algeria.

The GIA rapidly alienated regular Algerians, and by the late 1990s, an offshoot, the Salafist Group for Preaching and Combat (GSPC), emerged. Its violence, somewhat less indiscriminate than the GIA's, was focused on security and military targets. Having failed to overthrow the Algerian state, the GSPC began to align itself with al-Qaeda, and Ayman al-Zawahiri announced its integration into the al-Qaeda network in a September 2006 video. The GSPC subsequently took the AQIM name.

AQIM has carried out a series of regional attacks and has focused on kidnapping Westerners. Some of these hostages have been killed,³² but more have been used to extort ransoms from Western governments.³³ Like other al-Qaeda affiliates, AQIM also took advantage of the power vacuums that emerged from the Arab Spring, particularly in Libya where Islamist militias flourished. The weak central government was unable to tame fractious militias, curb tribal and political clashes, or dampen rising tensions between Arabs and Berbers in the West and Arabs and the Toubou tribe in the South.

The September 11, 2012, attack on the U.S. diplomatic mission in Benghazi underscored the extent to which Islamist extremism had flourished in the region. The radical Islamist group that launched the attack, Ansar al-Sharia, had links to AQIM and shared its violent ideology. AQIM and likeminded Islamist allies

also grabbed significant amounts of territory in northern Mali in late 2012, implementing a brutal version of sharia law, until a French military intervention helped to push them back.

AQIM continues to support and works alongside various jihadist groups in the region. In March 2017, the Sahara branch of AQIM merged with three other al-Qaeda or al-Qaedalinked organizations based in the Sahel to form the Group for Support of Islam and Muslims (JNIM), an organization that has pledged allegiance to al-Qaeda emir Ayman al-Zawahiri.³⁴

AQIM is not known to have explicitly targeted the U.S. homeland in recent years, but it does threaten regional stability and U.S. allies in North Africa and Europe, where it has gained supporters and operates extensive networks for the smuggling of arms, drugs, and people.

The Islamic State of Iraq and al-Sham and Its Affiliates. The Islamic State of Iraq and al-Sham (ISIS) is an al-Qaeda splinter group that has outstripped its parent organization in terms of its immediate threats to U.S. national interests.

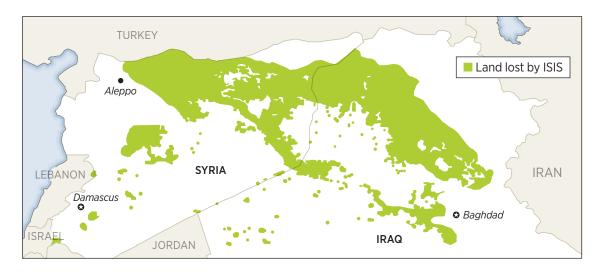
The Islamic State of Iraq (ISI), the precursor to ISIS and an al-Qaeda offshoot, was perceived by some Western policymakers as having been strategically defeated following the U.S. "surge" of 2006–2007 in Iraq. However, the group benefited from America's effectively having withdrawn—both politically and militarily—from Iraq in the 2010–2011 period, as well as from the chaos in Syria where Bashar al-Assad responded to the Arab Spring protests with bloody persecution.

In both Iraq and Syria, ISI had space in which to operate and a large disaffected pool of individuals from which to recruit. In April 2013, ISI emir Abu Bakr al-Baghdadi declared that the al-Nusra Front, the al-Qaeda affiliate operating in Syria, was merely a front for his operation and that a new organization was being formed: the Islamic State of Iraq and al-Sham (ISIS).

ISIS sought to establish an Islamic state governed by its interpretation of sharia law, posing an existential threat to Christians,

Territory Lost by ISIS

At its peak, ISIS controlled large swaths of territory within Iraq and Syria. As of June 2019, it had lost control over all of these areas, but it remains a potent terrorist threat.



NOTE: Areas are approximate.

