# 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 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 world conducts 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. These additional American interests, however important

they may be, therefore are not used in this assessment of the adequacy of current U.S. military power.

Throughout this *Index*, we reference 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 serves as a reference point produced by the U.S. government against which each threat assessment in this *Index* was compared. We note 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.

- *First, The Military Balance* is an excellent, widely consulted source, but it is only a count of military hardware without context in terms of equipment capability, maintenance and readiness, training, manpower, integration of services, doctrine, or the behavior of competitors—those that threaten the national interests of the U.S. as defined in this *Index*.

- *Second*, the WWTA omits many threats, and its analysis of those that it does address is limited. Moreover, it does not reference underlying strategic dynamics

# Threat Categories

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

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.

We suspect that this is a consequence of the U.S. intelligence community's withholding from public view its 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. Perhaps surprisingly, The Heritage Foundation's *Index of U.S. Military Strength* may actually serve as a useful correction to the systemic deficiencies that we found in these open sources.

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.

As noted, the following assessments are arranged by region (Europe, Middle East, and Asia) to correspond with the flow of the chapter on operating environments and then by U.S. vital interest (threat posed by an actor to the U.S. homeland, potential for regional war,

and freedom of global commons) within each region. Each actor is then discussed in terms of how and to what extent its behavior and physical capabilities posed a challenge to U.S. interests in the assessed year.

### Endnotes

1.  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%20 SFR%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.

# Europe

Russia remains an acute and formidable threat to the U.S. and its interests in Europe. From the Arctic to the Baltics, Ukraine, the South Caucasus, and increasingly the Mediterranean Sea, 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 top 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 313 intercontinental ballistic missiles; 2,780 main battle tanks; and more than 5,140 armored infantry fighting vehicles, more than 6,100 armored personnel carriers, and more than 4,328 pieces of artillery. The navy has one aircraft carrier; 62 submarines (including 13 ballistic missile submarines); five cruisers; 15 destroyers; 13 frigates; and 100 patrol and coastal combatants. The air force has 1,176 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.[1] 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 December 2017, it was reported that 3,000 mercenaries from one private company, the Wagner Group, which is closely tied to Russian President Vladimir Putin, have fought in Syria since 2015.[4]

In July 2016, Putin signed a law creating a 340,000-strong (both civilian and military) National Guard over which he has direct control.[5] He created his National Guard, which is responsible for "enforcing emergency-situation regimes, combating terrorism, defending Russian territory, and protecting state facilities and assets,"[6] by amalgamating "interior troops and various law-enforcement agencies."[7] Although Putin could issue a directive to deploy the force abroad,[8] forces are more likely to be used to stifle domestic dissent.

Hamstrung by low oil prices, economic sanctions, and deep structural issues, Russia's economy is projected to produce only tepid

growth of 1.5 percent–2.0 percent in 2018.[9] Though Russia cut defense spending by 20 percent from $70 billion in 2016 to $66.3 billion in 2017,[10] it has invested heavily in 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."[11]

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 Chatham House, "as inflation has eroded the value of the rouble since 2011, the new programme is less ambitious than its predecessor in real terms."[12] A Swedish Defense Research Agency brief notes that the new armaments program is likely to be distributed more evenly between military branches and that "the emphasis of the 2018–2027 programme is on procurement of high-precision weapons for air, sea and land battle—including hypersonic missiles—unmanned air strike complexes, individual equipment for servicemen and advanced reconnaissance, communication and electronic warfare systems."[13] The new state armaments program will also focus on development of unmanned vehicles and robotics.[14]

Russia's counterspace and countersatellite capabilities are formidable. In February 2018, Director of National Intelligence Daniel R. Coats testified that "[b]oth Russia and China continue to pursue anti-satellite (ASAT) weapons as a means to reduce US and allied military effectiveness."[15]

Russia's nuclear arsenal has been progressively modernized. According to the IISS:

> The Strategic Rocket Force (RVSN) continues to progressively rearm, with a number of regiments continuing to receive new Yars missiles and launchers in 2016. Meanwhile, tests of the heavy Sarmat liquid fuel intercontinental ballistic missile (ICBM) have been postponed several times due to technical difficulties,

and these are now expected to resume towards the end of 2017. Ejection tests of the rail-mobile Barguzin ICBM were first carried out in November 2016, but the future of the system has yet to be decided.[16]

Russia has announced that the new RS-28 ballistic missile, commissioned in 2011, will come into service in 2018 as planned. Russia also 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.[17]

The armed forces also continue to undergo process modernization, which was begun by Defense Minister Anatoly Serdyukov in 2008.[18] Partially because of this modernization, 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.[19] Russia has invested heavily in military modernization over the past decade and projects that 70 percent of its military equipment will have been modernized by 2020.[20] 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.[21] However, problems remain:

> The naval shipbuilding industry has suffered from years of neglect and under investment; while the Ukraine crisis and the imposition of sanctions is starting to have an effect. The refurbishment of existing naval vessels is progressing, albeit at a slower, and more expensive, pace than originally envisaged. Although several new frigates, corvettes and submarines have already entered service, delivery of new vessels is behind schedule.[22]

Following years of delays, the commissioning of the *Admiral Gorshkov* stealth guided missile frigate was delayed until the end of summer 2018.[23] The second *Admiral Gorshkov*-class frigate, the *Admiral Kasatonov*, began sea trials in 2018; however, according to

some analysts, tight budgets and an inability to procure parts from Ukrainian industry (importantly, gas turbine engines) make it difficult for Russia to build the three additional *Admiral Gorshkov*-class frigates as planned.[24] In April, Russia announced that its only aircraft carrier would be out of service until 2021 for modernization and repair.[25] 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.[26]

Russia's naval modernization continues to prioritize submarines, including upgrades to its diesel electric *Kilo*-class subs.[27] According to one analyst:

> [R]einvigorating submarine construction has been one of the visible accomplishments of the Russian Navy's modernization program for 2011–2020. Russia has built three new SSBNs of the Borei class (Project 955) and recently launched the second SSGN in the Yasen class (Project 885M)—an upgraded version of the well-known Severodvinsk—and it intends to build five more Borei-class SSBNs by 2021 and another four or five SSGNs of the Yasen class by 2023.[28]

Russia also has expressed ambitions to produce a fifth-generation stealth nuclear-powered submarine by 2030[29] and to arm it with Zircon hypersonic missiles, which have a reported speed of from Mach 5 to Mach 6.[30]

Transport remains a nagging problem, and Russia's Defense Minister has stressed the paucity of transport vessels. 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.[31]

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 and Su-57 fighter and the T-14 Armata main battle tank.[32] In May, 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.[33]

**Russian Exercises.** Russian military exercises, especially snap exercises, are a source of serious concern because they have masked real military operations in the past. In 2013, Russia reintroduced snap exercises, which are conducted with little or no warning and often involve thousands of troops and pieces of equipment.[34] In February 2017, for example, Russia ordered snap exercises involving 45,000 troops, 150 aircraft, and 200 anti-aircraft pieces.[35] These exercises often encompass multiple military districts, police forces, and the new National Guard. For instance, "in March 2015, the armed forces conducted a major snap exercise of the northern fleet and its reinforcement with elements from the Central, Southern, Western and Eastern Military Districts. This was followed by a major policing exercise, Zaslon 2015."[36]

Snap exercises have been used for military campaigns as well. According to General Curtis Scaparrotti, NATO Supreme Allied Commander and Commander, U.S. European Command (EUCOM), "the annexation of Crimea took place in connection with a snap exercise by Russia."[37]

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."[38]

In September 2017, Russia and Belarus conducted Zapad 2017, a massive exercise in Russia's Western Military District, Kaliningrad, and Belarus, the most recent iteration of which

had taken place in 2013. While Russia claimed that only 12,700 troops took part, which is 300 fewer than the 13,000 threshold that would require monitoring by the Organization for Security and Co-operation in Europe (OSCE) under the Vienna Document,[39] the actual total was 60,000–70,000, with 12,000 exercises across Belarus and the rest in Russia.[40] In addition to underreporting troop numbers in its exercises, "Russia simply compartmentalizes its large-scale exercises into chunks small enough to evade Vienna Document requirements."[41] Zapad 2017 was smaller than Zapad 13 because it "focused on strengthening Command and Control (C2) and integrating forces, rather than emphasising troop displacements."[42]

While Zapad 17 was ostensibly a counter-terrorism exercise, one NATO staff officer wrote that:

> The "terrorist" formations confronting the combined Russian and Belorussian forces were of sufficient size and strength to require three days of operations by combined-arms and armoured land forces with extensive fixed and rotary-wing air support, large-scale aerospace operations and engagement by the Baltic Fleet and coastal defence units.[43]

Estonian Defense Forces Commander Riho Terras stated plainly that the exercise "simulated a large-scale military attack against Nato."[44] In addition to exercises in the Western Military District, Russia exercised simultaneously in every other military district as well, including live firings of Iskander missiles deployed outside the Western Military District, and a simulated defense of Moscow by S-400s from a large-scale cruise missile attack.[45] Zapad 17 also featured Russian exercises in the Arctic region.[46]

During Zapad 17, Russia deployed Iskander missiles near the northern Norwegian border, nine miles from the town of Korpfjell.[47] Russian signal jamming during the exercise interfered with GPS signals over 150 miles from the Russian border and disrupted commercial aircraft and fishing and shipping vessels in Norway.[48]

Russian 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. Twice in April, Russia stated 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.[49] Sweden issued warnings to commercial aviation and sea traffic.[50] Russia did not actually fire any live missiles,[51] and the event was described by the Latvian Ministry of Defense as "a show of force, nothing else."[52] The exercises took place near the Karlskrona Naval Base, the Swedish Navy's largest base.[53]

### 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.[54]

The document also clearly states that Russia will use every means at its disposal to achieve its strategic goals: "Interrelated political,

MAP 3

# U.S., Russian Troops Near NATO Nations

The U.S. maintains a permanent active-duty force of about 65,000 troops in Europe. Following its recent actions in Georgia, Syria, and Ukraine, Russia has about 61,000 troops outside its borders on NATO's perimeter.

● U.S. troops ● Russian troops ● Russian troops in occupied territories ☐ NATO member
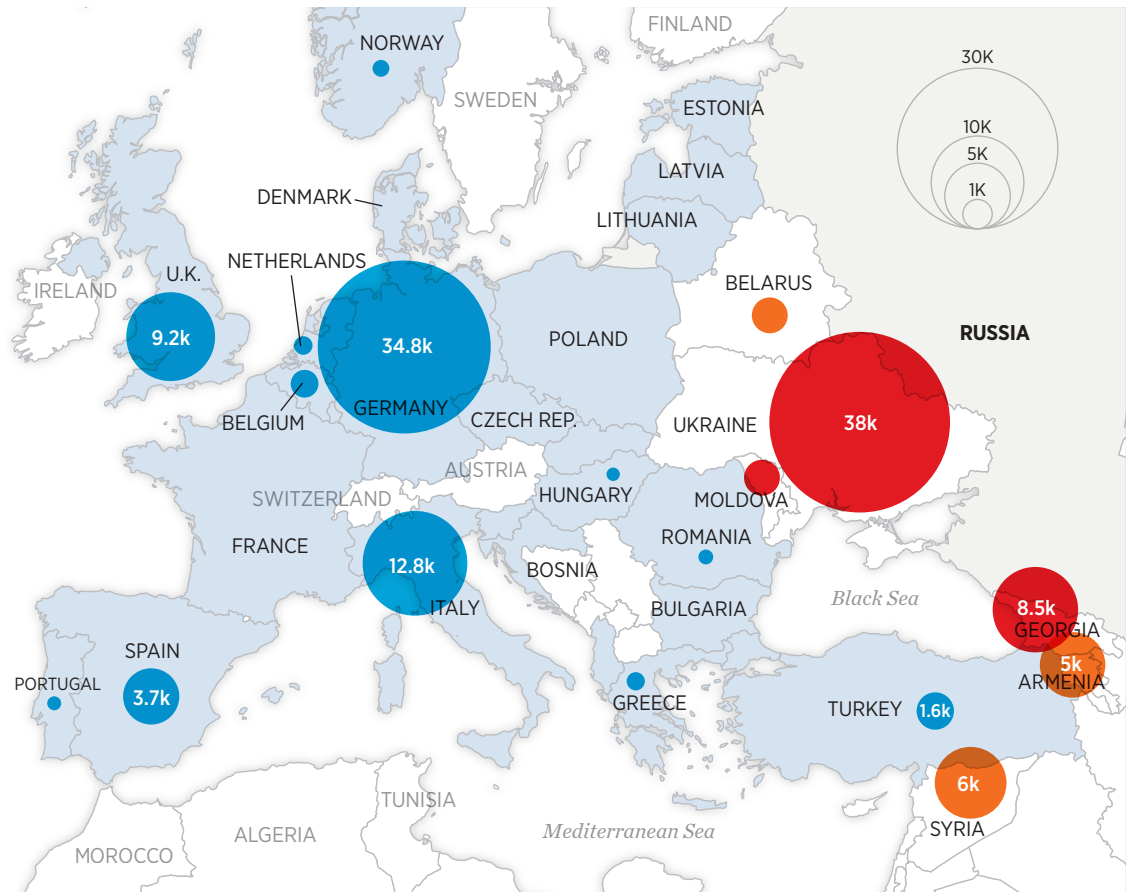


**NOTE:** U.S. active-duty troops in 15 NATO nations with levels below 200 are not represented.
**SOURCE:** U.S. Department of Defense, Defense Manpower Data Center, and Heritage Foundation research.

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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."[55] In December 2014, Putin signed a new version of Russia's military doctrine emphasizing the claimed threat of NATO and global strike systems to Russia.[56]

**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 nuclear weapons arsenal 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 nuclear triad modernization will remain a top priority under the new State Armaments Program.[57] However, an aging nuclear workforce could hamper 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."[58]

Russia is currently relying 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.[59] This arsenal serves as a protective umbrella under which Russia can modernize its conventional forces at a deliberate pace. While its 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.[60]

General Scaparrotti discussed the risks presented by Russia's possible use of tactical nuclear weapons in his March 23, 2017, EUCOM posture statement: "Most concerning...is Moscow's substantial inventory of non-strategic nuclear weapons in the EUCOM AOR [Area of Responsibility] and its troubling doctrine that calls on the potential use of these weapons to escalate its way out of a failing conflict."[61]

Particularly worrisome are Moscow's plans for rail-based nuclear-armed missiles, which are very difficult to detect. The missiles are scheduled to begin testing in 2019 and to become operational in 2020. Russia reportedly plans to deploy five regiments with a total of 30 railroad ICBMs: six missiles per regiment.[62] The Defense Ministry states that the new armed forces structure is being created with the goal of increased flexibility, mobility, and readiness for combat in limited-scale conflicts. Strategic Rocket Forces are the first line of defense (and offense) against Russia's great-power counterparts.[63]

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.[64] Russia's reliance on nuclear weapons is based partly on their small cost relative to conventional weapons, especially in terms of their effect, and on Russia's inability to attract sufficient numbers of high-quality servicemembers. Thus, 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.[65] 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.[66] In early 2017, Russia fully deployed the SSC-X-8 Cruise Missile in violation of the INF treaty. One battalion with the cruise missile remains at a missile test site in southern Russia, and another battalion with the missile deployed to an operational base in December 2016. U.S. officials acknowledge that the banned cruise missiles are no longer in the testing phase and now consider

them to be fully operational.[67] In March 2017, Joint Chiefs of Staff Vice Chairman and U.S. Air Force General Paul Selva testified that Russia's cruise missile deployment "violates the spirit and intent of the Intermediate Nuclear Forces Treaty" and "presents a risk to most of our facilities in Europe."[68] In December 2017, the U.S. announced new diplomatic, military, and economic measures "intended to induce the Russian Federation to return to compliance and to deny it any military advantage should it persist in its violation."[69]

*Summary:* The sizable Russian nuclear arsenal remains the only threat to the existence of the U.S. homeland emanating from Europe and Eurasia. While the potential for use of this arsenal remains low, the fact that Russia continues to threaten Europe with nuclear attack demonstrates that it will continue to play a central strategic role in shaping both Moscow's military and political thinking and its level of aggressive behavior beyond its borders.

### 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 Eurasia Economic Union 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 the 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."[70] In May 2016, a senior intelligence official from Portugal working for the Portuguese Security Intelligence Service

was arrested for passing secrets, especially classified NATO intelligence and material, to the Russian Federation.

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,[71] and his daughter Yulia were poisoned with Novichok nerve agent by Russian security services in Salisbury, U.K. Hundreds of residents of Salisbury could have been contaminated,[72] including a police officer who was exposed to the nerve agent after responding.[73] The physical cleanup of Salisbury is ongoing as of this writing, and businesses in the city are struggling with mounting losses.[74] On March 15, France, Germany, the UK, 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."[75]

In response to Russia's actions, two dozen countries expelled over 150 Russian intelligence agents operating under diplomatic cover; the U.S., for its part, expelled 60 Russian diplomats whom it had identified as intelligence agents and shuttered the Russian consulate in Seattle.[76] Russia retaliated by expelling 60 American diplomats and closing the U.S. consulate in St. Petersburg[77] in addition to expelling another 59 diplomats from 23 other nations.[78] In May, the suspected perpetrators of the poisoning were reported to be back in Russia.[79] Skripal, who survived the attack (along with his daughter), has continued to assist Western security services, including those of the Czech Republic and Estonia.[80] 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.[81]

Russian intelligence operatives are reportedly mapping U.S. telecommunications infrastructure around the United States, focusing especially on fiber optic cables.[82] 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.[83] 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.[84]

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.[85] 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."[86] Russia also has an agreement with Nicaragua, signed in 2015, that allows access to Nicaraguan ports for its naval vessels.[87]

**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 nonconventional means to apply pressure to sow discord among NATO member states. Russia continues to utilize cyberattacks, espionage, its significant share of the European energy market, and propaganda to undermine the alliance. The Estonian Foreign Intelligence Service's *International Security and Estonia 2018* report states clearly that "[t]he only existential threat to the sovereignty of Estonia and other Baltic Sea states emanates from Russia. However, the threat of a direct Russian military attack on NATO member states in 2018 is low."[88]

Due to 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 the situation as a pretext for aggression. This view is not without merit, considering Moscow's irredentist rhetoric and Russia's use of this technique to annex Crimea.

