Russia

Alexis Mrachek

Russia remains a formidable threat to the United States and its interests in Europe. From the Arctic to the Baltics, Ukraine, and the South Caucasus, and increasingly in the Mediterranean, Russia continues to foment instability in Europe. Despite economic problems, Russia continues to prioritize the rebuilding of its military and funding for its military operations abroad. Russia remains antagonistic to the United States both militarily and politically, and its efforts to undermine U.S. institutions and the NATO alliance continue without letup. In Europe, Russia uses its energy position, along with espionage, cyberattacks, and information warfare, to exploit vulnerabilities with the goal of dividing the transatlantic alliance and undermining faith in government and societal institutions.

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

Military Capabilities. According to the International Institute for Strategic Studies (IISS):

- Among the key weapons in Russia's inventory are 336 intercontinental ballistic missiles, 2,840 main battle tanks, 5,220 armored infantry fighting vehicles, more than 6,100 armored personnel carriers, and more than 4,684 pieces of artillery.
- The navy has one aircraft carrier; 49 submarines (including 11 ballistic missile submarines); four cruisers; 11 destroyers; 15 frigates; and 125 patrol and coastal combatants.
- The air force has 1,160 combat-capable aircraft.
- The army has 280,000 soldiers.
- There is a total reserve force of 2,000,000 for all armed forces.[1]

In addition, 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. It has used such volunteers in Libya, Syria, and Ukraine because they help the Kremlin "keep costs low and maintain a degree of deniability," and "[a]ny personnel losses could be shrouded from unauthorized disclosure."[3]

In February 2018, for example, at Deir al-Zour in eastern Syria, 500 pro-Assad forces and Russian mercenaries armed with Russian tanks, artillery, and mortars attacked U.S.-supported Kurdish forces.[4] Approximately 30 U.S. Rangers and Delta Force special operators were also at the base.[5] U.S. air strikes helped to repulse the attack, and "three sources familiar

with the matter" estimated that approximately 300 Russian mercenaries were either killed or wounded.[6] Moscow claims, however, that since the launch of its Syria operation, only 112 Russian troops have suffered casualties.[7]

In January 2019, reports surfaced that 400 Russian mercenaries from the Wagner Group were in Venezuela to bolster the regime of Nicolás Maduro.[8] Russian propaganda in Venezuela has supported the regime and stoked fears of American imperialism. In February 2020, Russian Foreign Minister Sergei Lavrov visited Venezuela to "counteract U.S. sanctions" and show support for Maduro.[9]

During the past few years, as the crisis has metastasized and protests against the Maduro regime have grown, Russia has begun to deploy troops and supplies to bolster Maduro's security forces.[10] In December 2018, for example, Russia temporarily deployed two Tu-160 nuclear-capable bombers to Caracas.[11] Russia also exports billions in arms to Venezuela (and has loaned the regime money to purchase Russian arms) along with $70 million–$80 million yearly in nonmilitary goods.[12]

In July 2016, Russian President Vladimir Putin signed a law creating a National Guard with a total strength (both civilian and military) of 340,000, controlled directly by him.[13] He created his National Guard, which is responsible for "enforcing emergency-situation regimes, combating terrorism, defending Russian territory, and protecting state facilities and assets," by amalgamating "interior troops and various law-enforcement agencies."[14] Putin is more likely to use this force domestically to stifle dissent than he is to deploy it abroad.[15] However, in November 2020, the Russian National Guard (Rosgvardia) and the Belarusian Ministry of the Interior signed an official cooperation deal specifying that either side "may carry out law-enforcement-type operations on the other's territory."[16] This deal likely directly resulted from the Belarusian protests that broke out in August 2020 following the fraudulent presidential election.

At first, the COVID-19 pandemic severely affected Russia's economic growth.[17] However, the Russian economy rebounded during the latter part of the pandemic and is expected to record growth in 2021.[18] Because of the economic boost following the coronavirus lockdowns, Russia will likely find it easier to fund its military operations.

In 2020, Russia spent $61.7 billion on its military—5.23 percent less than it spent in 2019—but still remained one of the world's top five nations in terms of defense spending.[19]

Much of Russia's military expenditure is directed toward modernization of its armed forces. According to a July 2020 Congressional Research Service report, "Russia has undertaken extensive efforts to modernize and upgrade its armed forces" since its invasion of Georgia in 2008.[20] From 2010 to 2019 (the most recent year for which data are publicly available), close to 40 percent of Russia's total military spending was on arms procurement.[21] Taking into account total military expenditure, Russia spent more than 4 percent of GDP on defense in 2020.[22]

In early 2018, Russia introduced its new State Armament Program 2018–2027, a $306 billion investment in new equipment and force modernization. However, according to the Royal Institute of International Affairs, "as inflation has eroded the value of the rouble since 2011, the new programme is less ambitious than its predecessor in real terms."[23]

Russia has prioritized modernization of its nuclear capabilities and "claims to be 81 percent of the way through a modernization program to replace all Soviet-era missiles with newer types by the early 2020s on a less-than one-for-one basis."[24] Russia plans to deploy the RS-28 (Satan 2) ICBM by 2022 as a replacement for the RS-36, which is being phased out in the 2020s.[25] The missile, which can carry up to 15 warheads,[26] was to undergo test launches in 2019, but the tests were delayed. To complete the tests, "Russia will first need to upgrade the testing site," which Russian Minister of Defense Sergei Shoigu admitted in December 2020 had yet to be built.[27]

The armed forces also continue to undergo process modernization, which was begun by

Defense Minister Anatoly Serdyukov in 2008.[28] Partially because of this modernization, former U.S. Deputy Assistant Secretary of Defense for Strategy and Force Development Elbridge Colby stated in January 2018 that the U.S. military advantage over Russia is eroding.[29]

In April 2020, the Kremlin stated that it had begun state trials for its T-14 Armata main battle tank in Syria.[30] In March 2021, Russian Defense Minister Sergei Shoigu revealed that the Russian military would receive a pilot batch of the T-14 Armata tanks in 2022.[31] Aside from the T-14 Armata, 10 new-build T-90M main battle tanks, contracted in 2017, were delivered to the 2nd Motor-Rifle Division in the Moscow region in 2020.[32]

Russia's fifth-generation Su-27 fighter fell short of expectations, particularly with regard to stealth capabilities. In May 2018, the government cancelled mass production of the Su-27 because of its high costs and limited capability advantages over upgraded fourth-generation fighters.[33] Russia lost one of its Su-27 jets near the Crimean coast during a planned mission in March 2020.[34]

In October 2018, Russia's sole aircraft carrier, the *Admiral Kuznetsov*, was severely damaged when a dry dock sank and a crane fell, puncturing the deck and hull.[35] In December 2019, the carrier caught on fire during repair work.[36] Despite these setbacks, the *Kuznetsov* is scheduled to begin sea trials in 2022.[37] In May 2019, reports surfaced that Russia is seeking to begin construction of a new nuclear-powered aircraft carrier in 2023 for delivery in the late 2030s, but the procurement's financial and technological feasibility remains questionable.[38]