SOURCE: U.S. Department of State, "November 2018 ISIS Area of Influence," https://www.state.gov/november-2018-isis-area-of-influence/ (accessed July 11, 2019).

heritage.org

Shiite Muslims, Yazidis, and other religious minorities. Its long-term goals continue to be a jihad to drive Western influence out of the Middle East; diminish and discredit Shia Islam, which it considers apostasy; and become the nucleus of a global Sunni Islamic empire.

With both al-Qaeda leader Ayman al-Za-wahiri and ANF emir Abu Mohammed al-Julani unsuccessful in reining in al-Baghdadi, ISIS was expelled from the al-Qaeda network in February 2014. Despite this, ISIS swept through parts of northern and western Iraq and in June 2014 declared the return of the Caliphate, with its capital in the northern Syrian city of Raqqa. It subsequently kidnapped and then murdered Westerners working in Syria, including American citizens.

A U.S.-led international coalition was assembled to chip away at ISIS's control of territory. The Iraqi Army and Iranian-backed militias broke its control of Mosul in July 2017,

and the U.S.-backed Syrian Democratic Forces militia liberated Raqqa in October 2017, with ISIS's last town (Baghouz) falling in March 2019. ISIS fighters have retreated, have adopted insurgent tactics, and will continue to pose a regional terrorist threat with direct implications for the U.S. In January 2019, for example, U.S. troops were killed in a suicide bombing at a market in Manbij in northern Syria.³⁵

Although ISIS's territorial control has now been broken in Iraq and Syria, its presence has spread far beyond that territory. Terrorist groups around the world have pledged allegiance to Abu Bakr al-Baghdadi, and ISIS now has affiliates in the Middle East, in South and Southeast Asia, and throughout Africa.

ISIS poses a threat to stability in all of these regions, seeking to overthrow their governments and impose Islamic law. In pursuit of this cause, ISIS has shown itself willing to kill Christians and other non-Muslims while committing attacks on the police and soldiers. An Islamic State in the Greater Sahara ambush in Niger in October 2017, for example, resulted in the death of four U.S. special operations troops. ³⁶ In addition, ISIS has made threats against government embassies, including those of the U.S., in its areas of influence. ³⁷

ISIS poses an ongoing threat to life in the West. In the U.S., on May 3, 2015, two extremists in contact with an ISIS operative in Syria were fatally shot by police before they could commit mass murder in Garland, Texas.³⁸

More commonly, however, the ISIS ideology has inspired individuals and small groups to plan attacks in the U.S. Tashfeen Malik, one of the perpetrators of the December 2, 2015, shootings that killed 14 people in San Bernardino, California, pledged allegiance to al-Baghdadi.39 ISIS then claimed responsibility for the June 12, 2016, shootings at a nightclub in Orlando, Florida, that killed 49 people. Omar Mateen, the perpetrator, had pledged allegiance to al-Baghdadi, although there is no evidence to show that the attacks were directed by ISIS.40 The group also claimed responsibility for the October 31, 2017, vehicular attack by Sayfullo Saipov in New York that killed eight. 41 Saipov, too, had pledged allegiance to ISIS's emir but did not appear to be operationally guided by ISIS.42 Such terrorist attacks, incited but not directed by ISIS, are likely to continue for the foreseeable future.

ISIS has also attempted complex attacks on aviation. It claimed responsibility for the October 31, 2015, downing of a Russian passenger jet over Egypt's Sinai Peninsula that killed 224 people and also tried to bring down a flight heading from Sydney to Abu Dhabi by concealing an explosive device inside a meat grinder.⁴³

ISIS had well-publicized success in attracting the support of foreign fighters. Approximately 250 from the U.S. traveled or attempted to travel to Syria. ⁴⁴ There is the potential for an ongoing threat from these individuals, who are likely to have received military training, upon return to the U.S. either in terms of attack planning or in recruiting future generations of jihadists.