The Estonian Foreign Intelligence Service report also predicted that Russian propaganda and fake think tanks would seek to "tarnish and diminish" events and celebrations surrounding the 100th anniversary of the Baltic States' independence.[89] In 2017, Lithuanian Defense Minister Raimundas Karoblis stated that Russian propaganda claims that the cities of Vilnius and Klaipeda did not belong to Lithuania may be groundwork for future "kinetic operations."[90] "There are real parallels with Crimea's annexation" by Russia, said Karoblis. "We are speaking of a danger to the territorial integrity of Lithuania."[91] Similar Russian efforts have sought to undermine the statehood and legitimacy of the other two 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."[92]

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."[93] 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's website.[94] Similarly, 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.[95] U.S. troops stationed in Poland for NATO's EFP have been the target of similar Russian misinformation campaigns.[96] 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.[97]

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 European Union (EU) in 2013, months of street demonstrations led to his ouster early in 2014. Russia responded by violating Ukraine's territorial integrity, 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.[98]

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.[99] 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 fully completed in 2023.[100] 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.[101] In addition, control of Crimea has allowed Russia to use the Black Sea as a platform to launch and support naval operations in the Gulf of Aden and the Eastern Mediterranean.[102] Russia has allocated $1 billion to modernize the Black Sea fleet by 2020 and has stationed additional warships there, including two frigates equipped with Kaliber-NK long-range cruise missiles.[103] Kaliber cruise missiles have a range of at least 2,500km, placing cities from Rome to Vilnius within range of Black Sea–based cruise missiles.[104]

In August 2016, Russia deployed S-400 air defense systems with a potential range of around 250 miles to Crimea;[105] a second deployment occurred in January 2018.[106] 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."[107]

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.[108] Russian-backed separatists daily violate the September 2014 and February 2015 cease-fire agreements, known respectively as Minsk I and Minsk II.[109] 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 11,000 lives and displaced 1.7 million people.[110]

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:

> 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.[111]

Russia's permanent stationing of Iskander missiles in Kaliningrad in 2018 occurred a year to the day after NATO's EFP deployed to Lithuania.[112] Russia reportedly has deployed tactical

nuclear weapons, the S-400 air defense system, and P-800 anti-ship cruise missiles to Kaliningrad.[113] It also has outfitted a missile brigade in Luga, Russia, a mere 74 miles from the Estonian city of Narva, with Iskander missiles.[114] Iskanders have been deployed to the Southern Military District at Mozdok near Georgia and Krasnodar near Ukraine as well,[115] and Russian military officials have reportedly asked manufacturers to increase the Iskander missiles' range and improve their accuracy.[116]

Moreover, Russia is not 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.[117] In February 2018, Russia approved the deployment of warplanes to an airport on Iturup, one of the largest islands.[118]

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."[119] In January 2017, Russia's Ministry of Defence announced that four S-400 air defense systems would be deployed to the Western Military District.[120] 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."[121] According to an assessment published by the Carnegie Endowment for International Peace, "The 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."[122]

*Summary:* Russia represents a real and potentially existential threat to NATO member countries in Eastern and Central Europe. Considering Russia's aggression in Georgia and Ukraine, a conventional attack against a NATO member by Russia, while unlikely, cannot be ruled out entirely. In all likelihood, Russia will continue to use nonlinear means in an effort to pressure and undermine both these nations and the NATO alliance.

**Militarization of the High North.** The Arctic region is home to some of the world's roughest terrain and harshest weather. Increasingly, the melting of Arctic ice during the summer months is causing new challenges for the U.S. in terms of Arctic security. Many of the shipping lanes currently used in the Arctic are a considerable distance from search and rescue (SAR) facilities, and natural resource exploration that would be considered routine in other locations is complex, costly, and dangerous in the Arctic.
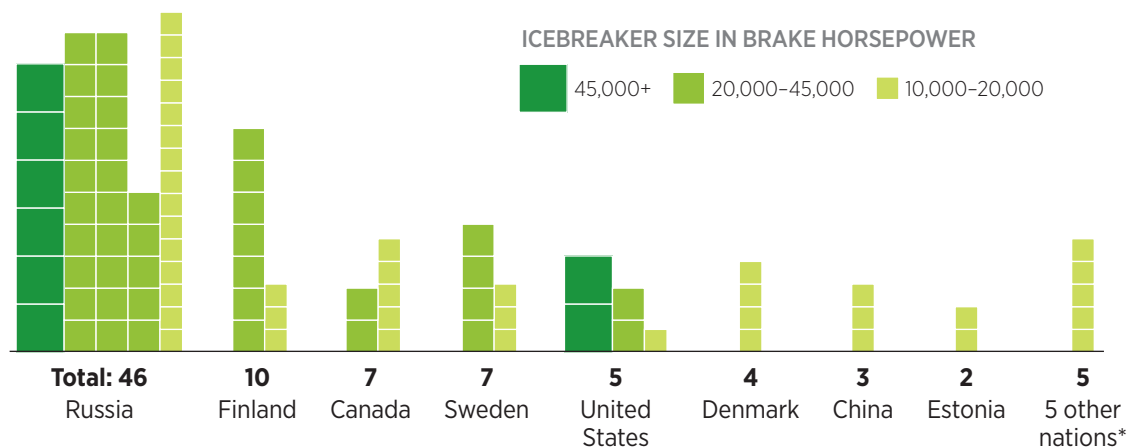
The U.S. is one of five littoral Arctic powers and one of only eight countries with territory located above the Arctic Circle, the area just north of 66 degrees north latitude that includes portions of Norway, Sweden, Finland, Russia, Canada, Greenland, Iceland, and the United States.

Arctic actors take different approaches to military activity in the region. Although the security challenges currently faced in the Arctic are not yet military in nature, there is still a requirement for military capability in the region that can support civilian authorities. For example, civilian SAR and response to natural disasters in such an unforgiving environment can be augmented by the military.

Russia has taken steps to militarize its presence in the region. In March 2017, a decree signed by Russian President Putin gave the Federal Security Service (FSB) additional powers to confiscate land "in areas with special objects for land use, and in the border areas."[123] Russia's Arctic territory is included within this FSB-controlled border zone. 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.[124] Two Arctic brigades have been formed, and Russia is planning to form Arctic Coastal Defense divisions,[125] which will be under the command of

CHART 7

# Russia's Icebreaker Fleet Dominates the Arctic



ICEBREAKER SIZE IN BRAKE HORSEPOWER

■ 45,000+  ■ 20,000–45,000  ■ 10,000–20,000

| Total: 46 | 10 | 7 | 7 | 5 | 4 | 3 | 2 | 5 |
|-----------|-----|--------|--------|------------------|---------|-------|---------|-------------------|
| Russia | Finland | Canada | Sweden | United States | Denmark | China | Estonia | 5 other nations* |

\* 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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the Northern Fleet and stationed in the Kola Peninsula and in Russia's eastern Arctic.[126]

Russia is also investing in Arctic bases. Its base on Alexandra Land, commissioned in 2017, can house 150 soldiers autonomously for up to 18 months.[127] 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."[128] In 2018, Russia plans to open an Arctic airfield at Nagurskoye[129] that "will be equipped with a 2,500 meter long landing strip and a fleet of MiG-31 or Su-34" Russian fighters.[130]

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.[131] In January, the Northern Fleet announced that it would "significantly expand the geography of the Arctic flights."[132] These 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.[133] 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.[134] 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.[135]

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.[136] In 2017, Russia activated a new radar complex on Wrangel Island.[137] Beginning in 2019, 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.[138]

Russia's ultimate goal is to have a combined Russian armed force deployed in the Arctic by 2020,[139] and it appears that Moscow is on track to accomplish this. Russia is developing equipment optimized for Arctic conditions like the Mi-38 helicopter[140] and three new nuclear icebreakers to add to the 40 icebreakers already in service (six of which are nuclear).[141] Admiral Paul F. Zukunft, former Commandant of the U.S. Coast Guard, has expressed concern that "Russia probably is going to launch two icebreaking corvettes with cruise missiles on them over the course of the next several years."[142]

In July 2017, Russia released a new naval doctrine that cited an alleged threat from the "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."[143] In May 2017, Russia announced that its buildup of the Northern Fleet's nuclear capacity is intended "to phase 'NATO out of [the] Arctic.'"[144]

Russia's Northern Fleet is also building newly refitted submarines, including a newly converted Belgorod nuclear-powered submarine that will be commissioned in 2018 or 2019 to carry out "special missions."[145] Construction on the vessel had been suspended in 2000 when the *Kursk*, its sister submarine, sank. According to Russian media reports, the submarine "will be engaged in studying the bottom of the Russian Arctic shelf, searching for minerals at great depths, and also laying underwater communications."[146] In January 2018, Russia established a deep-water division, based in Gadzhiyevo in the Murmansk region, that is directly subordinate to the Minister of Defense.[147]

*Summary:* Russia continues to develop and increase its military capabilities in the Arctic region. The likelihood of armed conflict remains low, but physical changes in the region mean that the posture of players in the Arctic will continue to evolve. It is clear that Russia intends to exert a dominant influence. In the words of EUCOM's 2018 posture statement:

> In the Arctic, Russia is revitalizing its northern fleet and building or renovating military bases along their Arctic coast line in anticipation of increased military and commercial activity.... Although the chances of military conflict in the Arctic are low in the near-term, Russia is increasing its qualitative advantage in Arctic operations, and its military bases will serve to reinforce Russia's position with the threat of force.[148]

**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. Seven years later, several thousand Russian troops occupied the two Georgian provinces of South Ossetia and Abkhazia.

In 2015, Russia signed so-called integration treaties with South Ossetia and Abkhazia. Among other things, these treaties 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.[149] The Georgian Foreign Ministry criticized the treaties as a step toward "annexation of Georgia's occupied territories,"[150] 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, which the U.S. condemned.[151]

In November 2017, the U.S. State Department approved an estimated $75 million sale of Javelin missiles to Georgia.[152] Russia has based 7,000 soldiers in Abkhazia and South Ossetia[153] and is regularly expanding its "creeping annexation" of Georgia.[154] Towns are split in two and families are separated as a result of Russia's occupation and imposition of an internal border. In 2017 alone, over 514 people were detained by Russian border guards for "illegal" crossings into South Ossetia.[155]

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 giving Moscow access to bases in that country for 49 years.[156] The bulk of Russia's forces, consisting of 3,300 soldiers, dozens of fighter planes and attack helicopters, 74 T-72 tanks, and S-300 and Buk M01 air defense systems, are based around the 102nd Military Base.[157] In 2015, Russia and Armenia signed a Combined Regional Air Defense System agreement. In March 2018, Russia signed a new $100 million defense loan with Armenia.[158] Around the same time, nationwide protests arose in Armenia that led to the election of a new prime minister, Nikol Pashinyan.[159] Once elected, Pashinyan met with Russian President Putin and declared that he "favored closer political and military ties with Russia."[160]

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.[161] 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.[162] In addition, Azerbaijani forces recaptured some of the territory lost to Armenia in the early 1990s, the first changes in the Line of Contact since 1994.[163] Recently, tensions have escalated, with the Azerbaijani army declaring its full preparation for large-scale military operations against Armenia.[164]

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.[165] 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."[166]

Following the outbreak of fighting, Russia expanded its influence in the region by brokering a shaky cease-fire that has largely held. By the time the OSCE Minsk Group, created in 1995 to find a peaceful solution to the Nagorno–Karabakh conflict, met, the Russian-brokered cease-fire was already in place.[167]

The South Caucasus might seem distant to many American policymakers, but the spillover 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 are dependent on oil and gas transiting the region.

*Summary:* Russia views the South Caucasus as a vital theater and uses a multitude of tools that include military aggression, economic pressure, and the stoking of ethnic tensions to exert influence and control, usually

MAP 4

# The Ganja Gap

To bypass Russia or Iran for overland trade between Asia and Europe there is only one option: Azerbaijan. Armenia's occupation of almost 20 percent of Azerbaijan's territory means that there is only a narrow 60-mile-wide chokepoint for trade. This is the Ganja Gap.
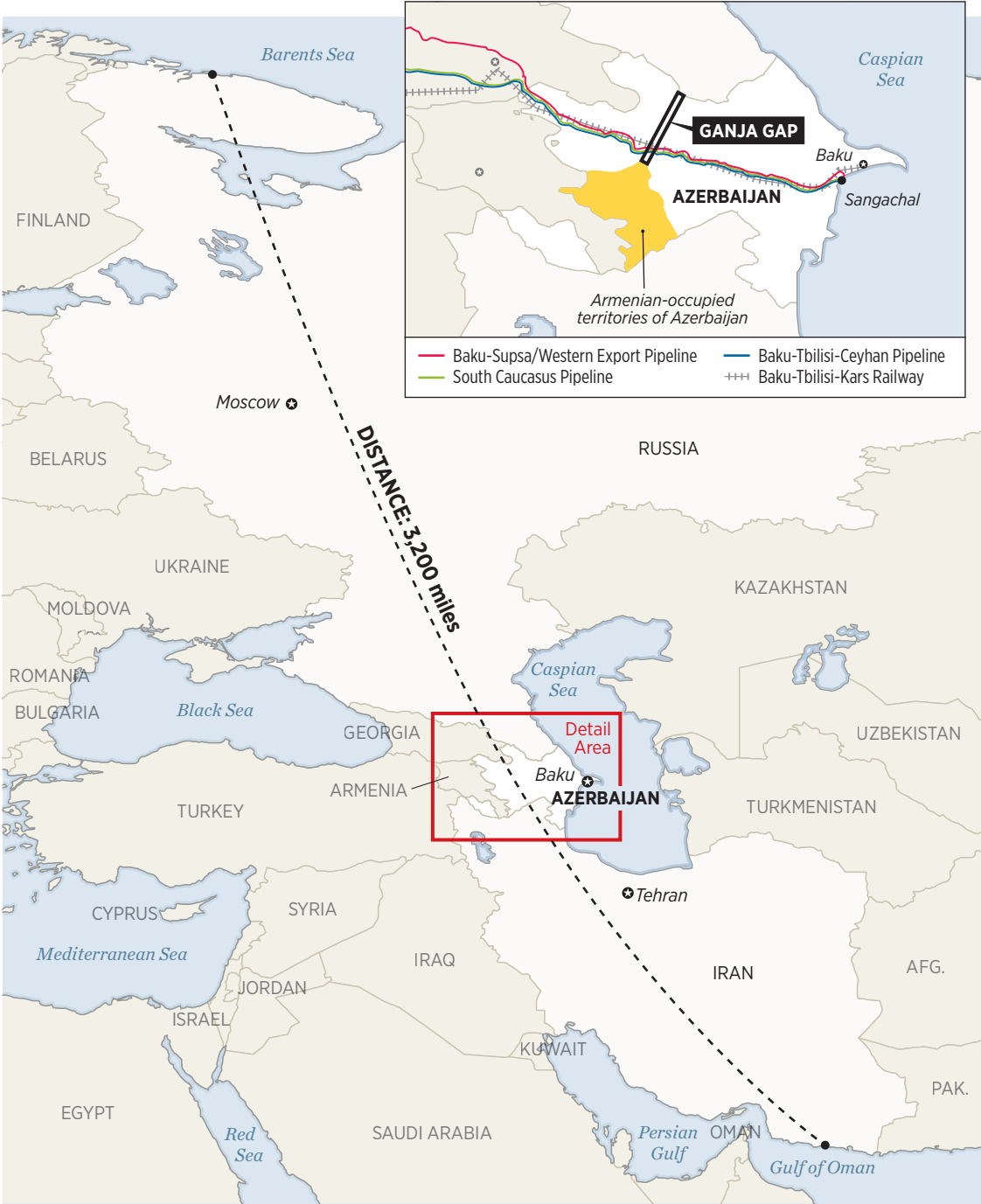


**NOTE:** Pipeline locations are approximate.
**SOURCE:** Heritage Foundation research.

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to promote outcomes that are at odds with U.S. interests.

**Increasingly Active 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. 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."[168] Russia is expanding the Tartus base to include a submarine maintenance facility.[169]

The agreement with Syria also includes upgrades to the Hmeymim air base at Latakia, including repairs to a second runway.[170] Russia deployed the S-400 anti-aircraft missile system to Hmeymim in late 2015.[171] In addition to the S-400 system, Russia 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."[172]

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."[173] In February 2017, Russian Defense Minister Sergei Shoigu claimed that Russia had tested 162 weapons systems in Syria.[174] Despite this display of Russian arms in Syria, however, Russian weapons exports have remained flat, in part because India and China are developing more weapons systems domestically.[175] In 2016, Russian arms exports rose slightly to $15 billion, up from $14.5 billion in 2015 but still lower than $15.7 billion in 2013.[176]

Russia's activities in Syria have allowed Assad to stay in power and have made achievement of a peaceful political settlement with rebel groups nearly impossible. They also have undermined American policy in the Middle East, including by frequently targeting U.S.-backed forces. A study of Russian airstrikes in Syria from September 2015 to March 2018 found that only 14 percent targeted ISIS and that Russian airstrikes were "particularly concentrated in areas where the Islamic State had little or no operational presence."[177]

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.[178] 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."[179] The U.S. and Russia have a deconfliction hotline to avoid mid-air collisions and incidents.

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.[180] Russia has also greatly stepped up its military operations in the Mediterranean, 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.[181] 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.[182]

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. It 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.[183]

*Summary:* Russia's entrenched position in Syria, including its expanded area-access/area-denial capabilities and increased submarine presence, underscores the growing importance of the Mediterranean theater in ensuring Europe's security.

**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 desire of the U.S. and our European allies to continue to assist the region in forging closer ties to the transatlantic community. Russia seeks to sever the transatlantic bond forged with the Western Balkans by sowing instability, chiefly by inflaming 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.[184]

Senior members of the Russian government have cited NATO enlargement in the Balkans as one of the biggest threats to Russia.[185] In June 2017, Montenegro became NATO's 29th member state, joining Albania and Croatia as NATO member states 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. The trial of 14 people accused of taking part in the coup plot began in July 2017. Two Russian nationals believed to be the masterminds behind the plot are being tried in absentia.[186]

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. Today, Russia accounts for one-third of foreign direct investment in Montenegro, and Russian nationals or companies own 40 percent of the nation's real estate as well as almost one-third of all Montenegrin companies.[187]

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.[188]

The so-called Russian–Serbian Humanitarian Center at Niš—widely believed to be a Russian spy base—is only 58 miles from NATO's Kosovo Force mission based in Pristina.[189]

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. Russia dealt a blow to Serbia in 2014 when it cancelled plans to build the South Stream Pipeline. The pipeline's proposed route through the Western Balkans would have been lucrative to Serbia and would have greatly strengthened Russia's energy grip on the region.

However, Serbia still exercises far more without Russia than with Russia: "In 2016, out of 26 training exercises only two are with Russia. Out of 21 multinational training drills in 2015, the Serbian military participated in only two with Russia."[190] 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 the easiest way to prevent Bosnia and Herzegovina from entering the transatlantic community is by exploiting internal ethnic and religious divisions among the country's Bosniak, Croat, and Serb populations.

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 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 as 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.[191] Republika Srpska hosted 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.[192] 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."[193]

On January 9, 2018, Bosnian Serbs again held "statehood day."[194] Joining in this year's celebrations was a delegation from the breakaway region of South Ossetia in Georgia.[195] Dodik and the self-proclaimed leaders of South Ossetia "signed a memorandum on cooperation between the 'states.'"[196] 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."[197]

Russia does not want to see Kosovo as a successful nation pointed toward the West. Rather, it seeks to derail Kosovo's efforts to integrate into the West, often utilizing grievances of the Serbian minority to cause problems. 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."[198]

Macedonia's accession to NATO remains on hold because of opposition by Greece. In January 2018, Greece and Macedonia agreed to renew talks to find a settlement of the name dispute, and the talks are ongoing. The decade-long denial of Macedonia's admission to NATO is having a deleterious impact on the public's perception of the alliance. While support for membership remains high, public support is beginning to decline.[199]

Russia's destabilizing influence may be partly to blame for this decline. Leaked reports of a memo prepared for the Director of Macedonia's Administration for Security and Counterintelligence detail Russia's decades-long efforts to destabilize Macedonia through espionage and propaganda. According to one excerpt, "it is evaluated that in the past nine years, the Republic of Macedonia has been undergoing strong subversive propaganda and intelligence activity implemented through the Embassy of the RF (Russian Federation)."[200] Russia has also sought to gain influence in Macedonia by constructing Orthodox churches and creating so-called friendship associations.[201]

In addition to Russia's destabilizing influence, the region faces threats from Islamist terrorism, rising Chinese investment and influence, and the potentially negative impacts of Turkish economic, cultural, and religious ties. 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.

*Summary:* The foremost external threat to the Balkans is Russia. Russia's interests in the Balkans are at odds with the U.S. goal of encouraging the region to progress toward the transatlantic community. Russia seeks to sever the transatlantic bond forged with the Western Balkans by sowing instability and increasing its economic, political, and military footprint in the region.