Following years of delays, the *Admiral Gorshkov* stealth guided missile frigate was commissioned in July 2018. The second *Admiral Gorshkov*–class frigate, the *Admiral Kasatonov*, began sea trials in April 2019, but according to some analysts, tight budgets and the inability to procure parts from Ukrainian industry (importantly, gas turbine engines) make it difficult for Russia to build the two additional *Admiral Gorshkov*–class frigates as planned.[39] Nevertheless, on April 23, 2019, keel-laying ceremonies took place for the fifth and sixth *Admiral Gorshkov*–class frigates, which reportedly will join Russia's Black Sea fleet.[40]

Russia plans to procure eight *Lider*-class guided missile destroyers for its Northern and Pacific Fleets, but procurement has faced consistent delay.[41] As of April 2020, Russia's Severnoye Design Bureau halted development of the frigates because of financial setbacks.[42]

In November 2018, Russia sold three *Admiral Grigorovich*–class frigates to India. It is set to deliver at least two of the frigates to India by 2024.[43] The ships had been intended for the Black Sea Fleet, but Russia found itself unable to produce a replacement engine following Ukraine sanctions. Of the planned 14 frigates, Russia had engines for only two,[44] but in January 2021, India procured gas turbine engines from Ukraine to give to Russia to install on the frigates.[45]

Russia's naval modernization continues to prioritize submarines. In June 2020, the first Project 955A Borei-A ballistic-missile submarine, the *Knyaz Vladimir*, was delivered to the Russian Northern Fleet, an addition to the three original Project 955 Boreis.[46] Russia reportedly will construct at least 10 more Borei-A–class submarines.[47] According to Admiral Phil Davidson, head of U.S. Indo-Pacific Command, it was expected that "the Russian Pacific Fleet [would] add its first Kalibr cruise missile-capable ships and submarines to its inventory in 2021."[48] In August 2021, the missile corvette Sovetsk, part of Russia's Baltic Fleet, test-launched a Kalibr cruise missile from the White Sea.[49]

The *Khaski*-class submarines are planned fifth-generation stealth nuclear-powered submarines. They are slated to begin construction in 2023 and to be armed with Zircon hypersonic missiles, which have a reported speed of from Mach 5 to Mach 6.[50] According to a Russian vice admiral, these submarines will be two times quieter than current subs.[51]

Russia also continues to upgrade its diesel electric *Kilo*-class subs.[52] Reportedly, it inducted the first improved Project 636 *Kilo*-class submarine into its Pacific Fleet in November 2019 and is now focused on delivering six Project

636 improved *Kilo*-class subs to the Pacific Fleet.[53] According to one assessment, the submarines' improvement in noise reduction has caused them to be nicknamed "Black Holes," but "the submarine class lacks a functioning air-independent propulsion system, which reduced the boats' overall stealth capabilities."[54]

Transport remains a nagging problem, and Russia's defense minister has stressed the paucity of transport vessels. According to a RAND report:

> In 1992, just after the collapse of the Soviet Union, the Russian Federation military had more than 500 transport aircraft of all types, which were capable of lifting 29,630 metric tons. By 2017, there were just over 100 available transport aircraft in the inventory, capable of lifting 6,240 metric tons, or approximately one-fifth of the 1992 capacity.[55]

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.[56]

Although budget shortfalls have hampered modernization efforts overall, Russia continues to focus on development of such high-end systems as the S-500 surface-to-air missile system. As of March 2021, the Russian Ministry of Defense was considering the most fitting ways to introduce its new S-500 Prometheus surface-to-air missile system, which is able to detect targets at up to 1,200 miles, with its missile range maxing at approximately 250 miles, "as part of its wider air-defense modernization." According to one report, the S-500 system will enter full service by 2025.[57]

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

> [O]ver the last two decades, Moscow has been developing a suite of counterspace weapons capabilities, including EW [electronic warfare] to deny, degrade, and disrupt communications and navigation and DEW [directed energy weapons] to deny the use of space-based imagery. Russia is probably also building a ground-based missile capable of destroying satellites in orbit.[58]

In December 2020, Russia tested a ballistic, anti-satellite missile built to target imagery and communications satellites in low Earth orbit.[59] According to Colonel Andrei Revenok, Chief of the Space Troops' Main Center for Missile Attack Warning within Russia's Aerospace Force, in February 2021, the latest *Voronezh* radars will replace all of the existing airspace control systems.[60]

Military Exercises. Russian military exercises, especially snap exercises, are a source of serious concern because they have masked real military operations in the past. Their purpose is twofold: to project strength and to improve command and control. According to Air Force General Tod D. Wolters, Commander, U.S. European Command (EUCOM):

> Russia employs a *below-the-threshold of armed conflict* strategy via proxies and intermediary forces in an attempt to weaken, divide, and intimidate our Allies and partners using a range of covert, difficult-to-attribute, and malign actions. These actions include information and cyber operations, election meddling, political subversion, economic intimidation, military sales, exercises, and the calculated use of force.[61]

Exercises in the Baltic Sea in April 2018, a day after the leaders of the three Baltic nations met with President Donald Trump in Washington, were meant as a message. Russia stated twice in April that it planned to conduct three days of live-fire exercises in Latvia's Exclusive Economic Zone, forcing a rerouting of commercial aviation as Latvia closed some of its airspace.[62] Sweden issued warnings to commercial aviation and sea traffic.[63] It turned

out that Russia did not actually fire any live missiles, and the Latvian Ministry of Defense described the event as "a show of force, nothing else."[64] The exercises took place near the Karlskrona Naval Base, the Swedish navy's largest base.[65]

Russia's snap exercises are conducted with little or no warning and often involve thousands of troops and pieces of equipment.[66] In April 2021, for example, between 150,000 and 300,000 Russian troops massed at the Ukrainian border and in Crimea to conduct snap exercises that also involved approximately 35,000 combat vehicles, 900 aircraft, and 190 navy ships.[67] The reintroduction of snap exercises has "significantly improved the Russian Armed Forces' warfighting and power-projection capabilities," according to one account. "These, in turn, support and enable Russia's strategic destabilisation campaign against the West, with military force always casting a shadow of intimidation over Russia's sub-kinetic aggression."[68]

Snap exercises have been used for military campaigns as well. According to General Curtis M. Scaparrotti, former EUCOM Commander and NATO Supreme Allied Commander Europe, for example, "the annexation of Crimea took place in connection with a snap exercise by Russia."[69] Such 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."[70]