ISIS had greater success attracting those from Europe, with approximately 6,000 departing from European countries.⁴⁵ The foreign fighter threat in that continent has led to several attacks. Mehdi Nemmouche, a French citizen of Algerian origin who shot and killed four civilians at the Jewish Museum in Brussels in May 2014, for example, was an ISIS-aligned terrorist who had fought in Syria.⁴⁶ In August 2015, Ayoub el-Khazzani, a Moroccan, attempted to gun down passengers in a train travelling between Amsterdam and Paris. Passengers, including two members of the U.S. Army, restrained him.⁴⁷

Similarly, a group of ISIS foreign fighters teamed with local Islamist terrorists to launch a series of suicide and gun attacks on a music venue, restaurants, cafes, and a football stadium, killing 130 and injuring 368 people in Paris, France, in November 2015.⁴⁸ Recruits from within the same network then killed 32 people and injured around 300 more in shootings and suicide bombings across Brussels, Belgium, in March 2016.⁴⁹

ISIS ideology has also inspired a wave of attacks in Europe, including one carried out by a Tunisian who used a truck to kill 86 people and injure 434 more at a Bastille Day celebration in Nice, France, in July 2016. In another such attack, in June 2017, three men killed eight people and injured 47 on or near London Bridge in London, England, by running over them or stabbing them. 151

ISIS has demonstrated an interest in carrying out biological attacks. Sief Allah H., a Tunisian asylum seeker who was in contact with ISIS, and his German wife Yasmin H. were arrested in Cologne in June 2018 after they successfully produced ricin as part of a suspected attack. This was the first time that ricin was successfully produced in the West as part of an alleged Islamist plot.

Overall, as of May 2019, ISIS had had some involvement—ranging from merely inspirational to hands-on and operational—in over 150 plots and attacks in Europe since January 2014 that had led to 371 deaths and over 1,700 injuries.⁵³ This includes the loss of American

lives abroad. An American college student was killed in Paris in November 2015, four Americans were killed in the Brussels attack of March 2016, and another three were killed in the Nice attack of July 2016. Moreover, the threat is by no means confined to Europe: Americans were also killed in ISIS-claimed attacks in Tajikistan in July 2018 and Sri Lanka in April 2019. 55

Conclusion

ISIS has lost its Caliphate, but it remains a highly dangerous adversary capable of planning and executing attacks regionally and—at the very least—inspiring them in the West. It appears to be transitioning from a quasi-state to an insurgency, relying on its affiliates to project strength far beyond its former Syrian and Iraqi strongholds.

Meanwhile, despite sustained losses to its leadership, al-Qaeda remains resilient. It has curried favor with other Sunnis in particular areas of strategic importance to it, has focused its resources on local conflicts, has occasionally controlled territory, and has de-emphasized (but not eschewed) focus on the global jihad. This approach has been particularly noticeable since the Arab Spring.

Regardless of any short-term tactical considerations, both groups ultimately aspire to attack the U.S. at home and U.S. interests abroad. While the U.S. has hardened its domestic defenses, making this a tricky prospect for both groups, they can rely on radicalized individuals living within the U.S. to take up the slack. Furthermore, as has been demonstrated time and again, there are ample opportunities to target Americans based in countries that are more vulnerable to terrorist attack.

If it wishes to contain and ultimately end Islamist violence, the U.S. must continue to bring effective pressure to bear on these groups and those that support them. This *Index* assesses the threat from ISIS, al-Qaeda, and their affiliated organizations as "capable" and "aggressive."

Threats: Middle East Terrorism

	HOSTILE	AGGRESSIVE	TESTING	ASSERTIVE	BENIGN
Behavior		✓			
	FORMIDABLE	GATHERING	CAPABLE	ASPIRATIONAL	MARGINAL
Capability			✓		

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Conclusion: Global Threat Level

America faces challenges to its security at home and interests abroad from countries and organizations that have:

- Interests that conflict with those of the U.S.;
- Sometimes hostile intentions toward the U.S.; and
- In some cases, growing military capabilities that are leveraged to impose their will by coercion or intimidation of neighboring countries, thereby creating regional instabilities.

The government of the United States constantly faces the challenge of employing, sometimes alone but more often in concert with allies, the right mix of diplomatic, economic, public information, intelligence, and military capabilities to protect and advance U.S. interests.