## Threats to the Commons

Other than cyberspace and (to some extent) airspace, the commons are relatively secure in the European region. Despite periodic Russian aggressive maneuvers near U.S. and NATO vessels, this remains largely true with respect to the security of and free passage through shipping lanes: 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.** On February 10, 2017, the USS *Porter*, a destroyer operating in international waters in the Black Sea, was buzzed by two Russian Su-24 fighters, followed by a solo Su-24 and finally by a Russian IL-38. The aircraft were flying with their transponders switched off and did not respond to radio requests to stop. A spokesperson for EUCOM said that such buzzing incidents are "always concerning because they could result in miscalculation or accident."[202] In April 2018, a fully armed Russian jet buzzed a French frigate operating in the eastern Mediterranean.[203]

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, "We are now seeing Russian underwater activity in the vicinity of undersea cables that I don't believe we have ever seen."[204] 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.[205] The *Yantar*, a mother ship to two Russian mini submersibles,[206] 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.[207] 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.[208]

**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 the surveillance aircraft 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."[209] 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[210] In another incident in January 2018, Belgian and British fighters scrambled to intercept two Russian TU-160 Blackjack bombers flying in NATO airspace over the North Sea.[211]

Aggressive Russian flying has also occurred near U.S. airspace. In May 2018, U.S. F-22s intercepted two Tu-95 Bear Bombers, which flew into the American Air Defense Identification Zone near Alaska.[212]

Russian flights have also targeted U.S. ally Japan. In April 2017, three Russian Tu-95 Bear Bombers and an IL-20 surveillance aircraft flew within 36 miles of the Japanese coast, and 14 Japanese fighters were scrambled to intercept them.[213] A similar incident occurred in January 2017 when three Russian Bear bombers, three refueling IL-78 aircraft, and two radar and communications A-50 AWACS flew near Japan. The bombers flew around Japan, and the incident caused NORAD to increase its threat posture from 5 to 4.[214] In November, two Tu-95 bombers flew within 80 miles of the USS *Ronald Reagan* aircraft carrier operating in the Sea of Japan before being escorted away by American F-18 fighters.[215]

The main threat from Russian airspace incursions, however, remains near NATO territory in Eastern Europe, specifically the Black Sea and Baltic regions. In April 2018, NATO jets taking part in Baltic Air Policing intercepted two Russian Su-35 fighters and one Su-24 attack aircraft that were flying over the Baltic Sea. "The Russian aircraft had their onboard transponders off, kept no radio contact with the regional air traffic control center, and hadn't submitted a flight plan."[216] In the Baltics, NATO aircraft intercepted Russian military aircraft 120 times in 2017, an increase over the 110 intercepts recorded in 2016 but still less than the 2015 high of 160.[217]

That the provocative and hazardous behavior of the Russian armed forces or Russian-sponsored groups poses a threat to civilian aircraft in Europe was demonstrated by the July 2014 downing of Malaysia Airlines Flight MH17, killing all 283 passengers and 15 crewmembers, over the skies of southeastern Ukraine. 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.[218] Similarly, in March 2014, Scandinavian Airlines plane almost collided with a Russian signals intelligence (SIGINT) plane, the two coming within 90 meters of each other.[219] 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.[220]

*Summary:* Russia's violation of the sovereign airspace of NATO member states is a probing and antagonistic policy that is designed both to test the defense of the alliance and as practice for potential future conflicts. Similarly, Russian antagonistic behavior in international waters is a threat to freedom of the seas. Russia's reckless aerial activity in the region remains a threat to civilian aircraft flying in European airspace.

**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, "[cyber-attacks 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."[221]

Relatedly, the 2018 Worldwide Threat Assessment of the U.S. Intelligence Community (WWTA) identifies the cyber threat as one of our nation's top concerns and cites Russia specifically:

> We expect that Russia will conduct bolder and more disruptive cyber operations during the next year, most likely using new capabilities against Ukraine. The Russian Government is likely to build on the wide range of operations it is already conducting, including disruption of Ukrainian energy distribution networks, hack-and-leak influence operations, distributed denial-of-service attacks, and false flag operations. In the next year, Russian intelligence and security services will continue to probe US and allied critical infrastructures, as well as target the United States, NATO, and allies for insights into US policy.[222]

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."[223] 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.[224]

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."[225]

*Summary:* Russia's cyber capabilities are advanced and are a key tool in realizing the state's strategic aims. Russia has used cyber-attacks to further the reach and effectiveness of its propaganda and disinformation campaigns, and its ongoing cyber-attacks against election processes in the U.S. and European countries are designed to undermine citizens' belief in the veracity of electoral outcomes and erode support for democratic institutions in the longer term. Russia also has used cyber-attacks to target physical infrastructure, including electrical grids, air traffic control, and gas distribution systems. Russia's increasingly bold use of cyber capabilities, coupled with their sophistication and Moscow's willingness to use them aggressively, presents a challenge to the U.S. and its interests abroad.

## 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 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. The 2018 WWTA states that "Moscow will use a range of relatively low-cost tools to advance its foreign policy objectives, including influence campaigns, economic coercion, cyber operations, multilateral forums, and measured military force."[226] 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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# Middle East

## Threats to the Homeland

Radical Islamist terrorism in its many forms remains the most immediate global threat to the safety and security of U.S. citizens at home and abroad, and most of the actors posing terrorist threats originate in the greater Middle East. More broadly, threats to the U.S. homeland and to Americans abroad include terrorist threats from non-state actors such as al-Qaeda that use the ungoverned areas of the Middle East as bases from which to plan, train, equip, and launch attacks; terrorist threats from state-supported groups such as Hezbollah; and the developing ballistic missile threat from Iran.

**Terrorism Originating from al-Qaeda, Its Affiliates, and the Islamic State (IS).** Although al-Qaeda has been damaged by targeted strikes that have killed key leaders in Pakistan, including Osama bin Laden, the terrorist network has evolved in a decentralized fashion, and regional affiliates continue to pose potent threats to the U.S. homeland. The regional al-Qaeda groups share the same long-term goals as the parent organization, but some have developed different priorities related to their local conflict environments.

*Al-Qaeda in the Arabian Peninsula (AQAP),* based in Yemen, has emerged as one of the leading terrorist threats to homeland security since the al-Qaeda high command was forced into hiding. Yemen has long been a bastion of support for militant Islamism in general and al-Qaeda in particular. Many Yemenis who migrated to Saudi Arabia to find work during the 1970s oil boom were exposed to radicalization there. Yemenis made up a disproportionate

number of the estimated 25,000 foreign Muslims who flocked to Afghanistan to join the war against the Soviet occupation in the 1980s. They also make up a large segment of al-Qaeda, which was founded by foreign veterans of that war to expand the struggle into a global revolutionary campaign.

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 involved in supporting the humanitarian food relief flights to Somalia. 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.[1]

Yemen was a site for the radicalization of American Muslims such as John Walker Lindh, who traveled there to study Islam before being recruited to fight in Afghanistan. Seven Yemeni Americans from Lackawanna, New York, were recruited by al-Qaeda before 9/11. Six were convicted of supporting terrorism and sent to prison, and the seventh became a fugitive who later surfaced in Yemen.

Following crackdowns in other countries, Yemen became increasingly important as a base of operations for al-Qaeda. In September 2008, al-Qaeda launched a complex 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's Anwar al-Aulaqi, a charismatic American-born Yemeni cleric, reportedly incited several terrorist attacks on U.S. targets before being killed in a drone air strike in 2011. He inspired Major Nidal Hassan, who perpetrated the 2009 Fort Hood shootings that killed 13 soldiers,[2] and Umar Farouk Abdulmutallab, the failed suicide bomber who sought to destroy an airliner bound for Detroit on Christmas Day 2009.[3] Aulaqi is also suspected of playing a role in the November 2010 AQAP plot to dispatch parcel bombs to the U.S. in cargo planes. After Aulaqi's death, his videos on the Internet continued to radicalize and recruit young Muslims, including the perpetrators of the April 2013 bombing of the Boston Marathon that killed three people; the July 2015 fatal shootings of four Marines and a Navy sailor at a military recruiting office in Chattanooga, Tennessee; the December 2015 terrorist attack in San Bernardino, California, that killed 14 people; and the June 2016 shootings of 49 people in a nightclub in Orlando, Florida.[4]

AQAP, estimated to have had as many as 4,000 members in 2016,[5] has greatly expanded in the chaos of Yemen's civil war, particularly since the overthrow of Yemen's government by Iran-backed Houthi rebels in 2015. AQAP has exploited alliances with powerful, well-armed Yemeni tribes (including the Aulaq tribe from which Osama bin Laden and the radical cleric Aulaqi claimed descent) to establish sanctuaries and training bases in Yemen's rugged mountains. This is similar to al-Qaeda's *modus operandi* in Afghanistan before 9/11. In April 2015, AQAP seized the city of al Mukalla and expanded its control of rural areas in southern Yemen; after it withdrew in April 2016, the city was recaptured by pro-government Yemeni troops and troops from the United Arab Emirates (UAE), a member of the Saudi-led coalition that intervened in March 2015 in support of the Yemeni government. Nevertheless, AQAP remains a potent force that could capitalize on the anarchy of Yemen's multi-sided civil war to seize new territory.

*The Islamic State (IS),* formerly known as the Islamic State of Iraq and Syria (ISIS) or the Islamic State in Iraq and the Levant (ISIL) and before that as the Islamic State of Iraq and Al-Qaeda in Iraq, emerged as an al-Qaeda splinter group but has outstripped its parent organization in terms of its immediate threats to U.S. national interests. Although the Islamic State has been decimated in Iraq and Syria, it still is expanding in Africa and Asia. Moreover, it has attracted more recruits and self-radicalized followers in Western countries than al-Qaeda ever did. In the short run, the Islamic State's greater appeal for young Muslims in the West makes it a more immediate threat to the U.S. homeland than Al-Qaeda, although the older terrorist network may pose a greater long-term threat.

The Islamic State seeks to overthrow the governments of Iraq, Syria, Lebanon, and Jordan and establish a nominal Islamic state governed by a harsh and brutal interpretation of Islamic law that is an existential threat to Christians, Shiite Muslims, Yazidis, and other religious minorities. Its long-term goals are to launch what it considers a jihad (holy war) to drive Western influence out of the Middle East; destroy Israel; diminish and discredit Shia Islam, which it considers apostasy; and become the nucleus of a global Sunni Islamic empire.

By mid-2018, the Islamic State had been decimated and pushed out of most of its self-declared "caliphate." The U.S.-backed Syrian Democratic Forces militia liberated Raqqah, the IS capital city, in October 2017. In February 2018, the Commander of U.S. Central Command (CENTCOM) estimated that the Islamic State had lost more than 98 percent of the territory it had formerly held in Iraq and Syria.[6] IS forces, estimated to number about 1,000 to 3,000 fighters in June 2018, retreated to the Iraq–Syria border area, where they continue to pose a local terrorist threat.[7]

The IS began as a branch of al-Qaeda before it broke away from the core al-Qaeda leadership in 2013 in a dispute over leadership of the jihad in Syria. The IS shares a common ideology with its al-Qaeda parent organization but differs with respect to how to apply that ideology. It now rejects the leadership of bin Laden's

successor, Ayman al-Zawahiri, who criticized its extreme brutality, which has alienated many Muslims. This is a dispute about tactics and strategies, however, not long-term goals. The schism also was fueled by a personal rivalry between Zawahiri and IS leader Abu Bakr al-Baghdadi, who sees himself as bin Laden's true successor and the leader of a new generation of jihadists. Baghdadi also declared the formation of a caliphate with himself as the leader in June 2014, a claim that al-Qaeda and almost all Muslim scholars rejected as illegitimate.

Although the IS has been defeated militarily in Iraq and Syria, it has continued to expand elsewhere, particularly in Afghanistan, Bangladesh, Egypt, Indonesia, Libya, Pakistan, the Philippines, and Yemen. Boko Haram, the Nigeria-based Islamist terrorist group, also pledged allegiance to the IS in March 2015.

The Islamic State primarily poses a regional terrorist threat. It has launched terrorist attacks inside Afghanistan, Egypt, Jordan, Kuwait, Lebanon, Libya, Saudi Arabia, Tunisia, Turkey, and Yemen, among other countries. It also claimed responsibility for the October 31, 2015, downing of a Russian passenger jet over Egypt's Sinai Peninsula that killed 224 people. The Islamic State also is known to have used chemical weapons in Syria and Iraq and to have the capability to make small amounts of crude mustard agent, which it has used along with captured Syrian mustard munitions.

The Islamic State's early success in attracting the support of foreign militants, including at least 4,500 from Western countries and at least 250 specifically from the United States, has amplified its potential threat as these foreign volunteers, many of whom received military training, return home.[8] IS foreign fighters teamed with local Islamist militants to launch terrorist attacks that killed 130 people in Paris, France, in November 2015 and 32 people in Brussels, Belgium, in March 2016, as well as a string of smaller attacks. The IS also has inspired self-radicalized individuals to use vehicles as battering rams in terrorist attacks. A terrorist in a truck killed 86 people at

a Bastille Day celebration in July 2016 in Nice, France; another truck attack killed 12 people at a Christmas market in Berlin, Germany, in December 2016; and in June 2017, three men in a van killed eight people on or near London Bridge in London, England, by running them over or stabbing them. In May 2017, a terrorist with proven links to the Islamic State killed 22 people in a suicide bombing at a concert in Manchester, England. A Moroccan-born French national who declared himself to be an IS supporter killed four people before being killed by police in Trebes, France, in March 2018.

IS leader al-Baghdadi threatened to strike "in the heart" of America in July 2012.[9] The IS reportedly has tried to recruit Americans who have joined the fighting in Syria and would be in a position to carry out this threat after returning to the United States.[10] It also has inspired several terrorist attacks by self-radicalized "stray dogs" or "lone wolves" who have acted in its name, such as the foiled May 3, 2015, attack by two Islamist extremists who were fatally shot by police before they could commit mass murder in Garland, Texas; the July 16, 2015, shootings that killed four Marines and a sailor in Chattanooga, Tennessee; the December 2, 2015, shootings that killed 14 people in San Bernardino, California; the June 12, 2016, shootings at a nightclub in Orlando, Florida, that killed 49 people, and the October 31, 2017, vehicle attack by a self-radicalized Uzbek immigrant who killed eight people with his truck on a New York City bicycle path. Such terrorist attacks, incited but not directed by the IS, are likely to continue for the foreseeable future.

*Hayat Tahrir al-Sham (HTS—Organization for the Liberation of the Levant)*, al-Qaeda's official affiliate in Syria, is a front organization formed in January 2017 in a merger between Jabhat Fateh al-Sham (Front for the Conquest of Syria), formerly known as the al-Nusra Front, and several other Islamist extremist movements. HTS was estimated to have 12,000 to 14,000 fighters in March 2017.[11] Before the merger, al-Nusra had an estimated

5,000 to 10,000 members and had emerged as one of the top two or three rebel groups fighting Syria's Assad dictatorship.[12] Al-Nusra was established as an offshoot of Al-Qaeda in Iraq (now renamed the Islamic State) in late 2011 by Abu Muhammad al-Julani, a lieutenant of AQI leader Abu Bakr al-Baghdadi.[13] It 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 the Islamic State.

When Baghdadi unilaterally proclaimed the merger of his organization and al-Nusra in April 2013 to form the Islamic State of Iraq and Syria, Julani rejected the merger and renewed his pledge to al-Qaeda leader Ayman al-Zawahiri. The two groups have clashed repeatedly and remain bitter enemies.

HTS, like its previous incarnation al-Nusra, has focused its attention on overthrowing the Syrian regime and has not emphasized its hostility to the United States, but that will change if it consolidates power within Syria. It already poses a potential threat because of its recruitment of foreign Islamist militants, including some from Europe and the United States. According to U.S. officials, al-Qaeda leader al-Zawahiri dispatched a cadre of experienced al-Qaeda operatives to Syria, where they were embedded with al-Nusra and charged with organizing terrorist attacks against Western targets. Many members of the group, estimated to number in the dozens, were veterans of al-Qaeda's operations in Afghanistan and Pakistan (part of what was called Khorasan in ancient times) and were referred to as the "Khorasan group" by U.S. officials.[14]

An American Muslim recruited by al-Nusra, Moner Mohammad Abusalha, conducted a suicide truck bombing in northern Syria on May 25, 2014, that was the first reported suicide attack by an American in that country.[15] At least five men have been arrested inside the United States for providing material assistance to al-Nusra, including Abdirahman Sheik Mohamud, a naturalized U.S. citizen born in Somalia who was arrested in April 2015 after returning from training in Syria, possibly to launch a terrorist attack inside the United States.[16] The Khorasan group was targeted by a series of U.S. air strikes in 2014–2015 that degraded its capacity to organize terrorist attacks in Western countries. By mid-2015, the FBI assessed that the Islamic State had eclipsed al-Nusra as a threat to the U.S. homeland.[17] In September 2017, testifying before the Senate Homeland Security and Government Affairs Committee, FBI Director Christopher Wray identified "the Islamic State... and homegrown violent extremists as the main terrorism threats to the Homeland."[18]

*Al-Qaeda in the Islamic Maghreb (AQIM)*, one of al-Qaeda's weaker franchises before the onset of the Arab Spring uprisings in 2011, has flourished in recent years in North Africa and is now one of al-Qaeda's best-financed and most heavily armed elements. The overthrow of Libyan dictator Muammar Qadhafi in 2011 opened a Pandora's box of problems that AQIM has exploited to bolster its presence in Algeria, Libya, Mali, Morocco, and Tunisia. AQIM accumulated large quantities of arms, including man-portable air defense systems (MANPADS), looted from Qadhafi's huge arms depots.

The fall of Qadhafi also led hundreds of heavily armed Tuareg mercenaries formerly employed by his regime to cross into Mali, where they joined a Tuareg separatist insurgency against Mali's weak central government. In November 2011, they formed the separatist National Movement for the Liberation of Azawad (MNLA) and sought to carve out an independent state. In cooperation with AQIM and the Islamist movement Ansar Dine, they gained control of northern Mali, a territory as big as Texas and the world's largest terrorist sanctuary until the January 2013 French military intervention dealt a major setback to AQIM and its allies.

AQIM is estimated to have several hundred militants operating in Algeria, Libya, Mali, Niger, and Tunisia.[19] Many AQIM cadres pushed out of Mali by the French intervention have regrouped in southwestern Libya and remain committed to advancing AQIM's self-declared long-term goal of transforming the Sahel "into one vast, seething, chaotic Somalia."[20]

The September 11, 2012, attack on the U.S. diplomatic mission in Benghazi underscored the extent to which Islamist extremists have grown stronger in the region, particularly in eastern Libya, a longtime bastion of Islamic fervor. The radical Islamist group that launched the attack, Ansar al-Sharia, has links to AQIM and shares its violent ideology. Ansar al-Sharia and scores of other Islamist militias have flourished in post-Qadhafi Libya because the weak central government has been 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.

AQIM does not pose as much of a threat to the U.S. homeland as other al-Qaeda offshoots pose, 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.

*WWTA:* The WWTA assesses that "Sunni violent extremists—most notably ISIS and al-Qa'ida—pose continuing terrorist threats to US interests and partners worldwide" and that "[h]omegrown violent extremists (HVEs) will remain the most prevalent and difficult-to-detect Sunni terrorist threat at home, despite a drop in the number of attacks in 2017."[21]

*Summary:* Although the al-Qaeda core group has been weakened, the Islamic State and al-Qaeda franchises based in the Middle East pose a continuing threat to the U.S. homeland as a result of the recruitment of Muslim militants from Western countries, including the United States, and their efforts to inspire terrorist attacks by homegrown Islamist extremists.

**Hezbollah Terrorism.** Hezbollah (Party of God), the radical Lebanon-based Shiite 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, assisted by a political wing that has dominated Lebanese politics and 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.