Russia conducted its VOSTOK ("East") strategic exercises, held primarily in the Eastern Military District, mainly in August and September of 2018 and purportedly with 300,000 troops, 1,000 aircraft, and 900 tanks taking part.[71] Russia's defense minister claimed that the exercises were the largest to have taken place in Russia since 1981; however, some analysis suggests that the actual number of participating combat troops was in the range of 75,000–100,000.[72] One analyst described the extent of the exercise:

> [T]he breadth of the exercise was impressive. It uniquely involved several major military districts, as troops from the Central Military District and the Northern Fleet confronted the Eastern Military District and the Pacific Fleet. After establishing communication links and organizing forces, live firing between September 13–17 [*sic*] included air strikes, air defence operations, ground manoeuvres and raids, sea assault and landings, coastal defence, and electronic warfare.[73]

Chinese and Mongolian forces also took part, with China sending 3,200 soldiers from the People's Liberation Army along with numerous pieces of equipment.[74] Chinese participation was a significant change from past iterations of VOSTOK, although Chinese forces were likely restricted largely to the Tsugol training ground, and an uninvited Chinese intelligence ship shadowed the Russian Navy's sea exercises.[75]

Threats to the Homeland

Russia is the only state adversary in the Europe 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 2021 National Security Strategy describes NATO as a threat to the national security of the Russian Federation:

> Military dangers and military threats to the Russian Federation are intensified by attempts to exert military pressure on Russia, its allies and partners, the buildup of the military infrastructure of the North Atlantic Treaty Organization near Russian borders, the intensification of reconnaissance activities, the development of the use of large military formations and

> nuclear weapons against the Russian Federation.[76]

The same document also clearly states that Russia will use every means at its disposal to achieve its strategic goals:

> [P]articular attention is paid to…improving the system of military planning in the Russian Federation, developing and implementing interrelated political, military, military-technical, diplomatic, economic, information and other measures aimed at preventing the use of military force against Russia and protecting its sovereignty and territorial integrity.[77]

Strategic Nuclear Threat. Russia possesses the largest arsenal of nuclear weapons (including short-range nuclear weapons) among the nuclear powers. 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 as well as the capability to threaten and prevent free access to the commons by other nations.

Russia has both intercontinental-range and short-range ballistic missiles and a varied arsenal of nuclear weapons that can be delivered by sea, land, and air. It also is investing significant resources in modernizing its arsenal and maintaining the skills of its workforce, and modernization of the nuclear triad will remain a top priority under the new state armament program.[78] An aging nuclear workforce could impede this modernization. "[A]lthough Russia's strategic-defence enterprises appear to have preserved some of their expertise," according to the IISS, "problems remain, for example, in transferring the necessary skill sets and experience to the younger generation of engineers."[79] Nevertheless, Putin revealed in December 2020 "that modern weapons and equipment now make up 86 percent of Russia's nuclear triad."[80]

Russia currently relies on its nuclear arsenal to ensure its invincibility against any enemy, intimidate European powers, and deter counters to its predatory behavior in its "near abroad," primarily in Ukraine but also concerning the Baltic States.[81] This arsenal serves both as a deterrent to large-scale attack and as a protective umbrella under which Russia can modernize its conventional forces at a deliberate pace, but 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.[82]

General Wolters discussed the risks presented by Russia's possible use of tactical nuclear weapons in his 2020 EUCOM posture statement:

> Russia's vast non-strategic nuclear weapons stockpile and apparent misperception they could gain advantage in crisis or conflict through its use is concerning. Russia continues to engage in disruptive behavior despite widespread international disapproval and continued economic sanctions, and continues to challenge the rules-based international order and violate its obligations under international agreements. The Kremlin employs coercion and aggressive actions amid growing signs of domestic unrest. These actions suggest Russian leadership may feel compelled to take greater risks to maintain power, counter Western influence, and seize opportunities to demonstrate a perception of great power status.[83]

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.[84] Russia's

MAP 10

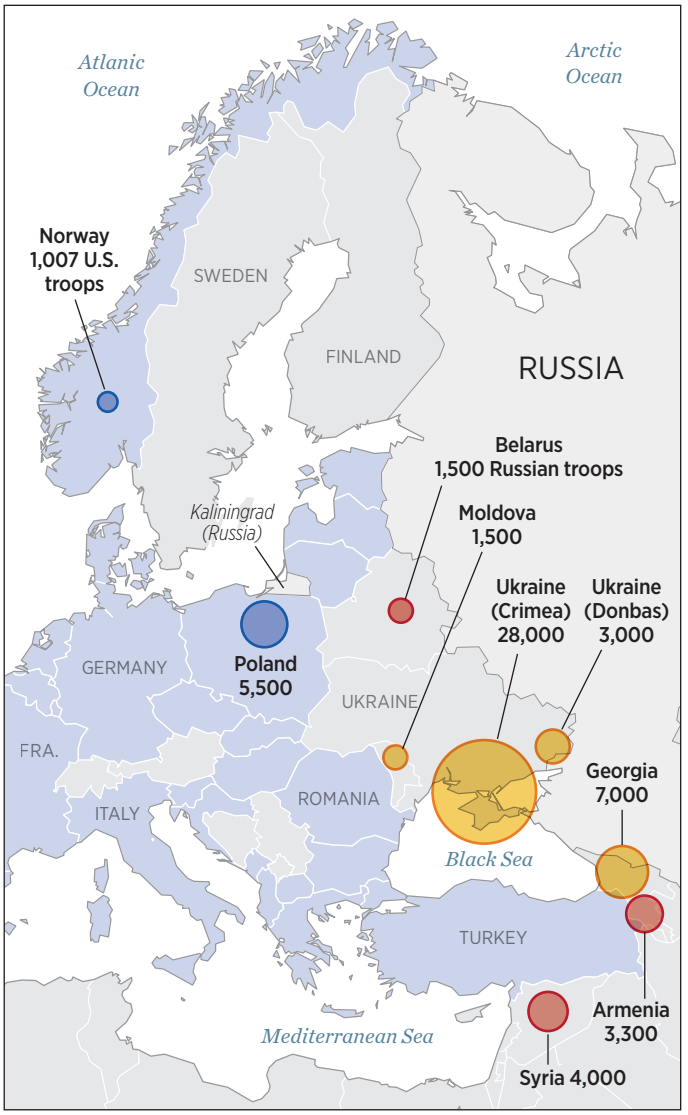
U.S. Troops Vastly Outnumbered by Russian Troops Outside Russia's Borders

U.S. troops in Norway and Poland number less than 7,000—far fewer than the 48,300 Russian troops that are, for all intents and purposes, permanently stationed outside its borders on NATO's perimeter.