Russia remains the primary threat to American interests in Europe and is the most pressing threat to the United States. The 2020 Index again assesses the threat emanating from Russia as "aggressive" in its behavior and "formidable" (the highest category on the scale) in its growing capabilities. Moscow continues to engage in massive pro-Russia propaganda campaigns in Ukraine and other Eastern European countries, actively supports separatist forces in Ukraine, regularly performs provocative military exercises and training missions, and continues to sell and export arms to countries that are hostile to U.S. interests. It also

has increased its investment in modernizing its military and has gained significant combat experience while continuing to sabotage U.S. and Western policy in Syria and Ukraine.

China, the most comprehensive threat the U.S. faces, remained "aggressive" in the scope of its provocative behavior and earns the score of "formidable" for its capability because of its ongoing military modernization and buildup. The People's Liberation Army continues to extend its reach and military activity beyond its immediate region and engages in larger and more comprehensive exercises, including livefire exercises in the East China Sea near Taiwan. It also has continued to conduct probes of the South Korean and Japanese air defense identification zones, drawing rebukes from both Seoul and Tokyo. In addition, there is little evidence that Chinese cyber espionage and computer network exploitation have abated.

Iran remains the state actor that is most hostile to American interests in the Middle East. The 2020 Index assesses Iran's behavior as "aggressive" and its capability as "gathering." In the years since publication of the 2015 *Index*, Iran has methodically moved closer to becoming a nuclear power, and it continues to enhance its ICBM, missile defense, and unmanned systems capabilities. Iran also continues to perpetuate and exploit instability to expand its influence in the region, both in its direct involvement in regional engagements and through its proxies, particularly in Syria. This year also saw aggressive activity in the Strait of Hormuz, including the downing of a U.S. drone in international airspace and attacks on merchant shipping.

North Korea's level of behavior remained "testing" in the *2020 Index*. North Korea's capability level has also remained at "gathering" as Pyongyang continues to develop and refine its missile technology, especially in the area of submarine-launched ballistic missiles. With its ICBM program, North Korea remains both a threat to U.S. allies and assets in the region and an ongoing threat to the U.S. homeland.

The terrorist threats emanating from the Afghanistan–Pakistan region remained "testing" in the *2020 Index*. Fatalities attributed to terrorism inside Pakistan continue to fall as various terrorist groups within the region find themselves in competition with each other for recruits, territory, and resources.

A broad array of terrorist groups remain the most hostile of any of the threats to America examined in the *Index*. As of mid-2018, the Islamic State had been decimated, having

lost more than 98 percent of previously held territory, and its further reduction continued in 2019. However, it has not been completely eliminated and has made efforts to reassert itself in the region. Fortunately, Middle East terrorist groups are the least capable of the threats facing the U.S.

Just as there are American interests that are not covered by this *Index*, there may be additional threats to American interests that are not identified here. The *Index* focuses on the more apparent sources of risk and those that appear to pose the greatest threat.

Compiling the assessments of these threat sources, the *2020 Index* again rates the overall global threat environment as "aggressive" and "gathering" in the areas of threat actor behavior and material ability to harm U.S. security interests, respectively, leading to an aggregated threat score of "high."

Behavior of Threats

	HOSTILE	AGGRESSIVE	TESTING	ASSERTIVE	BENIGN
Russia		~			
Iran		✓			
Middle East Terrorism		✓			
Af-Pak Terrorism			✓		
China		✓			
North Korea			✓		
OVERALL		✓			

Capability of Threats

	FORMIDABLE	GATHERING	CAPABLE	ASPIRATIONAL	MARGINAL
Russia	✓				
Iran		✓			
Middle East Terrorism			✓		
Af-Pak Terrorism			✓		
China	✓				
North Korea		✓			
OVERALL		~			

Threats to U.S. Vital Interests

	SEVERE	HIGH	ELEVATED	GUARDED	LOW
Russia		✓			
Iran		✓			
Middle East Terrorism		✓			
Af-Pak Terrorism			✓		
China		✓			
North Korea		✓			
OVERALL		~			

Our combined score for threats to U.S. vital interests can be summarized as:

Threats to U.S. Vital Interests: Summary

SEVERE	HIGH	ELEVATED	GUARDED	LOW
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