Hezbollah murdered more Americans than any other terrorist group before September 11, 2001. Despite al-Qaeda's increased visibility since then, Hezbollah remains a bigger, better equipped, better organized, and potentially more dangerous terrorist organization, in part because it enjoys the support of the two chief state sponsors of terrorism in the world today: Iran and Syria. Hezbollah's demonstrated capabilities led former Deputy Secretary of State Richard Armitage to dub it "the A-Team of Terrorists."[22]

Hezbollah has expanded its operations from Lebanon to regional targets in the Middle East and then far beyond. 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. Europe is believed to contain many more of these cells.

Hezbollah has been implicated 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. Hezbollah 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.[23]

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 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.[24]

Nicholas Rasmussen, Director of the National Counterterrorism Center, noted at an October 10, 2017, briefing that the June arrests were a "stark reminder" of Hezbollah's global reach and warned that Hezbollah posed a potential threat to the U.S. homeland: "It's our assessment that Hizballah is determined to give itself a potential homeland option as a critical component of its terrorism playbook, and that is something that those of us in the counterterrorism community take very, very seriously."[25]

*WWTA:* The WWTA assesses that "Lebanese Hizballah has demonstrated its intent to foment regional instability by deploying thousands of fighters to Syria and by providing weapons, tactics, and direction to militant

and terrorist groups." In addition, "Hizballah probably also emphasizes its capability to attack US, Israeli, and Saudi Arabian interests."[26]

*Summary:* Hezbollah operates mostly in the Middle East, but it has established cells inside the United States that could be activated, particularly in the event of a military conflict with Iran, Hezbollah's creator and chief backer.

**Palestinian Terrorist Threats.** A wide spectrum of Palestinian terrorist groups threaten Israel, including Fatah (al-Aqsa Martyrs Brigade); Hamas; Palestinian Islamic Jihad; the Popular Front for the Liberation of Palestine (PFLP); the Popular Front for the Liberation of Palestine–General Command (PFLP–GC); the Palestine Liberation Front; and the Army of Islam. Most of these groups are also hostile to the United States, which they denounce as Israel's primary source of foreign support.

Although they are focused more on Israel and regional targets, these groups also pose a limited potential threat to the U.S. homeland, particularly should the Israeli–Palestinian peace process break down completely and the Palestinian Authority be dissolved. In the event of a military confrontation with Iran, Tehran also might seek to use Palestinian Islamic Jihad, the PFLP–GC, or Hamas as surrogates to strike the United States. Jihadist groups based in Gaza, such as the Army of Islam, also could threaten the U.S. homeland even if a terrorist attack there would set back Palestinian national interests. In general, however, Palestinian groups present a much bigger threat to Israel, Jordan, Egypt, and other regional targets than they do to the United States.

*WWTA:* The WWTA does not reference the potential threat of Palestinian terrorist attacks on the U.S. homeland.

*Summary:* Palestinian terrorist groups are focused primarily on Israeli targets and potentially on Egypt and Jordan, which are perceived as collaborating with Israel. They also, however, pose a limited potential threat to the U.S. homeland because of the possibility that if the Israeli–Palestinian peace process broke down completely or Iran became involved in a military conflict with the U.S., Palestinian

surrogates could be used to target the U.S. homeland.

**Iran's Ballistic Missile Threat.** Iran has an extensive missile development program that has received key assistance from North Korea and more limited support from Russia and China until sanctions were imposed 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.[27]

Although Tehran's missile arsenal primarily threatens U.S. bases and allies in the region, Iran eventually could expand the range of its missiles to include the continental United States. In its January 2014 report on Iran's military power, the Pentagon assessed that "Iran continues to develop technological capabilities that could be applicable to nuclear weapons and long-range missiles, which could be adapted to deliver nuclear weapons, should Iran's leadership decide to do so."[28]

*WWTA:* The WWTA assesses that "Iran's ballistic missile programs give it the potential to hold targets at risk across the region, and Tehran already has the largest inventory of ballistic missiles in the Middle East." Moreover, "Tehran's desire to deter the United States might drive it to field an ICBM." In this connection, the WWTA warns that "[p]rogress on Iran's space program, such as the launch of the Simorgh SLV in July 2017, could shorten a pathway to an ICBM because space launch vehicles use similar technologies."[29]

*Summary:* Iran's ballistic missile force poses a significant regional threat to the U.S. and its allies, and Tehran eventually could expand the range of its missiles to threaten the continental United States.

## Threat of Regional War

The Middle East region is one of the most complex and volatile threat environments faced

MAP 5

# Iran's Ballistic Missile Ranges



Detail Area

RUSSIA

GERMANY    POLAND

UKRAINE

KAZAKHSTAN

ROMANIA

TURKEY

CHINA

SYRIA

IRAN

ISRAEL    IRAQ    AFGHANISTAN

LIBYA    PAKISTAN

EGYPT

INDIA

SAUDI ARABIA

**Shahab–2 (500km)**

**Ghadr (1,600 km)**

**Sajjil–2 (2,000 km)**

**Sajjil–3 (3,700 km)**

*Indian Ocean*

☐ Existing missile
⌐⌐ In development
• City, population 1 million+
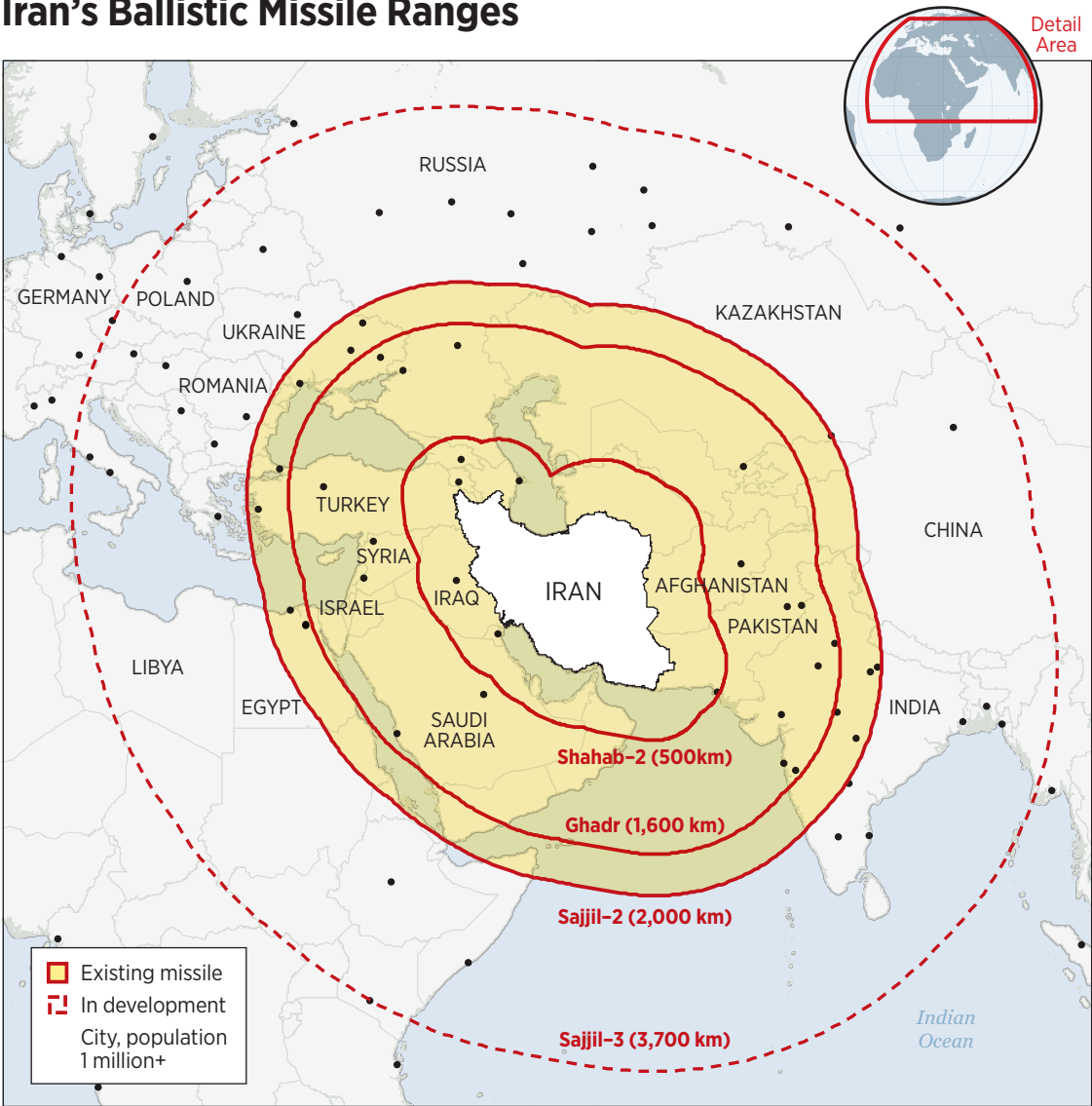
**SOURCES:** International Institute for Strategic Studies, *The Military Balance 2014* (London: Routledge, 2014), and Michael Elleman, "Iran's Ballistic Missile Program," United States Institute of Peace, http://iranprimer.usip.org/resource/irans-ballistic-missile-program (accessed August 25, 2015).

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by the United States and its allies. Iran, various al-Qaeda offshoots, Hezbollah, Arab–Israeli clashes, and a growing number of radical Islamist militias and revolutionary groups in Egypt, Gaza, Iraq, Jordan, Lebanon, Libya, Syria, and Yemen pose actual or potential threats both to America's interests and to those of its allies.

**Iranian Threats in the Middle East.** Iran is an anti-Western revolutionary state 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

CHART 8

# Iran Defense Spending on Rise Since 2014

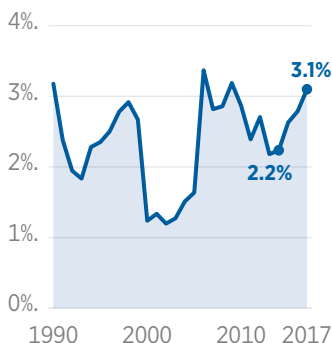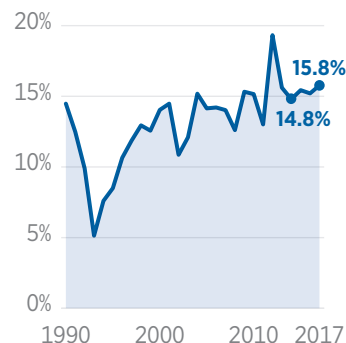**SPENDING IN BILLIONS OF CONSTANT 2016 DOLLARS**

$15

$10

$5

$0

1990  2000  2010  2017

**$14.1**

**$10.3**

**SPENDING AS SHARE OF GDP**

4%.

3%.

2%.

1%.

0%.

1990  2000  2010  2017

**3.1%**

**2.2%**
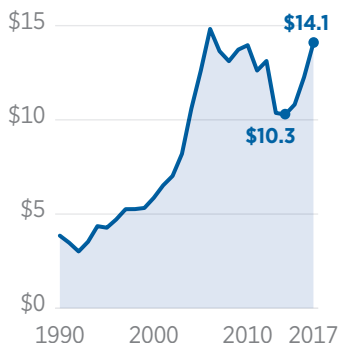
**SPENDING AS A SHARE OF GOVERNMENT SPENDING**

20%

15%

10%

5%

0%

1990  2000  2010  2017

**15.8%**

**14.8%**

**SOURCE:** Stockholm International Peace Research Institute, https://www.sipri.org/ (accessed August 8, 2018).

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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. With regard to conventional threats, Iran's ground forces dwarf the relatively small armies of the other Gulf States, and its formidable ballistic missile forces pose significant threats to its neighbors.

The July 14, 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 boosted Iran's economy and enabled Iran to enhance its strategic position, military capabilities, and support for surrogate networks and terrorist groups. Tehran announced in May 2016 that it was increasing its military budget for 2016–2017 to $19 billion—a 90 percent increase over the previous year.[30]

The lifting of sanctions also has allowed Tehran to emerge from diplomatic isolation and strengthen strategic ties with Russia that will allow it to purchase advanced arms and modernize its military forces. Russian

President Vladimir Putin traveled to Iran in November 2015 to meet with Ayatollah Khamenei, Iran's Supreme Leader, 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."[31] 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.[32]

This growing strategic relationship has strengthened Iran's military capabilities. Tehran announced in April 2016 that Russia had started 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.[33] Moscow also began negotiations to sell Iran T-90 tanks and advanced Sukhoi Su-30 Flanker fighter jets.[34] The warplanes will significantly improve Iran's air defense and long-range strike capabilities.

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.[35] Iran, working closely with Russia, then expanded its military efforts and helped to consolidate a costly victory for the Assad regime.

Iran's growing military presence in Syria and continued efforts to provide advanced weapons to Hezbollah through Syria have fueled tensions with Israel. Israel has launched over one 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.[36] Although Russia has sought to calm the situation, another clash could quickly escalate into a regional conflict.

*Terrorist Attacks.* 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, 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 found success in establishing 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.

*Mounting Missile Threat.* Iran possesses the largest number of deployed missiles in the Middle East.[37] 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 of the five missiles launched, three missed Syria altogether and landed in Iraq, and the remaining two landed in Syria but missed their intended targets by miles.[38]

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 such as cities.

Iran'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."[39]

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.

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. 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.[40]

Iran's ballistic missiles pose a major threat to U.S. bases and allies from Turkey, Israel, and Egypt in the west to Saudi Arabia and the other Gulf States to the south and Afghanistan and Pakistan to the east. 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 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."[41] The development of nuclear warheads for Iran's ballistic missiles would significantly degrade Israel's ability to deter 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 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.[42]

Before the 2015 nuclear deal, Iran had accumulated enough low-enriched uranium to build eight nuclear bombs if enriched to weapons-grade levels, and it could enrich enough uranium to arm one bomb in less than two months.[43] 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 in Tehran 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."[44] The short-lived agreement, however, did a much better job of dismantling sanctions against Iran than it did of dismantling Iran's nuclear infrastructure. This flaw led President Donald Trump to withdraw the U.S. from the agreement on May 8, 2018, and reimpose sanctions.

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 exit the nuclear agreement marks a return to long-standing U.S. nonproliferation policy. Iran, Britain, France, Germany, and the European Union (EU) have announced that they will try to salvage the agreement, but this is unlikely, given the strength of the U.S. sanctions that are slated to be fully reimposed by November 4, 2018, after a 180-day wind-down period.

Iran is a declared chemical weapons power that claims to have destroyed all of its chemical weapons stockpiles. 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."[45] Iran also has threatened to disrupt the flow of Persian Gulf oil exports by closing the Strait of Hormuz in the event of a conflict with the U.S. or its allies.

*WWTA:* The WWTA assesses that "Iran will seek to expand its influence in Iraq, Syria, and Yemen, where it sees conflicts generally trending in Tehran's favor," and "will exploit the fight against ISIS to solidify partnerships and translate its battlefield gains into political, security, and economic agreements." It also notes that "Iran continues to develop and improve a range of new military capabilities to target US and allied military assets in the region, including armed UAVs, ballistic missiles, advanced naval mines, unmanned explosive boats, submarines and advanced torpedoes, and antiship and land-attack cruise missiles." Tehran has the Middle East's "largest ballistic missile force… and can strike targets up to 2,000 kilometers from Iran's borders," and "Russia's delivery of the SA-20c SAM system in 2016 has provided Iran with its most advanced long-range air defense system."[46]

*Summary:* Iran poses a major potential threat to U.S. bases, interests, and allies in the Middle East by virtue of its ballistic missile capabilities, continued nuclear ambitions, long-standing support for terrorism, and extensive support for Islamist revolutionary groups.

**Arab Attack on Israel.** In addition to threats from Iran, Israel faces the constant threat of attack from Palestinian, Lebanese, Egyptian, Syrian, and other Arab terrorist groups. 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 are bogged down by increasingly brutal 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 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. Israeli officials have estimated that Hezbollah has amassed around 150,000 rockets, including a number of long-range Iranian-made missiles capable of striking cities throughout Israel.[47]

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.[48] 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.

Israel also faces a growing threat of terrorist attacks from Syria. Islamist extremist groups fighting the Syrian government, including the al-Qaeda–affiliated Hayat Tahrir al-Sham (formerly al-Nusra Front), have attacked Israeli positions in the Golan Heights, which Israel captured in the 1967 Arab–Israeli war.

*WWTA:* The WWTA does not reference Arab threats to Israel.

*Summary:* The threat posed to Israel by Arab states has declined in recent years as a result of the overthrow or weakening of hostile Arab regimes in Iraq and Syria. However, there is a growing threat from sub-state actors such as Hamas, Hezbollah, the Islamic State, and other terrorist groups in Egypt, Gaza, Lebanon, and Syria. Given the region's inherent volatility, the general destabilization that has occurred as a consequence of Syria's civil war, the growth of the Islamic State as a major threat actor, and the United States' long-standing support for Israel, any concerted attack on Israel would be a major concern for the U.S.

**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 offered Tehran substantial relief from sanctions, ran as high as $350 million annually.[49]

After the nuclear deal boosted Iran's financial health, Tehran increased its aid to Hezbollah, providing as much as $800 million per year, according to Israeli officials.[50] Tehran has lavishly stocked 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 United Arab Emirates.

Iranian Revolutionary Guards conspired with the branch of Hezbollah in Saudi Arabia to conduct the 1996 Khobar Towers bombing in Saudi Arabia. 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.[51]

France and Britain have been the principal European targets of Hezbollah terrorism, in part 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 as the U.S. Marine barracks bombing), 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 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, the participation of European troops 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 may 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.[52]

*WWTA:* The WWTA assesses that "Lebanese Hizballah has demonstrated its intent to foment regional instability by deploying thousands of fighters to Syria and by providing weapons, tactics, and direction to militant and terrorist groups." In addition, "Hizballah probably also emphasizes its capability to attack US, Israeli, and Saudi Arabian interests."[53]

*Summary:* Hezbollah poses a major potential terrorist threat to the U.S. and its allies in the Middle East and Europe.

**Al-Qaeda and the Islamic State: Continuing Regional Threats.** The Arab Spring uprisings that began in 2011 created power vacuums that al-Qaeda, the Islamic State, and other Islamist extremist groups have exploited to advance their revolutionary agendas. The al-Qaeda network has taken advantage of failed or failing states in Iraq, Libya, Mali, Syria, and Yemen. The fall of autocratic Arab regimes and the subsequent factional infighting within the ad hoc coalitions that ousted them created anarchic conditions that have enabled al-Qaeda franchises to expand the territories that they control. Rising sectarian tensions resulting from conflicts in Iraq, Syria, and Yemen also have presented al-Qaeda and other Sunni extremist groups with major opportunities to expand their activities.

Jonathan Evans, Director General of the British Security Service (MI5), warned presciently in 2012 that "parts of the Arab world [had] once more become a permissive environment for al-Qaeda."[54] In Egypt, Libya, Syria, Tunisia, and Yemen, the collapse or purge of intelligence and counterterrorism organizations removed important constraints on the growth of al-Qaeda and similar Islamist terrorist groups. Many dangerous terrorists were released or escaped from prison. Al-Qaeda and other revolutionary groups were handed new opportunities to recruit, organize, attract funding for, train, and arm a new wave of followers and to consolidate safe havens from which to mount future attacks.

The Arab Spring uprisings were a golden opportunity for al-Qaeda, coming at a time when its sanctuaries in Pakistan were increasingly threatened by U.S. drone strikes. Given al-Qaeda's Arab roots, the Middle East and North Africa provide much better access to potential Arab recruits than is provided by the more distant and remote regions along the Afghanistan–Pakistan border, to which many al-Qaeda cadres fled after the fall of Afghanistan's Taliban regime in 2001. The countries destabilized by the Arab uprisings also could provide easier access to al-Qaeda's Europe-based recruits, who pose dangerous threats to the U.S. homeland by virtue of their European passports and greater ability to blend into Western societies.