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

SOURCES: International Institute for Strategic Studies, *The Military Balance 2021: The Annual Assessment of Global Military Capabilities and Defence Economics* (London: Routledge, 2021); U.S. Department of Defense, Defense Manpower Data Center; and Heritage Foundation research.

heritage.org



reliance on nuclear weapons is based partly on their small cost relative to the cost of conventional weapons, especially in terms of their effect, and on Russia's inability to attract sufficient numbers of high-quality servicemembers. In other words, Russia sees its nuclear weapons as a way to offset the lower quantity and quality of its conventional forces.

Moscow has repeatedly threatened U.S. allies in Europe with nuclear deployments and even preemptive nuclear strikes.[85] The Russians justify their aggressive behavior by pointing to deployments of U.S. missile defense systems in Europe. In the past, these systems were not scaled or postured to mitigate Russia's advantage in ballistic missiles and nuclear weapons to any significant degree, but Pentagon officials have revealed that laser-armed Strykers, new Eastern European batteries, and sea-based interceptors are set to arrive by 2023.[86]

Russia continues to violate the Intermediate-Range Nuclear Forces (INF) Treaty, which bans the testing, production, and possession of

intermediate-range missiles.[87] Russia first violated the treaty in 2008 and then systematically escalated its violations, moving from testing to producing to deploying the prohibited missile into the field. Russia fully deployed the SSC-X-8 cruise missile in violation of the INF Treaty early in 2017 and has deployed battalions with the missile at a missile test site, Kapustin Yar, in southern Russia; at Kamyshlov, near the border with Kazakhstan; in Shuya, east of Moscow; and in Mozdok, in occupied North Ossetia.[88] U.S. officials consider the banned cruise missiles to be fully operational.[89]

In December 2018, in response to Russian violations, the U.S. declared Russia to be in material breach of the INF Treaty, a position with which NATO allies were in agreement.[90] The U.S. provided its six-month notice of withdrawal from the INF treaty on February 2, 2019, and officially withdrew from the treaty on August 2.[91]

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 the level of Russia's aggressive behavior beyond its borders.

Threat of Regional War

Many U.S. allies regard Russia as a genuine threat. At times, this threat is of a military nature. At other times, it involves less conventional tactics such as cyberattacks, utilization of energy resources, and propaganda. Today, as in Imperial times, Russia uses both the pen and the sword to exert its influence. Organizations like the Collective Security Treaty Organization (CSTO) and the Eurasian Economic Union (EEU), for example, embody Russia's attempt to bind regional capitals to Moscow through a series of agreements and treaties.

Russia also uses espionage in ways that are damaging to U.S. interests. For example:

- In May 2016, a Russian spy was sentenced to prison for gathering intelligence for Russia's Foreign Intelligence Service (SVR) while working as a banker in New York. The spy specifically transmitted intelligence on "potential U.S. sanctions against Russian banks and the United States' efforts to develop alternative energy resources."[92]

- In October 2019, the U.S. released and deported to Russia Maria Butina, a convicted Russian operative who had infiltrated American conservative political groups to interfere with the 2016 presidential election.[93]

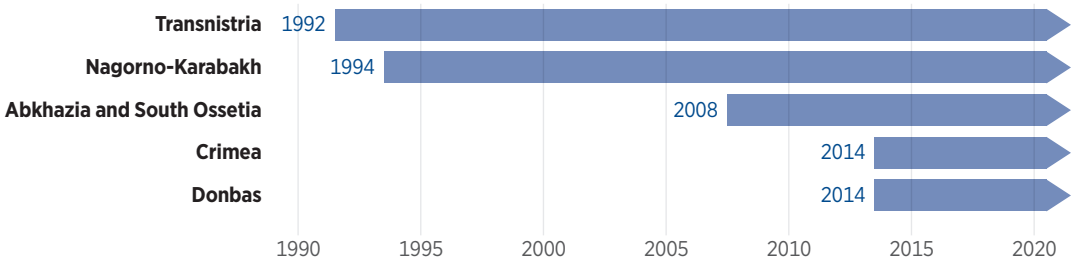
The European External Action Service, diplomatic service of the European Union (EU), estimates that 200 Russian spies are operating in Brussels, which also is the headquarters of NATO.[94] According to one report, Russian spies are becoming harder to track because they infiltrate companies, schools, and even the government.[95]

On March 4, 2018, Sergei Skripal, a former Russian GRU colonel who was convicted in 2006 of selling secrets to the United Kingdom and freed in a spy swap between the U.S. and Russia in 2010, and his daughter Yulia were poisoned with Novichok nerve agent by Russian security services in Salisbury, U.K. Hundreds of residents could have been contaminated, including a police officer who was exposed to the nerve agent after responding.[96] It took a year and the work of 190 U.K. Army and Air Force personnel plus contractors to complete the physical cleanup of Salisbury.[97]

On March 15, 2018, France, Germany, the U.K., and the U.S. issued a joint statement condemning Russia's use of the nerve agent: "This use of a military-grade nerve agent, of a type developed by Russia, constitutes the first offensive use of a nerve agent in Europe since the Second World War."[98] 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.[99]

MAP 11

Russian Interference Zones



Transnistria. Russia has stationed troops in Transnistria since 1992 when a cease-fire ended the Moldovan civil war.

Nagorno-Karabakh. In September 2020, major fighting broke out in the Nagorno–Karabakh frozen conflict. Since 1994, Armenia had been occupying Azerbaijan's Nagorno–Karabakh region and parts of seven other surrounding districts. The fighting ended in November 2020 when Armenia and Azerbaijan signed a Russian-brokered cease-fire deal. Although Azerbaijan regained much of its territory, approximately 2,000 Russian peacekeeping troops remain in parts of Nagorno–Karabakh for now.

Abkhazia and South Ossetia. Since Russia's 2008 invasion of Georgia and the subsequent five-day war, Russian troops have been stationed in both Abkhazia and South Ossetia.

Crimea. In March 2014, Russia illegally annexed the entire Crimean peninsula, and Russian troops have been stationed there ever since then. In March–April 2021, Russian troops massed within Crimea in connection with an escalation of fighting in the Donbas region.

Donbas. Russia's annexation of Crimea led to an armed conflict between Russian troops, Russian-backed separatist forces, and Ukrainian soldiers in Ukraine's eastern Donbas region. In March–April 2021, the fighting escalated sharply, and Russia massed troops along the Ukrainian border in response to that escalation.