*WWTA:* The WWTA assesses that "Al-Qa'ida almost certainly will remain a major actor in global terrorism because of the combined staying power of its five affiliates" and that "[t]he primary threat to US and Western interests from al-Qa'ida's global network through 2018 will be in or near affiliates' operating areas." Specifically, "[n]ot all affiliates will have the intent and capability to pursue or inspire attacks in the US homeland or elsewhere in the West" and "probably will continue to dedicate most of their resources to local activity, including participating in ongoing conflicts in Afghanistan, Somalia, Syria, and Yemen, as well as attacking regional actors and populations in other parts of Africa, Asia, and the Middle East."[55]

The WWTA also assesses that "ISIS is likely to focus on regrouping in Iraq and Syria, enhancing its global presence, championing its cause, planning international attacks, and encouraging its members and sympathizers to attack in their home countries" and that its "claim of having a functioning caliphate that governs populations is all but thwarted." Efforts by "ISIS core" to conduct "a robust insurgency in Iraq and Syria as part of a long-term strategy to...enable the reemergence of its so-called caliphate...will challenge local CT efforts against the group and threaten US interests in the region."[56]

*Summary:* The al-Qaeda network and the Islamic State have exploited the political turbulence of the Arab Spring to expand their strength and control of territory in the Middle East. Although the Islamic State has been rolled back in Iraq and Syria, it continues to pose regional threats to the U.S. and its allies.

**Growing Threats to Jordan.** Jordan, a key U.S. ally, faces external threats from Syria's Assad regime and from Islamist extremists, including the Islamic State, who maintain terrorist and insurgent operations in neighboring Syria and Iraq. Jordan's cooperation with the United States, Saudi Arabia, and other countries in the air campaign against the IS in Syria and in supporting moderate elements of the Syrian opposition has angered both the Assad regime and Islamist extremist rebels. Damascus could retaliate for Jordanian support for Syrian rebels with cross-border attacks, air strikes, ballistic missile strikes, or the use of terrorist attacks by such surrogates as Hezbollah or the PFLP–GC.

The Islamic State is committed to overthrowing the government of Jordan and replacing it with an Islamist dictatorship. In its previous incarnation as al-Qaeda in Iraq, the IS mounted attacks against targets in Jordan that included the November 2005 suicide bombings at three hotels in Amman that killed 57 people.[57] The IS also burned to death a Jordanian Air Force pilot captured in Syria after his plane crashed and released a video of his grisly murder in February 2015. Jordan also faces threats from Hamas and from Jordanian Islamist extremists, particularly some based in the southern city of Maan who organized pro-IS demonstrations in 2014. Although Jordanian security forces have foiled several IS terrorist plots, six Jordanian border guards were killed by a car bomb on June 21, 2016, prompting Jordan to close the border. IS terrorists also killed 14 people in a December 18, 2016, terrorist attack in the city of Karak.

Jordan is a prime target for terrorist attacks because of its close cooperation with the U.S.-led anti-terrorism coalition, its long and permeable borders, and the nearby presence of Islamic State diehards who seek to demonstrate their continued relevance. An estimated 2,000 Jordanians joined the Islamic State, and Jordan hosts up to a million Syrian refugees, some of whom may support the IS agenda.

The large refugee population also has strained Jordan's already weak economy and scarce resources. Government austerity measures and tax hikes provoked popular protests that led to the June 4, 2018, resignation of Prime Minister Hani al-Mulki, who was replaced by economist Omar Razaz. Jordan's new government must address the country's chronic economic problems, which have been exacerbated by the influx of Syrian refugees.

*WWTA:* The WWTA does not reference threats to Jordan.

*Summary:* Jordan faces significant security threats from the Islamic State, based in neighboring Syria and Iraq, as well as from home-grown extremists. Because Jordan is one of the very few Arab states that maintain a peaceful relationship with Israel and has been a key regional partner in fighting Islamist terrorism, its destabilization would be a troubling development.

**Terrorist Attacks on and Possible Destabilization of Egypt.** The overthrow of President Hosni Mubarak's regime in 2011 undermined the authority of Egypt's central government and allowed disgruntled Bedouin tribes, Islamist militants, and smuggling networks to grow stronger and bolder in Egypt's Sinai Peninsula. President Mohamed Morsi's

Muslim Brotherhood–backed government, elected to power in 2012, took a relaxed attitude toward Hamas and other Gaza-based Islamist extremists, enabling Islamist militants in the Sinai to grow even stronger with support from Gaza. They carved out a staging area in the remote mountains of the Sinai that they have used as a springboard for attacks on Israel, Egyptian security forces, tourists, the Suez Canal, and a pipeline carrying Egyptian natural gas to Israel and Jordan.

The July 2013 coup against Morsi resulted in a military government that took a much harder line against the Sinai militants, but it also raised the ire of more moderate Islamists, who sought to avenge Morsi's fall. Terrorist attacks, which had been limited to the Sinai, expanded in lethality and intensity to include bomb attacks in Cairo and other cities by early 2014. In November 2014, the Sinai-based terrorist group Ansar Bayt al-Maqdis (Supporters of Jerusalem) declared its allegiance to the Islamic State and renamed itself the Sinai Province of the Islamic State. It has launched a growing terrorist campaign against Egypt's army, police, and other government institutions, as well as the country's Christian minority, and has claimed responsibility for the October 31, 2015, bombing of a Russian passenger plane flying to Saint Petersburg from Sharm-el-Sheikh that killed 224 people.

The Islamic State–Sinai Province has fiercely resisted military operations and has launched a series of terrorist attacks that have taken a heavy toll. A car bomb killed at least 23 people at a police checkpoint near Gaza on July 7, 2017; an estimated 40 IS gunmen slaughtered 311 people at a Sufi mosque in the northern Sinai on November 24, 2017, the deadliest terrorist attack in Egyptian history; and 14 IS militants wearing bomb belts killed at least eight soldiers at an army base in Sinai on April 14, 2018.

Egypt also faces potential threats from Islamist militants and al-Qaeda affiliates based in Libya. The Egyptian air force bombed Islamic State targets in Libya on February 16, 2015, the day after the terrorist organization released a video showing the decapitation of 21 Egyptian Christians who had been working in Libya. Cairo has stepped up security operations along the border with Libya to block the smuggling of arms and militants into Egypt. It also has supported Libyans fighting Islamist extremists in eastern Libya.

During the 2014 conflict between Hamas and Israel, Egypt closed tunnels along the Gaza–Sinai border that have been used to smuggle goods, supplies, and weapons into Gaza. It has continued to uncover and destroy tunnels to disrupt an important source of external support for Sinai Province terrorists. Egypt has continued to uphold its peace treaty with Israel and remains an important ally against Islamist terrorist groups.

*WWTA:* The WWTA does not reference threats to Egypt.

*Summary:* Egypt is threatened by Islamist extremist groups that have established bases in the Sinai Peninsula, Gaza, and Libya. Left unchecked, these groups could foment greater instability not only in Egypt, but also in neighboring countries.

**Threats to Saudi Arabia and Other Members of the Gulf Cooperation Council.** 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.[58]

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 (EFPs). 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."[59] 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."[60]

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.

Saudi Arabia also faces threats from Islamist extremists, including al-Qaeda offshoots in Iraq and Yemen that have attracted many Saudi recruits. Al-Qaeda launched a series of bombings and terrorist attacks inside the kingdom in 2003 and a major attack on the vital Saudi oil facility in Abqaiq in 2006, but a security crackdown drove many of its members out of the country by the end of the decade. Many of them joined Al-Qaeda in the Arabian Peninsula in neighboring Yemen. AQAP has flourished, aided by the instability fostered by Arab Spring protests and the ouster of the Yemeni government by Iran-backed Houthi rebels in early 2015.

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.

*WWTA:* The WWTA assesses that "[i]n Yemen, Iran's support to the Huthis further escalates the conflict and poses a serious threat to US partners and interests in the region." Continued Iranian support also "enables Huthi attacks against shipping near the Bab al Mandeb Strait and land-based targets deep inside Saudi Arabia and the UAE, such as the 4 November and 19 December ballistic missile attacks on Riyadh and an attempted 3 December cruise missile attack on an unfinished nuclear reactor in Abu Dhabi."[61]

*Summary:* Saudi Arabia and other members of the Gulf Cooperation Council face continued threats from Iran as well as rising threats from Islamist extremist groups such as al-Qaeda, the Islamic State, and Houthi militias in Yemen. Saudi citizens and Islamic charities have supported Islamist extremist groups, and the Saudi government promulgates the religious

views of the fundamentalist Wahhabi sect of Sunni Islam, but the Saudi government also serves to check radical Islamist groups like the Islamic State and is a regional counterbalance to Iran.

## 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, which 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. The flow of that oil could be interrupted by interstate conflict or terrorist attacks.

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. Approximately 18.5 million barrels of oil a day—more than 30 percent of the seaborne oil traded worldwide—flowed through the strait in 2016.[62]

Iran has trumpeted the threat that it could pose to the free flow of oil exports from the Gulf if it is attacked or threatened with a cutoff of its own oil exports. 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. Iran's 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."[63]

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. However, 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.

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 is well stocked with 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 anti-ship cruise missiles, the Ra'ad and Noor. More recently, Tehran has produced and deployed more advanced anti-ship cruise missiles, the Nasir and Qadir.[64] 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. They include the Chinese-designed EM-52 "rocket" mine, which remains stationary on the sea floor and fires a homing rocket when a ship passes overhead. In addition, Iran can deploy mines or torpedoes from its three *Kilo*-class submarines, which would be effectively immune to detection for brief periods when running silent and remaining stationary on a shallow bottom just outside the Strait of Hormuz,[65] and also could deploy mines by mini-submarines, helicopters, or small boats disguised as fishing vessels.

Iran's Revolutionary Guard naval forces have developed swarming tactics using fast attack boats and could deploy naval commandos trained to attack using small boats, mini-submarines, and even jet skis. The Revolutionary Guards also have underwater demolition teams that could attack offshore oil platforms 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.[66] On May 14, 2015, an oil tanker flagged in Singapore, the *Alpine Eternity,* 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, although the ship's owners maintained that it had hit an uncharted submerged structure.[67] 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.[68] IRGC naval forces have frequently challenged U.S. naval forces in a series of incidents in recent years. 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. 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.[69] Although this is a welcome development, the provocations could resume suddenly if U.S.–Iran relations were to deteriorate.

Finally, Tehran could use its extensive client network 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.[70] 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 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.

Terrorists also pose a potential threat to oil tankers and other ships. Al-Qaeda strategist Abu Mus'ab al-Suri has identified four strategic choke points that should be targeted for disruption: the Strait of Hormuz, the Suez Canal, the Bab el-Mandeb Strait, and the Strait of Gibraltar.[71] In 2002, al-Qaeda terrorists attacked and damaged the French oil tanker *Limbourg* off the coast of Yemen. Al-Qaeda also almost sank the USS *Cole*, a guided-missile destroyer, in the port of Aden, killing 17 American sailors with a suicide boat bomb in 2000. An Egyptian patrol boat was attacked in November 2014 by the crews of small boats suspected of smuggling arms to Islamist terrorists in Gaza. In July 2015, the Islamic State–Sinai Province claimed responsibility for a missile attack on an Egyptian coast guard vessel.

Terrorists have targeted the Suez Canal as well. In two incidents on July 29 and August 31, 2013, ships in the waterway were attacked with rocket-propelled grenades. The attacks were claimed by a shadowy Islamist extremist group called the Furqan Brigades, which operated in Egypt's Sinai Peninsula.[72] The vessels reportedly escaped major damage. More important, the canal was not forced to close, which would have disrupted global shipping operations, ratcheted up oil prices, and complicated the deployment of U.S. and NATO naval vessels responding to potential crises in the Middle East, Persian Gulf, and Horn of Africa.

Over the past decade, piracy off the coast of Somalia has threatened shipping near the Bab el-Mandeb Strait and the Gulf of Aden. After more than 230 pirate attacks off the coast of Somalia in 2011, the number of attacks fell off steeply because of security precautions such as the deployment of armed guards on cargo ships and increased patrols by the U.S. Navy and other navies.[73] Then, after a four-year lull, pirate attacks surged in 2016 with 27 incidents, although no ships were hijacked. Between January and May 2017, three commercial vessels were hijacked, the first to be taken since 2012.[74] In 2017, the number of pirate incidents off the coast of East Africa doubled to 54.[75] Somali criminal networks apparently have exploited a decline in international naval patrols and the complacency of some shipping operators who have failed to deploy armed guards on ships in vulnerable shipping lanes.

*WWTA:* The WWTA assesses that "Iran continues to provide support that enables Huthi attacks against shipping near the Bab al Mandeb Strait and land-based targets deep inside Saudi Arabia and the UAE."[76]

*Summary:* Iran poses the chief potential threat to shipping in the Strait of Hormuz and has boosted the Houthi naval threat in the Red Sea. Various terrorist groups pose the chief threats to shipping in the Suez Canal and the Bab el-Mandeb Strait. Although pirate attacks off the coast of Somalia declined steeply between 2011 and 2016, there was a spike in attacks in 2017.

**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 Libyan arms depots after the fall of Muammar Qadhafi's regime in 2011. Although Libya is estimated to have had up to 20,000 MANPADS (mostly old Soviet models), only about 10,000 have been accounted for, and an unknown number may have been smuggled out of Libya, which is a hotbed of Islamist radicalism.[77]

U.S. intelligence sources have estimated that at least 800 MANPADS fell into the hands of foreign insurgent groups after being moved out of Libya.[78] Libyan MANPADS have turned up in the hands of AQIM, the Nigerian Boko Haram terrorist group, and Hamas in Gaza. At some point, one or more could be used in a terrorist attack against a civilian airliner. Insurgents or terrorists also could use anti-aircraft missile systems captured from regime forces in Iraq, Syria, and Yemen. In January 2015, a commercial airliner landing at Baghdad International Airport was hit by gunfire that injured a passenger and prompted a temporary suspension of flights to Baghdad.

Al-Qaeda also has used MANPADS in several terrorist attacks. In 2002, it launched two SA-7 MANPADS in a failed attempt to bring down an Israeli civilian aircraft in Kenya. In 2007, the al-Qaeda affiliate al-Shabaab shot down a Belarusian cargo plane in Somalia, killing 11 people.[79] Al-Qaeda's al-Nusra Front and the Islamic State have acquired substantial numbers of MANPADS from government arms depots in Iraq and Syria. Although such weapons may pose only a limited threat to modern warplanes equipped with countermeasures, they pose a growing threat to civilian aircraft in the Middle East and could be smuggled into the United States and Europe to threaten aircraft there.

The Islamic State–Sinai Province claimed responsibility for a bomb that destroyed Metrojet Flight 9268, a Russian passenger jet en route from Sharm el-Sheikh, Egypt, to Saint Petersburg, Russia, on October 31, 2015. The incident claimed the lives of 224 people on the plane, one of the biggest death tolls in a terrorist attack in recent years. The May 19, 2016, crash of EgyptAir flight MS804, which killed 66 people flying from Paris, France, to Cairo, Egypt, has been attributed to a fire, but the cause of that onboard fire has not been determined.

*WWTA:* The WWTA makes no mention of the terrorist threat to airspace in the Middle East.

*Summary:* Al-Qaeda, the Islamic State, and other terrorists have seized substantial numbers of anti-aircraft missiles from military bases in Iraq, Libya, and Syria, and these missiles pose potential threats to safe transit of airspace in the Middle East, North Africa, and elsewhere.

**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.[80] The technology probably was transferred by North Korea, which built its BM-25 missiles using the R-27 as a model.[81] 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.[82] Tehran also announced in June 2013 that it had established its first space tracking center to monitor objects in "very remote space" and to help manage the "activities of satellites."[83] 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).[84]

*WWTA:* The WWTA assesses that "[p]rogress on Iran's space program, such as the launch of the Simorgh SLV in July 2017, could shorten a pathway to an ICBM because space launch vehicles use similar technologies."[85]

*Summary:* Iran has launched satellites into orbit successfully, but there is no evidence that it has yet developed an offensive space capability that could deny others the use of space or exploit space as a base for offensive weaponry.

**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."[86]

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 successfully 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.[87] Iran has invested heavily in cyber

activity, reportedly spending "over $1 billion on its cyber capabilities in 2012 alone."[88]

Hostile Iranian cyber activity has increased significantly since the beginning of 2014 and could threaten U.S. critical infrastructure, according to an April 2015 report released by the American Enterprise Institute. 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, according to the report.[89]

Iran allegedly has used cyber weapons to engage in economic warfare, most notably the sophisticated and debilitating "denial-of-service (DDoS) attacks against a number of U.S. financial institutions, including the Bank of America, JPMorgan Chase, and Citigroup."[90] 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.[91] 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.[92]

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.[93] In March 2016, the Justice Department indicted seven Iranian hackers for penetrating the computer system that controlled a dam in the State of New York.[94]

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 accounts such as LinkedIn, YouTube, Facebook, and Twitter.[95] 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).[96]

*WWTA:* The WWTA assesses that "Iran will continue working to penetrate US and Allied networks for espionage and to position itself for potential future cyberattacks, although its intelligence services primarily focus on Middle Eastern adversaries—especially Saudi Arabia and Israel." Iran "probably views cyberattacks as a versatile tool to respond to perceived provocations, despite [its] recent restraint from conducting cyberattacks on the United States or Western allies," and its "cyber attacks against Saudi Arabia in late 2016 and early 2017 involved data deletion on dozens of networks across government and the private sector."[97]

*Summary:* Iranian cyber capabilities present significant espionage and sabotage threats to the U.S. and its allies, and Tehran has shown both willingness and skill in using them.

### Threat Scores

**Iran.** 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' *Military Balance 2018*,

among the key weapons in Iran's inventory are 22-plus MRBM launchers, 18-plus SRBM launchers, 334 combat-capable aircraft, 1,513-plus main battle tanks, 640-plus armored personnel carriers, 21 tactical submarines, seven corvettes, and 12 amphibious landing ships. There are 523,000 personnel in the armed forces, including 350,000 in the Army, 125,000-plus in the Islamic Revolutionary Guard Corps, and 18,000 in the Navy. With regard to these capabilities, the IISS assesses that:

> Iran continues to rely on a mix of ageing combat equipment, reasonably well-trained regular and Islamic Revolutionary Guard Corps (IRGC) forces, and its ballistic-missile inventory to underpin the security of the state. The IRGC, including senior military leaders, has been increasingly involved in the civil war in Syria, supporting President Bashar al-Assad's regular and irregular forces; it was first deployed to Syria in an "advisory" role in 2012, deployments of the army began in 2013....
>
> The armed forces continue to struggle with an ageing inventory of primary combat equipment that ingenuity and asymmetric warfare techniques can only partially offset.[98]

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

## Threats: Iran

| | HOSTILE | AGGRESSIVE | TESTING | ASSERTIVE | BENIGN |
|---|---|---|---|---|---|
| Behavior | | ✔ | | | |

| | FORMIDABLE | GATHERING | CAPABLE | ASPIRATIONAL | MARGINAL |
|---|---|---|---|---|---|
| Capability | | ✔ | | | |

......................................................................

### Greater Middle East–Based Terrorism

Collectively, the varied non-state actors in the Middle East that are vocally and actively opposed to the United States are the closest to being rated "aggressive" with regard to the degree of provocation they exhibit. These groups, from the Islamic State to al-Qaeda and its affiliates, Hezbollah, and the range of Palestinian terrorist organizations in the region, are primarily a threat to America's allies, friends, and interests in the Middle East. Their impact on the American homeland is mostly a concern for American domestic security agencies, but they pose a challenge to the stability of the region that could result in the emergence of more dangerous threats to the United States.

The IISS *Military Balance* addresses only the military capabilities of states. Consequently, it does not provide any accounting of such entities as Hezbollah, Hamas, al-Qaeda, or the Islamic State.