SOURCE: Heritage Foundation research.

heritage.org

Russian intelligence operatives are reportedly mapping U.S. telecommunications infrastructure around the United States, focusing especially on fiber-optic cables.[100]

- 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.[101]

- 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.[102]

- Undersea cables in the United States are also at risk of being tapped for valuable intelligence. Fourteen Russian sailors who died aboard a submarine that caught fire in July 2019 were suspected of attempting to tap information flowing from American undersea cables.[103]

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.[104] In November 2017, the Russian-built "counter-drug" center at Las Colinas opened, its future purpose being to support "Russian security engagement with the entire region."[105] According to a Foreign Policy Research Institute report, "Aside from the center, Russian forces have participated in joint raids and operations against drug trafficking [in Nicaragua], capturing as many as 41 presumed traffickers in one particular operation" since 2017.[106] Russia also has an agreement with Nicaragua, signed in 2015, that allows access to Nicaraguan ports for its naval vessels.[107]

Pressure on Central and Eastern Europe. Moscow poses a security challenge to members of NATO that border Russia. Although a conventional Russian attack against a NATO member is unlikely, primarily because it would trigger a NATO response, it cannot be entirely discounted. Russia continues to use cyberattacks, espionage, its significant share of the European energy market, and propaganda to sow discord among NATO member states and undermine the alliance. The Estonian Foreign Intelligence Service's *International Security and Estonia 2019* report states clearly that "[t]he only serious threat to regional security, including the existence and sovereignty of Estonia and other Baltic Sea states, emanates from Russia. It involves not only asymmetrical, covert or political subversion, but also a potential military threat."[108]

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

According to Lithuania's *National Threat Assessment 2021*, "It is almost certain that Russia's policy of denying the sovereign choices of its neighbours will remain one of the most significant security threats in the Baltic Region in the future."[109] Its *National Threat Assessment 2019* states that Russia "exploits democratic freedoms and rights for its subversive activity" and "actually promotes its aggressive foreign policy" while "pretending to develop cultural relations" in Lithuania.[110]

Latvian authorities describe the means used by Russia to claim that it is defending the rights of citizens or Russian compatriots in similar terms: TV propaganda to push discrediting messages about Latvia and stories in which the rights of Russian citizens are allegedly violated; "spreading interpretations of history favourable to Russia within Russia and abroad, as well as actively engaging

in military-memorial work"; and the use of "compatriot support funds and other compatriot policy bodies" targeted at Latvian youth.[111]

Russia has also sought to undermine the statehood and legitimacy of the Baltic States. In January 2018, for example, Putin signed a decree renaming an air force regiment the "Tallinn Regiment" to "preserve holy historical military traditions" and "raise [the] spirit of military obligation."[112] 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."[113]

In 2020, Russia used the COVID-19 pandemic to spread disinformation. In March, for example, various Russian state news sources reported that the U.S. initiated the coronavirus pandemic, that the U.S. deployed the virus as a "biological weapon," or that the virus was a complete hoax created by the United States. Nor did Russia create this disinformation on its own; it relied on various theories created by China and Iran.[114]

In addition, Russia has sought to use disinformation to undermine NATO's Enhanced Forward Presence (eFP) in the Baltics. In April 2017, for example, Russian hackers planted a false story about U.S. troops being poisoned by mustard gas in Latvia on the Baltic News Service website.[115] Since 2017, a disinformation campaign nicknamed "ghostwriter" has been ongoing. In some cases, Russian hackers published false news stories "on real news websites without permission." In one case, a Lithuanian news site published a fake article in 2019 "claiming that German soldiers had desecrated a Jewish cemetery," and in another, a fake message was published on the Polish War Studies Academy website, purportedly from the organization's commander, calling for troops "to fight against 'the American occupation.'"[116]

U.S. troops stationed in Poland for NATO's eFP have been the target of similar Russian disinformation campaigns.[117] A fabricated interview with U.S. Army Europe commander Lieutenant General Christopher Cavoli that was published online was meant to undermine NATO's reputation among the public.[118] One report summarized that "Russia's state propaganda channels RT and Sputnik remain very keen to exploit to the maximum any incidents involving eFP personnel, and to repeat the Kremlin's anti-NATO and anti-eFP narrative."[119] In particular, more recent Russian propaganda has focused on portraying eFP as an "occupying force."[120]

Russia has also demonstrated a willingness to use military force to change the borders of modern Europe. When Kremlin-backed Ukrainian President Viktor Yanukovych failed to sign an Association Agreement with the EU in 2013, months of street demonstrations led to his ouster early in 2014. Russia responded by sending troops, aided by pro-Russian local militia, to occupy the Crimean Peninsula under the pretext of "protecting Russian people." This led to Russia's eventual annexation of Crimea, the first such forcible annexation of territory in Europe since the Second World War.[121]

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.[122] 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.[123] The effect on Ukraine's regional economic interests can be seen in the fact that 30 percent of the cargo ships that served Mariupol could not clear the span.[124] In December 2019, Russia completed a new rail bridge over the Kerch Strait that the EU condemned as "yet another step toward a forced integration of the illegally annexed peninsula."[125]

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.[126] The Monolit-B radar system, for instance, has a passive range of 450 kilometers, and its deployment "provides the Russian military with an excellent real-time picture of the positions of foreign surface

vessels operating in the Black Sea."[127] In addition, "Russian equipment there includes 40 main battle tanks, 680 armored personnel carriers and 174 artillery systems of various kinds" along with 113 combat aircraft.[128]

These numbers may be larger now, given Russia's military buildup in Ukraine in April 2021.[129] In March 2019, Russia announced the deployment of nuclear-capable Tupolev Tu-22M3 strategic bombers to Gvardeyskoye air base in occupied Crimea.[130]

Control of Crimea has allowed Russia to use the Black Sea as a platform to launch and support naval operations in the Eastern Mediterranean.[131] The Black Sea fleet has received six *Kilo* diesel submarines and three *Admiral Grigorovich*–class frigates equipped with Kalibr-NK long-range cruise missiles.[132] Russia is also planning to add *Gorshkov*-class frigates to its Black Sea fleet.[133] Kalibrs have a range of at least 2,500 kilometers, placing cities from Rome to Vilnius within range of Black Sea–based cruise missiles.[134]

Russia has deployed five S-400 air defense systems with a potential range of around 250 miles to Crimea.[135] Russia's new S-350 air defense systems also have the potential to be deployed to Crimea.[136] 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."[137] Russia also deploys the Bastion P coastal defenses armed with the P-800 Oniks anti-ship cruise missile, which "has a range of up to 300 kilometers and travels at nearly Mach 2.5, making it extraordinarily difficult to defeat with kinetic means."[138]

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. Moscow 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. Approximately 3,000 Russian soldiers are operating in the Donbas region of Ukraine.[139] Russian-backed separatists daily violate the September 2014 Minsk I and February 2015 Minsk II cease-fire agreements.[140] These agreements have led to the de facto partition of Ukraine and have created a frozen conflict that remains both deadly and advantageous for Russia. As of April 2021, the war in Ukraine had cost an estimated 14,000 lives.[141]

On November 25, 2018, Russian forces blocked the passage of three Ukrainian naval vessels through the Kerch Strait and opened fire on the ships before boarding and seizing them along with 24 Ukrainian sailors.[142] In September 2019, Russia released the sailors in a prisoner swap with Ukraine.[143] Russian harassment of ships sailing through the Kerch Strait and impeding of free movement had taken place consistently before the November 2018 aggression and continued afterwards.[144] Russian inspections of ships, blockages of the strait, and delays have coalesced to constrict the port of Mariupol, where shipping traffic has been greatly reduced since 2014.[145]

In Moldova, Russia supports the breakaway enclave of Transnistria, where yet another frozen conflict festers to Moscow's liking. According to a Congressional Research Service report:

> Russia stations approximately 1,500 soldiers in Transnistria, a few hundred of which Moldova accepts as peacekeepers. In 2017, the Constitutional Court ruled that Russia's troop presence in Moldova was unconstitutional, and parliament adopted a declaration calling on Russia to withdraw. In 2018, the U.N. General Assembly passed a resolution calling on Russia to withdraw its troops from Moldova "unconditionally and without further delay."
>
> A political settlement to the Transnistrian conflict appears distant. The Moldovan government supports a special local governance status for Transnistria, but Russia and authorities in Transnistria have resisted agreement.

> The conflict-resolution process operates in a "5+2" format under the chairmanship of the Organization for Security and Cooperation in Europe (OSCE), with the OSCE, Russia, and Ukraine as mediators and the EU and the United States as observers. The EU also supports conflict management through a Border Assistance Mission to Moldova and Ukraine (EUBAM). EUBAM seeks to help the two countries combat transborder crime, facilitate trade, and resolve the conflict over Transnistria, which shares a long border with Ukraine.[146]

Russia continues to occupy 12 percent of Moldova's territory. In August 2018, Russian and separatist forces equipped with armored personnel carriers and armored reconnaissance vehicles exercised crossing the Dniester River in the demilitarized security zone. Moldovan authorities called the exercises "provocative," and the Organization for Security and Co-operation in Europe (OSCE) Mission to Moldova "expresse[d] its concern."[147] On January 22, 2019, in an effort to enhance its control of the breakaway region, Russia opened an office in Moscow for the Official Representation of the Pridnestrovian Moldavian Republic in the Russian Federation.[148]

Russia's permanent stationing of Iskander missiles in Kaliningrad in 2018 occurred a year to the day after NATO's eFP deployed to Lithuania.[149] Russia reportedly has deployed tactical nuclear weapons, the S-400 air defense system, and P-800 anti-ship cruise missiles to Kaliningrad.[150] Additionally, it plans to reestablish a tank brigade and a "fighter aviation regiment and naval assault aviation (bomber) regiment" in Kaliningrad and to reequip the artillery brigade with new systems.[151] According to the IISS, the majority of Russian air force pilot graduates this past year were sent to Kaliningrad "to improve staffing" in the air force units located there.[152]

Russia also has outfitted a missile brigade in Luga, Russia, a mere 74 miles from the Estonian city of Narva, with Iskander missiles.[153] Iskanders have been deployed to the Southern Military District at Mozdok near Georgia and Krasnodar near Ukraine as well, and Russian military officials have reportedly asked manufacturers to increase the Iskander missiles' range and improve their accuracy.[154]

Nor is Russia deploying missiles only in Europe. In February 2018, Russia approved the deployment of warplanes to an airport on Iturup, one of the largest Kuril Islands.[155] In September 2019, Russia announced its plans to deploy additional missile systems on Paramushir and Matua, two islands in the northern portion of the Kuril Island chain.[156] In December 2020, Russia announced the deployment of S-300V4 air defense missile systems on Iturup.[157] Russia has stationed 3,500 troops on the Kuril Islands. In December 2018, Japan lodged a formal complaint over the building of four new barracks.[158]

Russia has deployed additional troops and capabilities near its western borders. In May 2021, Russia announced plans to increase its troop presence along its western border "in response to what it views as an increasing threat from the United States and the NATO alliance."[159] In June 2020, one report revealed that the brigade in the Western Military District is relatively well-equipped with "modern weapons and specialist equipment, including 'T-90A tanks, BTR-82A armored personnel carriers, BMP-3 combat vehicles, as well as 9A34 Strela-10 and 2S6M Tunguska air defense systems.'"[160] According to a report published by the Royal Institute of International Affairs:

> Five dedicated storage and maintenance bases have been established in the Western Military District, and another one in the Southern Military District (and a further 15 in the Central and Eastern districts). These, similar to the US Army's POMCUS (Prepositioning Of Materiel Configured in Unit Sets), contain pre-positioned, properly maintained brigade-level assets, and 2.5 units of fire for all equipments.[161]

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, 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. Russia has a long history in the Arctic and, as an Arctic nation, has interests there. However, Russia's ongoing militarization of the region, coupled with its bellicose behavior toward its neighbors, makes the Arctic a security concern.

Because nationalism is on the rise in Russia, Vladimir Putin's Arctic strategy is popular among the population. For Putin, the Arctic is an area that allows Russia to flex its muscles without incurring any significant geopolitical risk.

Russia is also eager to promote its economic interests in the region. Half of the world's Arctic territory and half of the Arctic region's population are located in Russia. It is well known that the Arctic is home to large stockpiles of proven and yet unexploited oil and gas reserves. The majority of these reserves are thought to be located in Russia. In particular, Russia hopes that the Northern Sea Route (NSR) will become one of the world's most important shipping lanes.

Russia has invested heavily in the Arctic region, opening a series of Arctic bases and investing in cold-weather equipment, coastal defense systems, underground storage facilities, and specialized training. Additionally, "Russian hardware in the High North area includes bombers and MiG31BM jets, and new radar systems close to the coast of Alaska."[162]

Russia has also staged a series of statement activities in the Arctic. In 2007, Artur Chilingarov, then a member of the Russian Duma, led a submarine expedition to the North Pole and planted a Russian flag on the seabed. Later, he declared: "The Arctic is Russian."[163] In July 2017, Russia released a new naval doctrine citing the alleged "ambition of a range of states, and foremost the United States of America and its allies, to dominate the high seas, including in the Arctic, and to press for overwhelming superiority of their naval forces."[164]

In May 2017, Russia announced that its build-up of the Northern Fleet's nuclear capacity is intended "to phase 'NATO out of [the] Arctic.'"[165] A recent statement exercise occurred in March 2021, when three Russian ballistic missile submarines punched through the Arctic ice near the North Pole.[166]

In addition to an ongoing strong naval presence in the Arctic, Russia often undertakes aggressive Arctic flights. In one instance 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.[167] In May 2017, 12 Russian aircraft simulated an attack against NATO naval forces taking part in the Eastern Atlantic Area (EASTLANT) 17 exercise near Tromsø, Norway, and later that month, Russian aircraft targeted aircraft from 12 nations that were taking part in the Arctic Challenge 2017 exercise near Bodø.[168] 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.[169]

Although the Arctic region has been an area of low conflict among the Arctic powers, NATO should consider the implications of Russia's recent aggressive military behavior. NATO is a collective security organization designed to defend the territorial integrity of its members. Five NATO members (Canada, Denmark, Iceland, Norway, and the United States) are Arctic countries, and each has territory above the Arctic Circle. Two closely allied nations (Finland and Sweden) also have Arctic territory.