This *Index* assesses the overall threat from greater Middle East–based terrorism, considering the range of contingencies, as "hostile" and "capable." The increase from "aggressive" to "hostile" reflects the growing assertiveness of Iranian-controlled Shia militias in Iraq and Syria.[99]

# Threats: Middle East Terrorism

| | HOSTILE | AGGRESSIVE | TESTING | ASSERTIVE | BENIGN |
|---|---|---|---|---|---|
| Behavior | ✔ | | | | |

| | FORMIDABLE | GATHERING | CAPABLE | ASPIRATIONAL | MARGINAL |
|---|---|---|---|---|---|
| Capability | | | ✔ | | |

# Endnotes

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99. 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.

# Asia

## Threats to the Homeland

Threats to the U.S. homeland that stem from Asia include terrorist threats from non-state actors resident in ungoverned areas of South Asia, an active and growing North Korean ballistic missile capability, and a credible Chinese nuclear missile capability that supports other elements of China's national power.

**Terrorism Originating from Afghanistan and Pakistan (AfPak).** Terrorist groups operating from Pakistan and Afghanistan 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 from 2010–2012 have helped to degrade the al-Qaeda threat, but the residual presence of al-Qaeda and the emergence of ISIS in Afghanistan remain serious concerns. This is a deadly region. According to General John W. Nicholson, then commander of U.S. and NATO forces in Afghanistan, "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."[1]

ISIS efforts to make inroads into Pakistan and Afghanistan have met with only limited success, most likely because of al-Qaeda's well-established roots in the region, ability to maintain the loyalty of the various South Asian terrorist groups, and careful nurturing of its relationship with the Afghan Taliban. 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."[2] 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 April 2017, the U.S. military claimed 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.[3] In June 2017, a U.S. airstrike killed the head of ISIS-Khorasan, Abu Sayed.

Experts believe 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 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, mostly children, shocked the Pakistani public and prompted the government led by Prime Minister Nawaz Sharif to introduce a National Action Plan (NAP) to reinvigorate the country's fight against terrorism. The action plan includes steps like lifting the moratorium on the death penalty for terrorists, establishing special military courts to try terrorists, curbing the spread of extremist literature and propaganda on social media, freezing the assets of terrorist organizations, and forming special committees of army and political leaders in the provinces to implement the NAP. The NAP has been criticized for being poorly implemented, but in the summer of 2018, the leaders of the PPP and PTI opposition parties, Bilawal Bhutto and Imran Khan, called for the NAP to be strengthened and extended across the country.

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 terrorist attack fatalities inside Pakistan 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, and just 281 in the first half of 2018.[4]

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 airbase at Pathankot on January 2, 2016. In early April 2015, Pakistan released on bail the mastermind of the Mumbai attacks, Zakiur Rehman Lakhvi, who had been in Pakistani custody since 2009.

In April 2012, the U.S. issued a $10 million reward for information leading to the arrest or conviction of LeT founder Hafez Muhammad Saeed. The LeT has engaged in recruitment and fundraising activities in the U.S. In September 2011, for instance, U.S. authorities arrested Jubair Ahmad, an American permanent resident born in Pakistan, for providing material support to the LeT by producing LeT propaganda and uploading it to the Internet. Ahmad reportedly attended an LeT training camp in Pakistan before moving to the U.S. in 2007.[5]

The U.S. trial of Pakistani American David Coleman Headley, who was arrested in Chicago in 2009 for his involvement in the 2008 Mumbai attacks, led to striking revelations about the LeT's international reach and close connections to Pakistani intelligence. Headley had traveled frequently to Pakistan, where he received terrorist training from the LeT, and to India, where he scouted the sites of the Mumbai attacks. In four days of testimony and cross-examination, Headley provided details about his meetings with a Pakistani intelligence officer, a former army major, and a navy frogman who were among the key players in orchestrating the Mumbai assault.[6]

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.[7]

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 top Indian 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 is concern 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 (NTI) *Nuclear Security Index* ranks 24 countries with "weapons useable nuclear material" for their susceptibility to theft. Pakistan's weapons-grade materials are the 22nd least secure, with only Iran's and North Korea's ranking lower. In the NTI's broader survey of 44 countries with nuclear power and related facilities, Pakistan ranks 36th least secure against sabotage.[8]

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 take charge 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.[9]

*WWTA:* The 2018 Worldwide Threat Assessment of the U.S. Intelligence Community (WWTA) does not reference any threat to the homeland from AfPak-based terrorism. The 2017 assessment, however, cited "[p]lotting against the US homeland" by individual members within terrorist groups.[10]

*Summary:* The threat to the American homeland emanating from Afghanistan and Pakistan 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. Despite the broad and deep U.S. relationships with Pakistan's governing elites and military, however, 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.

**Missile Threat: North Korea and China.** The two sources of the ballistic missile threat to the U.S. (North Korea and China) are very different in terms of their sophistication and integration into broader strategies for achieving national goals. The threats from these two countries are therefore very different in nature.

*North Korea.* In 2017, North Korea conducted three successful tests of two variants of road-mobile intercontinental ballistic missiles (ICBMs). 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.[11] The Hwasong-15 has a range of 13,000 kilometers and could reach the entire continental United States. North Korea conducted its fourth and fifth nuclear tests in 2016 and its most recent —the first test of a much more powerful hydrogen bomb—in 2017.

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.[12] In late 2017, Kim Jong-un

MAP 6

# North Korean Missiles

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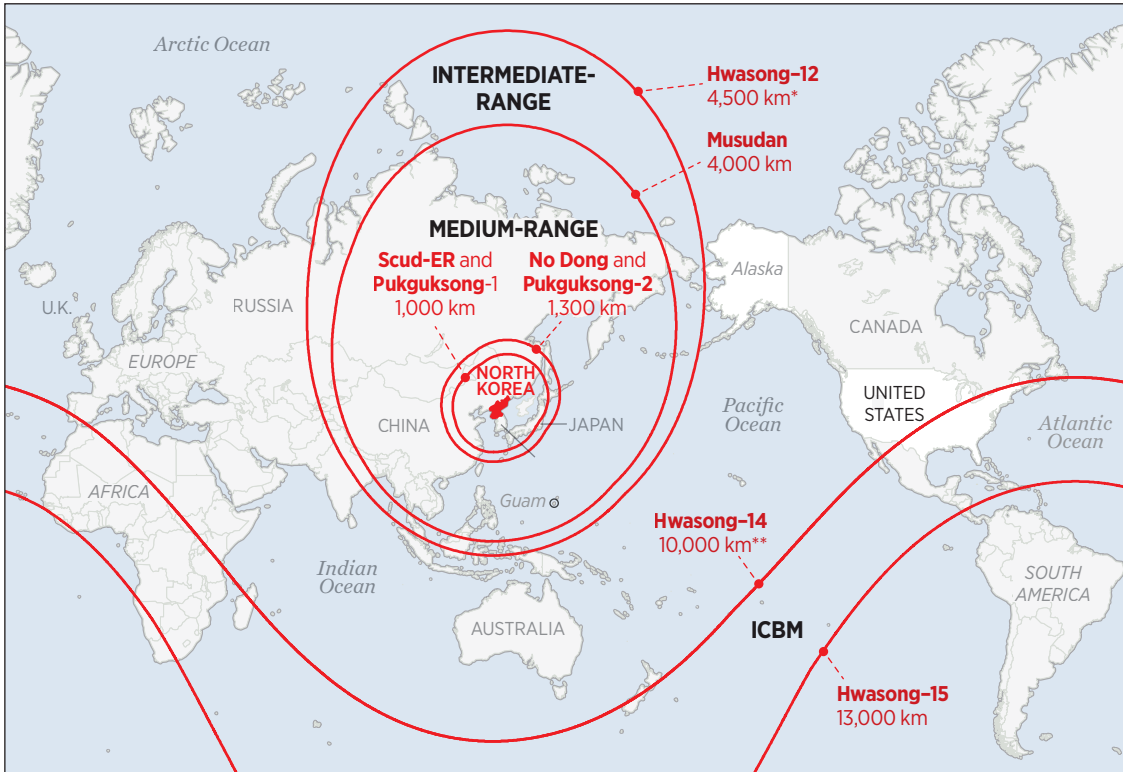


* First tested May 2017.    ** First tested July 2017.
**SOURCES:** Heritage Foundation research and media reports.

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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."[13] Among North Korea's many direct verbal threats to the U.S., the regime warned in March 2016 that it would "reduce all bases and strongholds of the U.S. and South Korean warmongers for provocation and aggression into ashes in a moment, without giving them any breathing spell."[14]

The United States and South Korea have revised their estimates and now see a more dire North Korean threat. In January 2018, then-CIA Director Mike Pompeo assessed that North Korea would attain an ICBM capability within a "handful of months."[15] Vice Admiral James Syring, then head of the U.S. Missile Defense Agency, has testified that "[i]t is incumbent on us to assume that North Korea today can range the United States with an ICBM carrying a nuclear warhead."[16] In April 2016, Admiral William Gortney, head of U.S. Northern Command, stated that "[i]t's the prudent decision on my part to assume that North Korea has the capability to miniaturize a nuclear weapon and put it on an ICBM."[17]

Most non-government experts assess that North Korea has perhaps 30 or more nuclear weapons. However, an April 2017 assessment by David Albright of the Institute for Science and International Security concluded that

Pyongyang could have had "13–30 nuclear weapons as of the end of 2016, based on the estimates of North Korea's production and use of plutonium and WGU [weapon-grade uranium]," and "is currently expanding its nuclear weapons at a rate of about 3–5 weapons per year."[18] An earlier study by Joel S. Witt and Sun Young Ahn that was published in February 2015 by the Korea Institute at Johns Hopkins University's Nitze School of Advanced International Studies included a worst-case scenario in which Pyongyang could have "100 [nuclear] weapons by 2020."[19]

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 (IRBM), which can target critical U.S. bases in Guam, and both the Pukguksong-2 road-mobile medium-range ballistic missile (MRBM) and the Pukguksong-1 submarine-launched ballistic missile (SLBM). In June 2017, in written testimony before the House Armed Services Committee, Secretary of Defense James Mattis called North Korea "the most urgent and dangerous threat to peace and security."[20]

In June 2018, President Donald Trump met with Kim Jong-un in Singapore and subsequently declared both that "[t]here is no longer a Nuclear Threat from North Korea"[21] and that "total denuclearization...has already started taking place."[22] The Singapore Communique may be the first step toward North Korea's denuclearization after eight failed diplomatic attempts during the past 27 years, but as of July 2018, there has been no decrease in North Korea's WMD arsenal or production capabilities. To the contrary, the U.S. Intelligence Community assessed that Pyongyang had increased production of fissile material for nuclear weapons, and satellite imagery showed upgrades to missile, reentry vehicle, missile launcher, and nuclear weapon production facilities.[23]

*China.* Chinese nuclear forces are the responsibility of the People's Liberation Army Rocket Forces (PLARF), one of 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 limited nuclear deterrent. The PRC fielded only a small number of nuclear weapons, with estimates of about 100–150 weapons on MRBMs and about 60 ICBMs. Its only ballistic missile submarine (SSBN) conducted relatively few deterrence patrols (perhaps none),[24] and its first-generation SLBM, the JL-1, if it ever attained full operational capability, had limited reach.

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 today is the DF-31 series, a solid-fueled, road-mobile system, along with a growing number of longer-range DF-41 missiles (also rail mobile) that may 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. These are expected to

be equipped with the new, longer-range JL-2 SLBM. 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, air-launched cruise missile carried on China's H-6 bomber, may be nuclear tipped, although there is not much evidence 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.[25]

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 or Pakistan (or North Korea), its nuclear-armed neighbors, are capable of fielding. If there are corresponding changes in doctrine, modernization will enable China to engage in limited nuclear options in the event of a conflict.

China has also been working on an array of hypersonic weapons. Undersecretary of Defense Michael Griffin and General John Hyten, head of U.S. Strategic Command, have testified that China and Russia are working aggressively to develop hypersonic weapons. Both have warned that China is at or ahead of the American level of development. General Hyten, for example, warned that "we don't have any defense that could deny the employment of such a weapon against us, so our response would be our deterrent force, which would be the triad and the nuclear capabilities that we have to respond to such a threat."[26]

*WWTA:* The language of the WWTA has changed slightly in its description of the North Korean nuclear threat, from a "serious threat to US interests and to the security environment in East Asia"[27] to "among the most

volatile and confrontational WMD threats to the United States."[28] However, it again reports that North Korea is "committed to developing a long-range, nuclear-armed missile that is capable of posing a direct threat to the United States."[29] With respect to the broader threat from North Korea's "weapons of mass destruction program, public threats, defiance of the international community, confrontational military posturing, cyber activities, and potential for internal instability," the WWTA warns that they "pose a complex and increasing threat to US national security and interests."[30] Last year, it described this same mix of factors as an "increasingly grave threat."[31]

The WWTA's assessment of the Chinese nuclear missile threat is unchanged from 2016 and 2017: China "continues to modernize its nuclear missile force by adding more survivable road-mobile systems and enhancing its silo-based systems. This new generation of missiles is intended to ensure the viability of China's strategic deterrent by providing a second-strike capability."[32] The 2018 assessment adds the observation that the Chinese are intent on forming a "triad by developing a nuclear-capable next generation bomber."[33]

*Summary:* The respective missile threats to the American homeland from North Korea and China are very different. China has many more nuclear weapons, multiple demonstrated and tested means of delivery, and more mature systems, but it is a more stable actor with a variety of interests, including relations with the United States and its extensive interaction with the international system. North Korea has fewer weapons and questionable means of delivery, but it is less stable and less predictable, with a vastly lower stake in the international system. There is also a widely acknowledged difference in intentions: China seeks a stable second-strike capability and, unlike North Korea, is not actively and directly threatening the United States.

### Threat of Regional War

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. One of its critical allies, South Korea, 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.[34] Taiwan is under a long-standing, well-equipped, 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.

In South Asia, India is geographically positioned between two major security threats: Pakistan to its west and China to its northeast. From Pakistan, India faces the additional threat of terrorism, whether state-enabled or carried out without state knowledge or control.

**North Korean Attack on American Bases and Allies.** 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 ballistic missile force. Pyongyang 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 IRBMs can hit U.S. bases on Okinawa and Guam. Pyongyang continues its development of several different ICBMs with enough range to hit the continental U.S.[35]

North Korea has approximately 1 million people in its military, with reserves numbering several million more. Pyongyang has forward-deployed 70 percent of its ground forces within 90 miles of the Demilitarized Zone (DMZ), making it possible to attack with little or no warning. This is of particular concern because South Korea's capital, Seoul, is only 30 miles south of the DMZ.[36] In addition to three conventional corps alongside the DMZ, Pyongyang has deployed two mechanized corps, an armor corps, and an artillery corps.[37]

The April 2018 inter-Korean summit led to bilateral pledges of nonaggression and mutual force reduction. However, similar pledges were contained in the 1972, 1992, 2000, and 2007 joint statements, all of which Pyongyang subsequently violated or abrogated.

In the Panmunjom Declaration that marked the 2018 summit, South Korean President Moon Jae-in and North Korean leader Kim Jong-un committed their countries to "completely cease all hostile acts against each other." The two leaders "pledged that 'there will be no more war on the Korean Peninsula and thus a new era of peace has begun.'"[38] In 1972, however, the Koreas futilely agreed to "implement appropriate measures to stop military provocation which may lead to unintended armed conflicts."[39] In 1992, they vowed that they would "not use force against each other" and would "not undertake armed aggression against each other."[40] And in 2007, Seoul and Pyongyang agreed to "adhere strictly to their obligation to nonaggression."[41]

None of those pledges prevented North Korea from conducting assassination attempts on the South Korean president, terrorist acts, military and cyber-attacks, and acts of war. For this reason, as of July 2018, there have been no changes in either North Korea's or South Korea's force posture.

After the June 2018 U.S.–North Korea summit, Washington and Seoul unilaterally canceled the annual Ulchi Freedom Guardian joint exercise, as well as South Korea's Taeguk command-post exercise, and suspended the joint Marine Exercise Program.[42] North Korea did not announce any reciprocal suspensions of its conventional military exercises, including its large-scale annual Winter and Summer Training Cycles.

South Korea remains North Korea's principal target. In 2005, South Korea initiated a comprehensive defense reform strategy to transform its military into a smaller but more

capable force to deal with the North Korean threat and a predicted shortfall of 18 year olds by 2025 to fully staff the military. The defense reform program has gone through a number of iterations but remains a goal in 2018. Overall, South Korean military manpower would 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.[43] Some Moon Jae-in administration advisers 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 clearly demonstrated by two deadly attacks in 2010. In March, a North Korean submarine sank the South Korean naval corvette *Cheonan* in South Korean waters, killing 46 sailors. In November, North Korean artillery shelled Yeonpyeong Island, killing four South Koreans.

Since the North Korean military is predominantly equipped with older ground force equipment, Pyongyang has prioritized deployment of strong asymmetric capabilities, including special operations forces, long-range artillery, and missiles. As noted, North Korea has deployed hundreds of Scud short-range 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 actively subject to occasional, limited armed conflict.

North Korea's September 2017 hydrogen bomb test—in excess of 150 kilotons—demonstrated a thermonuclear hydrogen bomb capability. It is unknown whether the warhead has been miniaturized for an ICBM, but then-CIA Director Michael Pompeo said in January 2018 that North Korea would have the ability to carry out a nuclear attack on the mainland U.S. in a mere "handful of months."[44] North

Korea is already assessed as having the ability to target South Korea and Japan with nuclear-capable missiles.

In March 2016, the Korean Central News Agency declared that Pyongyang has a "military operation plan...to liberate south Korea and strike the U.S. mainland," that "offensive means have been deployed to put major strike targets in the operation theatres of south Korea within the firing range," and that "the powerful nuclear strike means targeting the U.S. imperialist aggressor forces bases in the Asia–Pacific region and the U.S. mainland are always ready to fire."[45]

In May 2018, North Korea blew up the entrance adits to its Punggye-ri nuclear test site. Foreign reporters were able to confirm the explosive closure of the entrances to six test tunnels but could not confirm overall damage to the tunnels. In April 2018, Kim Jong-un had declared that "under the proven condition of complete nuclear weapons, we no longer need any nuclear tests, mid-range and intercontinental ballistic rocket tests" and that "the nuclear test site in [the] northern area has also completed its mission."[46]

*WWTA:* The WWTA specifically cites Pyongyang's "serious and growing threat to South Korea and Japan" and the expanded "conventional strike options...that improve North Korea's ability to strike regional US and allied targets with little warning."[47]

*Summary:* 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 threat of force.

**Chinese Threat to 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 resumed as a result

of Beijing's reaction to the outcome of Taiwan's 2016 presidential election. Regardless of the state of the relationship at any given time, however, 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, there is no realistic means by which any Chinese leadership can back away from the stance of having to unify the island with the mainland. As a result, the island remains an essential part of the People's Liberation Army's "new historic missions," shaping PLA acquisitions and military planning.

Two decades of double-digit increases in China's announced defense budget have produced a significantly more modern PLA, much of which remains focused on a Taiwan contingency. This modernized force includes more than 1,000 ballistic missiles, a modernized air force, and growing numbers of modern surface combatants and diesel-electric submarines capable of mounting a blockade. As the 1995–1996 Taiwan Strait crisis demonstrated, Beijing is prepared at least to use open displays of force. Accordingly, over the last year, the Chinese have sought to intimidate Taiwan with a growing number of military exercises, including live-fire drills and bomber flights around the island.[48] In the absence of a strong American presence, it might be willing to go farther than this.

It is widely posited that China's counter-intervention 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, that Americans refer to as an anti-access/area-denial (A2/AD) strategy—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 such as 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 doctrine of "three warfares"[49] highlights 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.