The U.S. in recent years has begun to pay increased attention to the Arctic theater in Europe. One way has been by maintaining an enhanced presence in Norway. In April 2021, the two nations signed the Supplementary Defense Cooperation Agreement, which in part allows the U.S. to build additional

infrastructure at Rygge and Sola air stations in southern Norway as well as Evenes air station and Ramsund naval station above the Arctic Circle.[170] Construction at Evenes will support Norwegian and allied maritime patrol aircraft in monitoring Russian submarine activity.

Because Russia is an Arctic power, its military presence in the region is to be expected, but it should be viewed with some caution because of Russia's pattern of aggression. In the Arctic, sovereignty equals security. Respecting national sovereignty in the Arctic would ensure that the chances of armed conflict in the region remain low. Since NATO is an intergovernmental alliance of sovereign nation-states built on the consensus of all of its members, it has a role to play in Arctic security. In the words of NATO Secretary-General Jens Stoltenberg:

> Increased Russian presence, more Russian bases in the High North, has also triggered the need for more NATO presence, and we have increased our presence there with more naval capabilities, presence in the air, and not least, the importance of protecting transatlantic undersea cables transmitting a lot of data.[171]

In March 2017, a decree signed by Putin gave the Federal Security Service (FSB), which controls law enforcement along the Northern Sea Route, an Arctic shipping route linking Asia and Europe, additional powers to confiscate land "in areas with special objects for land use, and in the border areas."[172] Russia's Arctic territory is included within this FSB-controlled border zone. The FSB and its subordinate coast guard have added patrol vessels and have built up Arctic bases, including a coast guard base in Murmansk that was opened in December 2018.[173]

The Russian National Guard, which reports to President Putin,[174] is likewise taking on an increased role in the Arctic and is now charged with protecting infrastructure sites that are deemed to be of strategic importance, including a new liquefied natural gas (LNG) export terminal at Sabetta that was opened in December 2017.[175] In April 2021, shareholders of Novatek, Russia's second-largest natural gas producer, "approved external financing of $11 billion for the Arctic LNG 2 project, which is expected to start production of [LNG] in 2023."[176]

In May 2018, Putin issued a presidential degree setting a target of 80 million tons shipped across the NSR by 2024.[177] In December 2020, Rosatom, Russia's state nuclear power company, announced that it had shipped a record 32 million tons on the NSR in 2020. This surpassed the original target of 29 million tons.[178] In March 2019, Russian media reported that the government was drafting stringent navigation rules for the entire length of the NSR outside Russian territorial waters. Under these rules, for example, foreign navies would be required to "post a request with Russian authorities to pass through the *Sevmorput* [NSR] 45 days in advance, providing detailed technical information about the ship, its crew and destination."[179]

Russia also has been investing in military bases in the Arctic. Its base on Alexandra Land, commissioned in 2017, can house 150 soldiers autonomously for up to 18 months.[180] In addition, old Soviet-era facilities have been reopened.

In September 2018, the Northern Fleet announced construction plans for a new military complex to house a 100-soldier garrison and anti-aircraft units at Tiksi; in January 2019, Russian authorities claimed that the base was 95 percent completed.[181] Also in 2018, Russia opened an Arctic airfield at Nagurskoye that is equipped with a 2,500-meter landing strip and a fleet of MiG-31 or Su-34 Russian fighters.[182]

Air power in the Arctic is increasingly important to Russia, which has 14 operational airfields in the region along with 16 deep-water ports.[183] According to a March 18, 2021, *Forbes* report, "the Russian navy has tasked a regiment of upgraded MiG-31BM [interceptor aircraft] to skip and hop across Arctic airfields in order to range across the cold-but-rapidly-thawing North Pole."[184] In March 2019,

Mayor General Igor Kozhin, head of the Russian Naval Air Force, claimed that Russia had successfully tested a new airstrip cover that is effective in "temperatures down to minus 30 centigrades."[185]

Russia resumed regular fighter jet combat patrols in the Arctic in 2019.[186] The Ministry of Defense, for example, announced that in January 2019, two Tu-160 bombers flew for 15 hours in international airspace over the Arctic.[187] Over the course of one week in April 2019, Russian fighter and bomber jets flew near the coast of Norway twice. In one instance, two Tu-60 bombers and a MiG-31 flew 13 hours over the Barents, Norwegian, and North Seas. British and Danish jets scrambled to meet the Russian aircraft.[188]

Russian Arctic flights are often aggressive. In May 2017, 12 Russian aircraft simulated an attack against NATO naval forces taking part in the EASTLANT 17 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.[189] As noted previously, 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.[190] In March 2020, two Russian strategic heavy bombers flew over U.S. submarines surfaced in the Arctic Ocean, and in April, two maritime Tu-142 reconnaissance and anti-submarine warfare planes flew over the Barents, Norwegian, and North Seas.[191]

In 2017, Russia activated a new radar complex on Wrangel Island.[192] In 2019, it announced 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.[193] Construction of the cable began in spring 2021.[194]

In November 2019, Russia announced rocket firings in the Norwegian Sea 20 to 40 nautical miles from the Norwegian coast. The test firings, with little advance notice, were designed to send a message as they took place in an area through which NATO ships were sailing during the Trident Juncture exercise.[195] In March 2021, Russia's *Admiral Gorshkov* frigate successfully "launched an Oniks cruise missile and hit a coastal target on Novaya Zemlya, about 300 kilometers from launch position."[196]

Russia's ultimate goal is encapsulated in a June 2019 study published by the Royal Institute of International Affairs:

> Since the mid-2010s, the Kremlin has deployed substantive force and capabilities along the coast of its northern border in the AZRF [Arctic Zone of the Russian Federation]. Parts of the armed forces are now Arctic-capable, and have developed concepts of operations tailored to that environment. With the creation of OSK Sever [Joint Strategic Command North] in 2013, the Russian armed forces have been slowly reshaping their Arctic command structure. The Arctic forces are primarily focused on air and naval operations, with the aim of creating an integrated combined-arms force for the region.[197]

For a few years, Russia was developing three new nuclear icebreakers, and in May 2019, it launched its third and final *Arktika*.[198] The *Arktika*, currently the world's largest and most powerful nuclear icebreaker,[199] sailed straight to the North Pole in October 2020.[200]

Russia's most recently released naval doctrine, from July 2017, cites the alleged "ambition of a range of states, and foremost the United States of America and its allies, to dominate the high seas, including in the Arctic, and to press for overwhelming superiority of their naval forces."[201] In May 2017, Russia had announced that its buildup of the Northern Fleet's nuclear capacity is intended "to phase 'NATO out of [the] Arctic.'"[202]