*WWTA:* The WWTA does not reference the threat that China poses to Taiwan but does again reference Beijing's "firm stance" with regard to Taipei.[50]

*Summary:* The Chinese threat to Taiwan is a long-standing one. After an extended lull in apparent tensions, its reaction to the new government in Taipei has once again brought the threat to the fore. China's ability to execute a military action against Taiwan, albeit at high economic, political, and military cost, is improving. Its intent to unify Taiwan with the mainland under the full authority of the PRC central government and to end the island's de facto independence has been consistent over time.

**Major Pakistan-Backed Terrorist Attack on India Leading to Open Warfare Between India and Pakistan.** An India–Pakistan conflict would jeopardize multiple U.S. interests in the region and potentially increase the threat of global terrorism if Pakistan were destabilized. Pakistan would rely on militant non-state actors to help it fight

India, potentially 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 currently totals well over $100 billion annually.[51] A conflict would also potentially 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.

Meanwhile, 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.[52]

Pakistan has been said to have "the world's fastest-growing nuclear stockpile."[53] Islamabad currently has an estimated 140 nuclear weapons and "has lowered the threshold for nuclear weapons use by developing tactical nuclear weapons capabilities to counter perceived Indian conventional military threats."[54] 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 remains volatile and has arguably grown more so since the May 2014 election of Bharatiya Janata Party (BJP) leader Narendra Modi as India's prime minister. While Modi initially sought to extend an olive branch by inviting Pakistani Prime Minister Nawaz Sharif to his swearing-in ceremony, he subsequently 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 (LoC) that divides Kashmir. The director of India's Border Security Force noted that the firing across the international border was the worst it had been since the war between India and Pakistan in 1971. A similar escalation in border tensions occurred again in December 2014 when a series of firing incidents over a one-week period resulted in the deaths of at least five Pakistani soldiers and one Indian soldier.

On December 25, 2015, a meeting did occur when Prime Minister Modi made an impromptu visit to Lahore to meet with Pakistani Prime Minister Sharif, the first visit to Pakistan by an Indian leader in 12 years. 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, JeM militants attacked the Indian airbase at Pathankot, killing seven Indian security personnel. India has provided information on the attackers to Pakistan and has demanded action against JeM, but to no avail.

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. Since 2015, there has also been an uptick in cross-border firing between the Indian and Pakistani militaries, raising questions about whether a cease-fire that has been in place since 2003 is being rendered ineffective.

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 an Indian airbase at Pathankot, as well as a February 2018 attack on an Indian army camp in Jammu.[55] Media reports indicate that some JeM leaders were detained in Pakistan following the Pathankot attack, but no charges were filed.

Hafez Muhammed Saeed, LeT's founder and the leader of its front organization Jamaat-ud-Dawa (JuD), has periodically been

placed under arrest, only to be later released. Previously, he had operated freely in Pakistan, often holding press conferences and inciting violence against India during large public rallies. In December 2014, Saeed held a two-day conclave in Lahore that received support from the Pakistani government, including security from 4,000 police officers and government assistance in transporting attendees to the gathering of more than 400,000. India condemned the Pakistani government's support for the gathering as "blatant disregard" of global norms against terrorism.[56]

There is some concern about the impact on Indian–Pakistani relations 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. Afghan security forces thwarted an attack on the Indian consulate in Herat, Afghanistan, in May 2014. However, 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 climb the military escalation ladder and eventually engage in all-out conflict. 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 would be under great pressure to react strongly in the face of another major terrorist provocation. Pakistan's recent focus on incorporating tactical nuclear weapons into its warfighting doctrine has also raised concern that if conflict does break out, there is now a higher risk of nuclear exchange.[57]

*WWTA:* The 2018 WWTA does not reference the threat to American interests from a Pakistani attack on India and potential escalation, but it does refer to "tense" relations between the two countries and the "risk of escalation" in the event of "another high-profile terrorist attack in India or an uptick in violence on the Line of Control."[58] It also calls attention to the production of "new types of nuclear weapons [that] will introduce new risks for escalation dynamics and security in the region."[59] More broadly, there is significant new language specifying that "Pakistan will continue to threaten US interests by deploying new nuclear weapons capabilities, maintaining its ties to militants, restricting counterterrorism cooperation, and drawing closer to China."[60]

*Summary:* Indian military retaliation against a Pakistan-backed terrorist strike against India could include targeted air strikes on terrorist training camps inside Pakistan. This would likely lead to broader military conflict with some prospect of escalating to a nuclear exchange. Neither side desires another general war. Both countries have limited objectives and have demonstrated their intent to avoid escalation, but this is a delicate calculation.

**Threat of China–India Conflict.** 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. It would also risk straining the maturing India–U.S. partnership if the level of U.S. support and commitment in a conflict scenario did not meet India's expectations. Meanwhile, a border conflict between India and China could prompt Pakistan to try to take advantage of the situation, further contributing to regional instability.

The Chinese continue to enjoy an advantage over India in terms of military infrastructure and along the Line of Actual Control (LAC) that separates Indian-controlled territory from Chinese-controlled territory and continue to expand a network of road, rail, and air links in the border areas. To meet these challenges, the government of Prime Minister Modi has committed to expanding infrastructure development along India's disputed

border with China, especially in the Indian states of Arunachal Pradesh and Sikkim, but progress has been slow. Although China currently holds a decisive military edge over India, New Delhi is engaged in an ambitious military modernization program.

Long-standing border disputes that led to a Sino–Indian War in 1962 have been heating up again in recent years. 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.

In April 2013, Chinese troops settled for three weeks several miles inside northern Indian territory on the Depsang Plains in Ladakh, marking a departure from the several hundred minor transgressions reported along the LAC every year, which are generally short-lived. 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. The border standoff lasted three weeks and was defused when both sides agreed to pull their troops back to previous positions.

The Border Defense and Cooperation Agreement (BDCA) signed during then-Prime Minister Manmohan Singh's visit to China in October 2013 affirms that neither side will use its military capabilities against the other, proposes a hotline between the two countries' military headquarters, institutes meetings between border personnel in all sectors, and ensures that neither side tails the other's patrols along the LAC.[61] The agreement also includes language stipulating that in the event the two sides come face-to-face, they "shall exercise maximum self-restraint, refrain from any provocative actions, not use force or threaten

to use force against the other side, treat each other with courtesy and prevent exchange of armed conflict."[62]

However, the agreement failed to reduce border tensions or restore momentum to border negotiations that have been largely stalled since the mid-2000s. Some analysts have even contended that the Chinese intend to buy time on their border disputes with India through the BDCA while focusing on other territorial claims in the Asia–Pacific.[63]

In the summer of 2017, China and India engaged in a tense and unprecedented standoff in the Doklam Plateau region near the tri-border area linking Bhutan, China, and India. An attempt by Chinese forces to extend a road south into Bhutanese territory claimed by China prompted an intervention by nearby Indian forces to halt construction. As with other recent border incidents, no shots were fired, but tensions ran high, with Chinese officials and media outlets levying unusually direct threats at India and demanding a full Indian withdrawal from "Chinese territory" with no preconditions. Quiet diplomacy eventually produced a mutual phased withdrawal, but Chinese troops remain encamped nearby, expanding local infrastructure and planning for a more permanent presence.

In early 2018, the two sides sought to reduce tensions, and an informal summit between President Xi and Prime Minister Modi was held in April. Despite this nominal charm offensive, however, the two sides face a growing divide along several key geopolitical fault lines.

The first major opponent of China's Belt and Road Initiative (BRI), India continues to oppose China's grand infrastructure initiative because one of its subcomponents, the China–Pakistan Economic Corridor (CPEC), traverses Indian-claimed Kashmir. Meanwhile, China has significantly expanded its economic, political, and military footprint in the Indian Ocean and South Asia, contributing to a sense of encirclement in Delhi. Beijing has achieved major diplomatic breakthroughs and landmark investments in Nepal, Sri Lanka, and the

MAP 7

# China's Belt and Road Initiative

Through its Belt and Road Initiative (BRI), China endeavors to reshape the economic and geopolitical landscape of Eurasia and the Indian Ocean with an unprecedented wave of infrastructure investments.
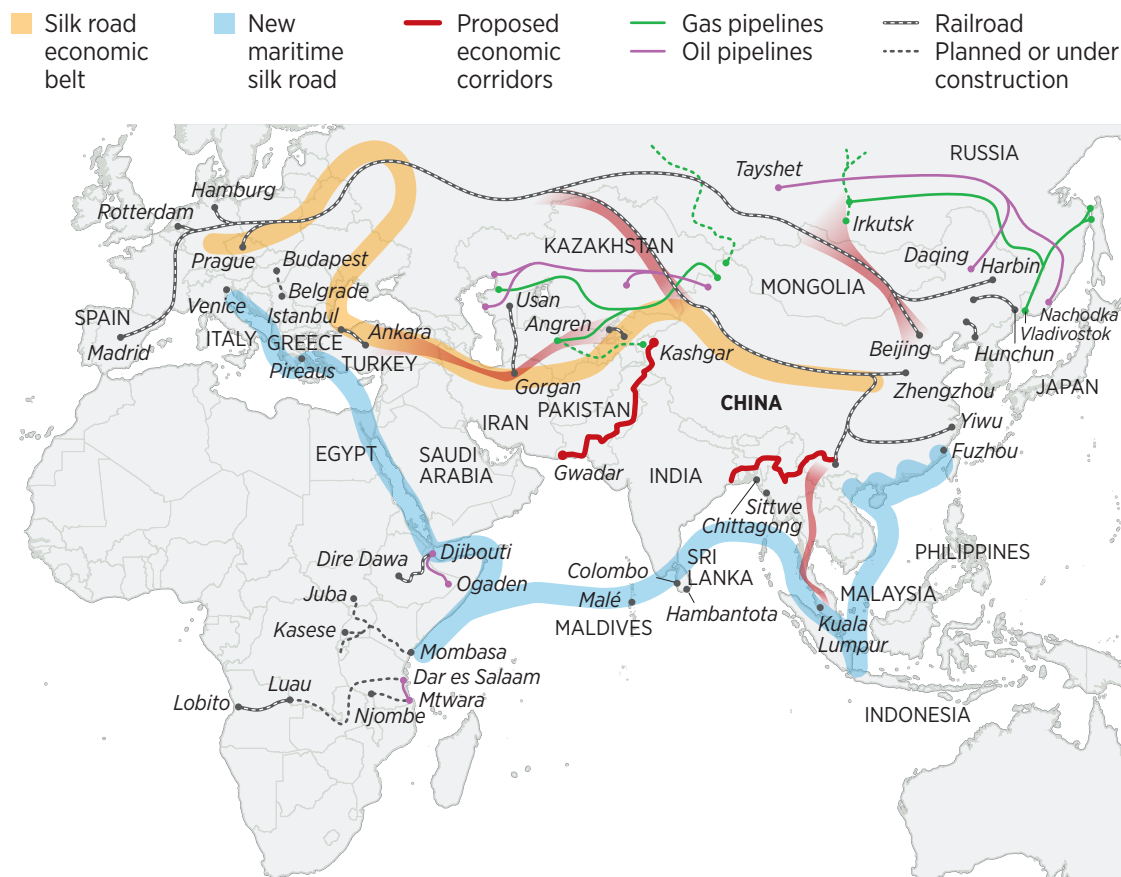


**SOURCES:** "Reviving the Silk Road," Reuters, May 10, 2017, map, https://pictures.reuters.com/archive/CHINA-SILKROAD--C-ET1ED5A1MD43P.html (accessed July 3, 2018), and Heritage Foundation research.

⚑ heritage.org

Maldives, and the PLA Navy has begun regular conventional and nuclear submarine patrols in the Indian Ocean, complementing the anti-piracy naval task force it regularly rotates through the Indian Ocean. China opened its first "overseas logistics supply facility," which closely resembles a full military base, in Djibouti in 2017 and reportedly has expressed interest in building a naval base in Pakistan near the Chinese-operated Gwadar port.

*WWTA:* Unlike the 2016 and 2017 WWTAs, which were silent with respect to India–China relations, the 2018 WWTA assesses that "relations between India and China [are expected] to remain tense and possibly to deteriorate further, despite the negotiated settlement to their three-month border standoff in August, elevating the risk of unintentional escalation."[64]

*Summary:* American interest in India's security is substantial and expanding. Both

India and China apparently want to avoid allowing minor incidents to escalate into a more general war. The Chinese seem to use border tensions for limited diplomatic and political gain vis-à-vis India, and India responds in ways that are intended to contain minor incursions and maximize reputational damage to China. Despite limited aims, however, the unsettled situation and gamesmanship along the border could result in miscalculation, accidents, or overreaction.

## Threats to the Commons

The U.S. has critical direct interests at stake in the East Asia and South Asia commons that include sea, air, space, and cyber interests. 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, which 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. It cannot be assumed that China shares either a common conception of international space with the United States or an interest in perpetuating American predominance in securing the commons.

Moreover, this concern extends beyond its immediate region. In addition to the aforementioned facility in Djibouti and the possibility of naval access to Gwadar, Chinese submarines have called at Sri Lankan ports, demonstrating China's growing ability to operate far from its shores.

**Maritime and Airspace Commons.** 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.

*East China Sea.* Since 2010, China has intensified its efforts to assert claims of sovereignty over the Senkaku Islands of Japan in the East China Sea. Beijing asserts not only exclusive economic rights within the disputed waters, but also recognition of "historic" rights to dominate and control those areas as part of its territory.

Chinese coast guard vessels and military aircraft regularly challenge Japanese administration of the waters surrounding the Senkakus by sailing into and flying over them, prompting reaction from Japanese Self Defense Forces. This raises the potential for miscalculation and escalation into a military clash. In the summer of 2016, China began to deploy naval units into the area.

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 government declared that it would "adopt defensive emergency measures to respond to aircraft that do not cooperate in the identification or refuse to follow the instructions."[65] The announcement was a provocative act—an 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.[66] In May 2017, the Chinese intercepted an American WC-135, also over the East China Sea,[67] and in July, they intercepted an EP-3 surveillance plane.[68]

*South China Sea.* Roughly half of global trade in goods, a third of trade in oil, and over half of global liquefied natural gas shipments pass through the South China Sea, which also accounts for approximately 10 percent of

global fish catch and may contain massive potential reserves of oil and natural gas. The U.S. Navy also operates in the area and requires access to meet its security and treaty obligations in the region most effectively.

The South China Sea is hotly contested by six countries, including Taiwan. Incidents between Chinese law enforcement vessels and other claimants' fishing boats occur there on a regular basis, as do other Chinese assertions of administrative authority. The most serious intraregional incidents have occurred between China and the Philippines and between China and Vietnam.

In 2012, 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, which in turn led the Philippines to bring a wide-ranging case before the Permanent Court of Arbitration (PCA) disputing Chinese activities (not its territorial claims) in the waters around the Spratlys, not limited to Scarborough. The Philippines won the case in July 2016 when the PCA invalidated China's sweeping claims to the waters and found its "island" reclamation to be in violation of commitments under the U.N. Convention on the Law of the Sea (UNCLOS).

Although the Chinese have never accepted the authority of the proceedings, they have allowed Filipino fishermen access to Scarborough Shoal in accordance with the PCA award and have refrained from reclaiming land around it. In exchange, the new Duterte government in the Philippines has chosen to set the ruling aside in pursuit of warmer relations with Beijing. This tacit agreement has lowered tensions over the past two years, although Chinese missile deployments to islands in 2018 provoked debate in Manila and a strengthening of Filipino rhetoric.[69] The government's reaction also revealed that the Philippines has formally protested Chinese activity dozens of times during Duterte's presidency.

China–Vietnam tensions in the South China Sea 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. As recently as 2018, the Chinese were still pressing their advantages in areas contested with Vietnam with widely publicized bomber deployments to the Paracel Islands.[70] They also successfully pressured Vietnam to cancel "major oil development" projects in the South China Sea in July 2017 and again in March 2018.[71]

The U.S. presence also has become an object of Chinese attention, beginning with confrontations with the ocean surveillance ship USNS *Impeccable* and the destroyer USS *John McCain* in 2009. In addition, the Chinese routinely and vigorously protest routine U.S. Navy operations and American "freedom of navigation" operations in the area, which have increased in frequency and intensity during the course of the Trump Administration.

Differences between the U.S. and China in the South China Sea have expanded significantly with Chinese reclamation of land features in the Spratlys that began in 2013. China has reclaimed territory at seven of these man-made islands and has built airstrips on three, thereby expanding the potential reach of its navy. In 2017 and 2018, the Chinese deployed surface-to-air missiles and anti-ship cruise missiles on the "islands" despite a 2015 promise by President Xi to President Barack Obama not to "militarize" them.[72]

In his February 14, 2018, posture statement to the House Committee on Armed Services, Admiral Harry Harris, Commander, U.S. Pacific

Command, listed the structures on each of the three largest of these islands:

- 10,000 foot runways capable of launching and recovering all military aircraft;

- Fighter aircraft hangers;

- Large aircraft hangars, capable of supporting larger aircraft such as bombers, AWACS, and transports;

- Protected air defense launcher sheds;

- Protected anti-ship missile launcher sheds;

- Water and fuel storage tank farms;

- Barracks, communication systems, deep water pier facilities, military radars.[73]

Admiral Harris went on to say that "[t]hese bases appear to be forward military outposts, built for the military, garrisoned by military forces and designed to project Chinese military power and capability across the breadth of China's disputed South China Sea claims."[74] Most dramatically, in responding to a series of "Advance Policy Questions" in connection with his confirmation hearing in April, Admiral Philip Davidson, who had been nominated to replace Admiral Harris, said that "China is now capable of controlling the South China Sea in all scenarios short of war with the United States."[75]

The Chinese could use their current position as a basis for declaring an ADIZ above the South China Sea. This would cause major tensions in the region and could lead to conflict. There also are 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 are not among the seven reclaimed "islands" but which the PCA determined are part of the Philippines EEZ and continental shelf. Proceeding

with reclamation at Scarborough is another destabilizing possibility, as it would facilitate the physical assertion of Beijing's claims and cross what the Philippine government has called a "red line."

In 2018, the situation involving continued militarization of the Spratlys led the U.S. to disinvite China from participation in biannual RIMPAC exercises.[76] In his first visit to China as Secretary of Defense, James Mattis also publicly criticized the Chinese for the militarization and made a point of raising it in his conversations with President and Communist Party General Secretary Xi Jinping.[77]

*Airpower.* Although China is not yet in a position to enforce an ADIZ consistently in either area, the steady improvement of the PLA Air Force (PLAAF) and naval aviation over the past two decades 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.

China also seems to have made a point of publicizing its air force modernization, unveiling new aircraft prototypes, including two new stealth fighters, on the eve of visits by American Secretaries of Defense. (Secretary Chuck Hagel's visit in 2014 was preceded by the unveiling of the J-15 naval fighter.) Those aircraft have been flown much more aggressively, with Chinese fighters flying very close to Japanese aircraft in China's East China Sea ADIZ and conducting armed combat air patrols in the skies over Tibet.[78]

The PLA has shed most of its 1960s-era aircraft, replacing them with much more modern systems. Today's PLAAF is dominated by fourth-generation and 4.5th-generation fighter aircraft. These include the domestically designed and produced J-10 and the Su-27/Su-30/J-11 system, which is comparable to the F-15 or F-18 and dominates both the fighter and strike missions.[79] Older airframes such as the J-7 are steadily being retired from the fighter inventory. China is also believed to be preparing

to field two stealth fifth-generation fighter designs. The J-20 is the larger aircraft, resembling 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.

China fields some long-range strike aircraft, largely the H-6 bomber based on the Soviet-era Tu-16 Badger. This aircraft has little prospect of penetrating advanced air defenses but is suitable as a cruise missile carrier. China also has used the H-6 as the basis for initial efforts to develop an aerial tanker fleet and seems to be examining other options as well. As it deploys more tankers, China will extend the range and loiter time of its fighter aircraft and be better equipped to enforce its declared East China Sea Air Defense Identification Zone and any possible future South China Sea ADIZ.

A variety of modern support aircraft have also entered the PLAAF inventory, including airborne early warning (AEW), command and control (C2), and electronic warfare (EW) aircraft. At the Zhuhai Air Show, Chinese companies have displayed a variety of unmanned aerial vehicles (UAVs) that reflect substantial investments and research and development efforts. Chinese drone systems include the CH-5 (Rainbow-5) drone, described in DOD's 2017 report on *Military and Security Developments Involving the People's Republic of China* as China's most heavily armed drone (carrying 16 air-to-surface munitions),[80] and the stealthy Lijian.

China's air defenses, which are controlled by the PLAAF, have also been modernizing steadily. China has acquired the advanced S-300 surface-to-air missile (SAM) system (SA-10B/SA-20), which is roughly analogous to the American Patriot SAM system, and is developing its own advanced SAM, the HQ-9, which is deployed both on land and at sea. Early in 2018, Russia delivered to China the first of four to six S-400 SAM systems under a contract concluded between the two governments in 2014. This marks a substantial improvement in PLAAF air defense capabilities.[81] 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. Some of these systems have reportedly been deployed to the Paracel Islands in the South China Sea.

A third component of the PLAAF is China's airborne forces. The 15th Airborne Corps is part of the PLAAF and is now organized in approximately six brigades.[82] These are not believed to be assigned to any of the Chinese military regions but are instead a strategic reserve as well as a rapid reaction force. They are believed to be deployed mainly in the Central War Zone. In 2009, in the military review associated with the 60th anniversary of the founding of the PRC, Chinese airborne units paraded through Tiananmen Square with ZBD-03 mechanized airborne combat vehicles. These vehicles provide Chinese airborne forces with tactical mobility as well as some degree of protected fire support from their 30mm autocannon and HJ-73 anti-tank missile (a domestic version of the AT-3 Sagger)—something that American airborne forces continue to lack.

*Sea Power.* As the world's foremost trading state, China depends on the seas for its economic well-being. China's factories are increasingly powered by imported oil, and Chinese diets include a growing percentage of imported food. China relies on the seas to move its products to markets. At the same time, because its economic center of gravity is now in the coastal region, China has to emphasize maritime power to defend key assets and areas. Consequently, China has steadily expanded its maritime power, including its merchant marine and maritime law enforcement capabilities, but especially the People's Liberation Army Navy (PLAN).

The PLAN is no longer an unsophisticated coastal defense force. Instead, since the end of the Cold War, China's navy has moved away from reliance on mass toward incorporating advanced platforms and weapons. Most notably, the Chinese navy is the first in East Asia to deploy its own aircraft carrier since World War II and is now the first to deploy a home-built

aircraft carrier. Both *Liaoning* and its Chinese-made sister ship are expected to carry a mixed air group of J-15 fighters (based on the navalized Su-27) and helicopters. China is also reportedly working on a third carrier with a modern flat-top design.

Many obsolete vessels have been decommissioned, including scores of older, missile-armed, fast attack craft. In their place, China has produced a range of more capable combatants and is building each class in significant numbers. These range from the Type 022 *Houbei* missile-armed catamaran, which is armed with sea-skimming supersonic anti-ship cruise missiles, to the Type-052C *Luyang-II* destroyer, which is equipped with a phased-array radar for its HQ-9 SAM system. The HQ-9, with its ability to combat most air-breathing systems and a limited anti–ballistic missile capability, is believed to be comparable to early model Patriot missiles. China is also apparently producing a new class of cruisers, the Type 055, which will carry both anti-aircraft and anti-missile systems. Although these new ships are not replacing older Chinese surface combatants on a one-for-one basis, the overall capability of the PLAN surface force is steadily improving.

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 anti-ship cruise missiles as well as torpedoes. 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.

The PLAN has been augmenting its aerial maritime strike capability as well. 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. Within Chinese littoral waters, the PLAN Air Force can bring a significant amount of firepower to bear.

Finally, the PLAN has been working to improve its "fleet train." 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."[83] Since then, the Chinese have expanded their fleet of logistics support ships, including underway replenishment oilers and cargo ships. Chinese submarine tenders have accompanied submarines into the Indian Ocean, allowing Chinese subs to remain on station longer.

As with other aspects of PLA modernization, even as the PLAN is upgrading its weapons, it is also improving its doctrine and training, including increased emphasis on joint operations and the incorporation of electronic warfare into its training regimen. Such improvements suggest that PLA Air Force assets, space and cyber operations, and even PLA Rocket Force units might support naval aviation strikes. The new anti-ship ballistic missile forces, centered on the DF-21D anti-ship ballistic missile (now reportedly at initial operational capability) and possibly the longer-range DF-26, should be seen as part of joint Chinese efforts to control the seas, complementing PLAAF and PLAN air, surface, and sub-surface forces.

**Escalation of Territorial Disputes or Incidents at Sea.** 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 the commons, 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.

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 resort to the lethal use of force. It uses military and economic threats, bombastic language, and enforcement through military bullying. Chinese paramilitary-implemented, military-backed encroachment in support of expansive extralegal claims could lead to an unplanned armed clash.

Rising nationalism is exacerbating tensions, making geostrategic relations in Asia increasingly complex and volatile. 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, add elements of unpredictability to future clashes.

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.[84] Escalation of a direct U.S.–China incident is likewise 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.

*WWTA:* The WWTA does not address threats to the maritime and airspace commons, but it does say that "China will continue to pursue an active foreign policy" in the region that is "highlighted by [among other things] a firm stance on competing territorial claims in the East China Sea (ECS) and South China Sea (SCS)."[85] Unlike last year's assessment, the 2018 WWTA does not reference Chinese construction in the South China Sea and offers no judgment with respect to the threat that this poses to American interests or whether large-scale conventional conflict in the region is likely to result from Chinese activity.

*Summary:* In both the air and maritime domains, China is ever more capable of challenging American dominance and disrupting the freedom of the commons that benefits the entire region. Both territorial disputes related to what the U.S. and its allies consider the commons and accidental incidents could draw the U.S. into conflict. China probably does not intend to engage in armed conflict with its neighbors, particularly American treaty allies, or with the U.S. itself. However, it will continue to press its territorial claims at sea in ways that, even if inadvertent, cause incidents that could escalate into broader conflict.

**Space.** 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 (meaning that its wars are conducted far distant 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. The U.S. can leverage space in ways that no other country can, 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.[86] It has three satellite launch centers, and a fourth is under construction. 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, "It may be said that America's victory in the Kosovo War could not [have been] achieved without fully exploiting space."[87]

The PLA has therefore 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) but also more advanced systems that are believed to be capable of reaching targets in medium earth orbit (MEO) and even geostationary earth orbit (GEO).[88] The latter include anti-satellite lasers for either dazzling or blinding purposes.[89] 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," according to one Chinese teaching manual, "and will directly affect the course and outcome of wars."[90]

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 being in "switched on" mode all of the time.[91] 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.

China has created a single service, the PLA Strategic Support Force (PLASSF), with authority over its space, electronic warfare, and network warfare capabilities. In essence, this is a service that is focused on fighting in the information domain, striving to secure what the PLA terms "information dominance" for itself while denying it to others. This service will probably combine electronic warfare, cyber warfare, and physical attacks against adversary space and information systems in order to deny them the ability to gather, transmit, and exploit information.

*WWTA:* The WWTA assesses that China "would justify attacks against US and allied satellites as necessary to offset any perceived US military advantage derived from military, civil, or commercial space systems." China "continue[s] to pursue a full range of anti-satellite (ASAT) weapons as a means to reduce US and allied military effectiveness" and "aim[s] to have nondestructive and destructive counterspace weapons available for use during a potential future conflict." In addition, "[m]ilitary reforms...in the past few years indicate an increased focus on establishing operational forces designed to integrate attacks against space systems and services with military operations in other domains." China's "destructive ASAT weapons probably will reach initial operating capability in the next few years," and China is "advancing directed-energy weapons technologies for the purpose of fielding ASAT weapons that could blind or damage sensitive space-based optical sensors, such as those used for remote sensing or missile defense."[92]

*Summary:* The PRC poses a challenge to the United States that is qualitatively different from the challenge posed by any other potential adversary in the post–Cold War environment. It is the first nation to be capable of accessing space on its own while also jeopardizing America's ability to do the same. This appears to be its intent.

**Cyber.** Threats in this area derive primarily from China and North Korea, and the threats posed by both countries are serious.

*China.* 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."[93] Given the difficulties of attribution, country of origin should not necessarily be conflated with the perpetrator, but forensic efforts have identified at least one Chinese military unit with cyber intrusions.[94] Similarly, the Verizon report concluded that China was the source of 95 percent of state-sponsored cyber-espionage attacks. Since the 2015 Xi–Obama summit at which the two sides reached an understanding to reduce cyber economic espionage, Chinese cyber trends have been difficult to discern. While Chinese economic cyber-espionage is reported to have declined, the overall level of cyber activity appears to have remained relatively constant. On the other hand, FireEye, a cyber-security consulting firm, has observed an increase in attacks against U.S. companies in attempts to obtain sensitive business information and warns that this may be due to Chinese activity.[95]

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 and seeks to obtain economic intellectual property as well as military electronic information.

This is not to suggest, however, 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 not only will be widely applied, but also will be 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*).[96]

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.

Attacks on computer networks in particular have the potential to be extremely disruptive. The 2014 indictment of five serving PLA officers on the grounds of cyber espionage highlights how active the Chinese military is in this realm.[97]

Since then, the major Chinese military reform announced at the end of 2015 included the establishment of the PLA Strategic Support Force (PLASSF), which brings together China's space, electronic warfare, and network warfare (which includes cyber) forces. This reflects the importance that the PLA is likely placing on computer network operations.

It is essential to recognize, however, that the PLA views computer network operations as part of the larger body of information operations (*xinxi zuozhan*), or information combat. 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.

Information 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.[98]

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.[99] 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."

*North Korea.* In April 2018, North Korea was suspected in a cyber-attack on a Turkish bank as part of a hacking campaign identified as Operation GhostSecret that spanned 17 countries and numerous industries. North Korean hackers were believed to be seeking information from several critical infrastructure sectors, including telecommunications and health care.[100]

In February 2016, North Korea conducted the first government-sponsored digital bank robbery. North Korean hackers gained access to the Society for Worldwide Interbank Financial Telecommunication (SWIFT), the system used by central banks to authorize monetary transfers, to steal $81 million. The regime had attempted to send money transfer requests of

$951 million from the Central Bank of Bangladesh to banks in the Philippines, Sri Lanka, and other parts of Asia.[101] North Korean hackers have also targeted the World Bank, the European Central Bank, 20 Polish banks, and large American banks such as Bank of America,[102] as well as financial institutions in Costa Rica, Ecuador, Ethiopia, Gabon, India, Indonesia, Iraq, Kenya, Malaysia, Nigeria, Poland, Taiwan, Thailand, and Uruguay.[103]

In 2014, North Korea conducted the largest cyber-attack on U.S. soil, targeting Sony Pictures in retaliation for the studio's release of a satirical film depicting the assassination of Kim Jong-un. The cyber-attack was accompanied by physical threats against U.S. theaters and citizens. Contrary to the perception of North Korea as a technologically backward nation, the regime has an active cyber warfare capability. As far back as 2009, North Korea declared that it was "fully ready for any form of high-tech war."[104]

The Reconnaissance General Bureau, North Korea's intelligence agency, oversees Unit 121 with approximately 6,000 "cyber-warriors" dedicated to attacking Pyongyang's enemies. Defectors from the unit have told South Korean intelligence officials that hackers are sent to other countries for training as well as to conduct undercover operations. The unit's hackers never operate primarily within North Korea, and this makes both attribution and retaliation more difficult.[105] North Korea has been "expanding both the scope and sophistication of its cyberweaponry, laying the groundwork for more-devastating attacks," according to a February 2018 report by cybersecurity firm FireEye.[106]

Seoul concluded that North Korea was behind cyber-attacks using viruses or distributed denial-of-service tactics against South Korean government agencies, businesses, banks, and media organizations in 2009, 2011, 2012, and 2013. The most devastating attack, launched in 2013 against South Korean banks and media outlets, deleted the essential Master Boot Record from 48,000 computers.[107] North Korea also jammed GPS signals in 2012,

putting hundreds of airplanes transiting Seoul's Incheon airport at risk. Lieutenant General Bae Deag-sig, head of South Korea's Defense Security Command, stated that "North Korea is attempting to use hackers to infiltrate our military's information system to steal military secrets and to incapacitate the defense information system."[108]

*WWTA:* The WWTA gives the cyber threat from China and North Korea a new level of priority: "Russia, China, Iran, and North Korea will pose the greatest cyber threats to the United States over the next year."[109] It assesses that "China will continue to use cyber espionage and bolster cyber attack capabilities to support national security priorities" but also characterizes the volume of cyber activity as "significantly lower than before the bilateral US–China cyber commitments of September 2015."[110] It further assesses that North Korea can be expected to use cyber operations to "raise funds and to gather intelligence or launch attacks on South Korea and the United States" And that North Korea "probably" has the ability to "achieve a range of offensive effects with little or no warning."[111]

*Summary:* 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.[112] China sees cyber as part of an integrated capability for achieving strategic dominance in the Western Pacific region. For North Korea, cyber security is an area in which even its limited resources can directly support discrete political objectives.

### Threat Scores

**AfPak-Based Terrorism.** A great deal of uncertainty surrounds the threat from the AfPak region. For the U.S., Pakistan is both a security partner and a security challenge.

Pakistan provides a home and support to terrorist groups that are hostile to the U.S., other U.S. partners in South Asia like India, and the fledgling government of Afghanistan. Afghanistan 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.

The IISS *Military Balance* addresses the military capabilities of states. It no longer contains a section on the capabilities of non-state actors. The 2018 edition contains no reference to the possibility that Pakistani nuclear weapons might fall into hands that would threaten the American homeland or interests more broadly. The 2014 edition stated that Pakistan's "nuclear weapons are currently believed to be well-secured against terrorist attack."[113] Pakistan's Army Strategic Forces Command has 30 medium-range ballistic missiles, 30 short-range ballistic missiles, and land-attack cruise missiles.[114] Previous editions of the *Military Balance* have also cited development of "likely nuclear capable" artillery. Pakistan also has "1–2 squadrons of F-16A/B or Mirage 5 attack aircraft that may be assigned a nuclear strike role."[115]

This *Index* assesses the overall threat from AfPak-based terrorists, considering the range of contingencies, 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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**China.** 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 (extending from attacks on overseas U.S. bases or against allies and friends); and the global commons. China's provocative behavior is well documented: It is challenging the U.S. and U.S. allies like Japan at sea and in cyberspace, it has raised concerns on its border with India, and it is a standing threat to Taiwan. While there may be a lack of official transparency, publicly available sources shed considerable light on China's fast-growing military capabilities.

According to the IISS *Military Balance,* among the key weapons in China's inventory are 70 Chinese ICBMs; 162 medium-range and intermediate-range ballistic missiles; four SSBNs with up to 12 missiles each; 77 satellites; 6,740 main battle tanks; 58 tactical submarines; 83 principal surface combatants (including one aircraft carrier and 23 destroyers); and 2,397 combat-capable aircraft in its air force. There are about two million active duty members of the People's Liberation Army.[116]

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. The PLA has been staging larger and more comprehensive exercises, including live-fire exercises in the East China Sea near Taiwan, which are improving the Chinese ability 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.

In addition, there is little evidence that Chinese cyber espionage and computer network exploitation have abated. The 2018 *Military Balance* cites "significant amounts of old equipment [remaining in] service," as well as questions about the quality of domestically produced equipment, but also notes that "the restructuring process may see outdated designs finally withdrawn over the next few years."[117]

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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**North Korea.** In the first instance, North Korea poses the most acute security challenge for American allies and bases in South Korea. However, it is also a significant challenge to U.S. allies in Japan and American bases there and in Guam.

North Korean authorities are very actively and vocally provocative toward the United States. While 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. North Korea 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.

According to the IISS *Military Balance*, key weapons in North Korea's inventory include 3,500-plus main battle tanks, 560-plus light tanks, and 21,100 pieces of artillery. The navy has 73 tactical submarines, three frigates, and 383 patrol and coastal combatants.[118] The air force has 545 combat-capable aircraft (58 fewer than 2014), including 80 H-5 bombers. The IISS counts 1,100,000 active-duty members of the North Korean army, a reserve of 600,000, and 189,000 paramilitary personnel, as well as 5,700,000 in the "Worker/Peasant Red Guard." Regarding the missile threat in particular, the 2018 *Military Balance* lists six-plus ICBMs, 12 IRBMs, 10 MRBMs, and 30-plus submarine-launched ballistic missiles. It points out, however, that although the higher frequency of testing in 2016 and 2017 "reveal[ed] four new successfully tested road-mobile systems"—including those listed above—other ICBMs remain untested.[119] With respect to conventional forces, the 2018 *Military Balance* includes a caveat that they "remain reliant on increasingly obsolete equipment with little evidence of widespread modernization across the armed services."[120]

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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# Conclusion: Global Threat Level

America and its interests face challenges around the world 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.

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.

In Europe, Russia remains the primary threat to American interests. The *2019 Index* again assesses the threat emanating from Russia as a behavior score of "aggressive" and a capability score of "formidable," the highest category on the scale. Moscow continues to engage in massive pro-Russia propaganda campaigns in Ukraine and other Eastern European countries, regularly performs provocative military exercises and training missions, and continues to sell and export arms to countries 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.

In the Middle East, Iran remains the state actor that is most hostile to American interests. The *2019 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 capabilities relating to ICBMs, missile defense, and unmanned systems. 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.

Also in the Middle East, a broad array of terrorist groups, most notably the Iran-sponsored Hezbollah, remain the most hostile of any of the global threats to America examined in the *Index*. As of mid-2018, the Islamic State had been essentially decimated, having lost more than 98 percent of previously held territory, but it has not been completely eliminated and has made efforts to reassert itself in the region. Despite the declining strength of ISIS forces, the growing assertiveness of Iranian-backed Shia militias contributes to a scoring inflation from "aggressive" to "hostile" in level of behavior. Fortunately, Middle East terrorist groups also are evaluated as being among the least capable of the threats facing the U.S.

In Asia, China returned to "aggressive" in the scope of its provocative behavior from "testing" in the *2018 Index*. 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 live-fire exercises in the East China Sea near Taiwan. It has also continued to conduct probes of the South Korean and Japanese air defense identification zones, drawing rebukes from both Seoul and Tokyo. There is also little evidence that Chinese cyber espionage and computer network exploitation have abated.

North Korea's level of behavior fell to "testing" from the *2018 Index* to the *2019 Index*. In a 2018 summit, South Korean President Moon Jae-in and North Korean leader Kim Jong-un committed to mutual nonaggression and force reduction. Kim Jung-un also declared that North Korea no longer needed to conduct nuclear and intercontinental ballistic missile tests. Both statements would appear to contribute to a positive appearance of cooperation and an improved level of behavior, but they could also reflect North Korea's improved confidence in its nuclear capabilities as opposed to being a sign of genuinely good faith. 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.

Finally, the terrorist threats emanating from the Afghanistan–Pakistan region dropped to "testing" in the *2019 Index*. Fatalities attributed to terrorism inside of Pakistan continue to fall as various terrorist groups within the region find themselves in competition with each other for recruits, territory, and resources.

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 in which the risk is greater.

Compiling the assessments of these threat sources, the *2019 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

| SEVERE | HIGH | ELEVATED | GUARDED | LOW |
|---|---|---|---|---|