Russia's Northern Fleet is also building newly refitted submarines, including a newly converted *Belgorod* nuclear-powered submarine that was launched in April 2019.[203] The *Belgorod* is expected to carry six Poseidon drones, also known as nuclear torpedoes, and

will carry out "a series of special missions."[204] The submarine will have a smaller minisub that will potentially be capable of tampering with or destroying undersea telecommunications cables.[205] According to Russian media reports, the *Belgorod* "will be engaged in studying the bottom of the Russian Arctic shelf, searching for minerals at great depths, and also laying underwater communications."[206] A similar submarine, the *Khabarovsk*, is under construction and scheduled to be launched in the fall of 2021.[207]

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 will continue to evolve. It is clear that Russia intends to exert a dominant influence. According to a U.S. Department of State official, as quoted in a Congressional Research Service report:

> [The U.S. has] concerns about Russia's military buildup in the Arctic. Its presence has grown dramatically in recent years with the establishments of new Arctic commands, new Arctic brigades, refurbished airfields and other infrastructure, deep water ports, new military bases along its Arctic coastline, an effort to establish air defense and coastal missile systems, early warning radars, and a variety of other things along the Arctic coastline. We've seen an enhanced ops [operations] tempo of the Russian military in the Arctic, including last October one of the largest Russian military exercises in the Arctic since the end of the Cold War. So there is some genuine and legitimate concern there on the part of the United States and our allies and partners about that behavior in the Arctic.[208]

Destabilization in the South Caucasus. The South Caucasus sits at a crucial geographical and cultural crossroads and has been 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 by force if necessary. In August 2008, Russia invaded Georgia, coming as close as 15 miles to the capital city of Tbilisi. A decade later, several thousand Russian troops occupied the two Georgian regions of South Ossetia and Abkhazia.

Russia has sought to deepen its relationship with the two occupied regions. In 2015, it signed so-called integration treaties with South Ossetia and Abkhazia that, among other things, call for a coordinated foreign policy, creation of a common security and defense space, and implementation of a streamlined process for Abkhazians and South Ossetians to receive Russian citizenship.[209] The Georgian Foreign Ministry criticized the treaties as a step toward "annexation of Georgia's occupied territories,"[210] both of which are still internationally recognized as part of Georgia.

In January 2018, Russia ratified an agreement with the de facto leaders of South Ossetia to create a joint military force—an agreement that the U.S. condemned.[211] In November 2017, the U.S. State Department approved an estimated $75 million sale of Javelin missiles to Georgia, and in June 2018, the State Department approved a sale of Stinger missiles.[212] Russia's "creeping annexation" of Georgia has left towns split in two and families separated by military occupation and the imposition of an internal border (known as "borderization").[213] In May 2020, the U.S. Embassy in Tbilisi reported that Russian-led security forces were continuing to erect unauthorized fences and reinforcing existing illegal "borderization" efforts near a number of Georgian villages.[214]

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 dangerous neighborhood surrounded by instability and insecurity reflected in terrorism, religious fanaticism, centuries-old sectarian divides, and competition for natural resources.

Russia maintains a sizable military presence in Armenia based on an agreement that gives Moscow access to bases in that country until at least 2044.[215] The bulk of Russia's forces, consisting of 3,300 soldiers, dozens of fighter planes and attack helicopters, 74 T-72 tanks, almost 200 APCs, and an S-300 air defense system, are based around the 102nd Military Base.[216] Russia and Armenia have also signed a Combined Regional Air Defense System agreement. Even after the election of Prime Minister Nikol Pashinyan following the so-called Velvet Revolution, Armenia's cozy relationship with Moscow remains unchanged.[217] Armenian troops have even deployed alongside Russian troops in Syria to the dismay of U.S. policymakers.[218]

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.[219] 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. In 2020, major fighting broke out along the front lines. After six weeks of fighting, Azerbaijan liberated its internationally recognized territory, "which had been under Armenian occupation since the early 1990s."[220]

The conflict ended on November 9, 2020, when Armenia and Azerbaijan signed a Russian-brokered cease-fire agreement.[221] As part of the nine-point cease-fire plan, nearly 2,000 Russian peacekeeping soldiers were deployed to certain parts of Nagorno-Karabakh largely populated by ethnic Armenians. In May 2021, tensions rose again in the region but for a different reason—the demarcation of the Armenian–Azerbaijani border.[222]

The Nagorno–Karabakh 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.[223] As noted by Eurasia expert Eduard Abrahamyan, "for years, Moscow has periodically sought to use the local authorities in Karabakh as a proxy tool of coercive diplomacy against both Baku and Yerevan."[224]

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 depend on oil and gas transiting the region. 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 to promote outcomes that are at odds with U.S. interests.

Increased Activity in the Mediterranean. Russia has had a military presence in Syria for decades, but in September 2015, it became the decisive actor in Syria's ongoing civil war, having saved Bashar al-Assad from being overthrown and having strengthened his hand militarily, thus enabling government forces to retake territory lost during the war. Although conflicting strategic interests cause the relationship between Assad and Putin to be strained at times, Assad still needs Russian military support to take back Idlib province, a goal that he likely shares with Putin.[225] Russia's Hmeymim Air Base is closely located to Idlib, a source of attacks from rebel fighters and terrorist groups, and Moscow instinctively desires to protect its assets. Assad's only goal is to restore sovereignty over all of Syria; Russia generally is more focused on eliminating terrorism in the region and must manage its relationship with Turkey.

In January 2017, Russia signed an agreement with the Assad regime to "expand the

MAP 12

Before and After the Second Karabakh War

The Nagorno–Karabakh region has been defined by nearly three decades of conflict. After a second war in the fall of 2020, Armenia and Azerbaijan finally reached a settlement. Azerbaijan regained much of its territory, and Russian peacekeeping forces now oversee the remaining parts.

SOURCE: Heritage Foundation research.

heritage.org

Tartus naval facility, Russia's only naval foothold in the Mediterranean, and grant Russian warships access to Syrian waters and ports.... The agreement will last for 49 years and could be prolonged further."[226] According to a May 2020 report, Russia is reinforcing its naval group in the Mediterranean Sea with warships and submarines armed with Kalibr cruise missiles.[227] In May 2021, the Voice of America reported that Russia is expanding its navy base at Tartus and "planning to construct a floating dock to boost the port's ship repair facilities."[228]

The agreement with Syria also includes upgrades to the Hmeymim air base at Latakia, including repairs to a second runway.[229] Russia deployed the S-400 anti-aircraft missile system to Hmeymim in late 2015.[230] It also has deployed the Pantsir S1 system. "The two systems working in tandem provide a 'layered defense,'" according to one account, "with the S-400 providing long-ranged protection against bombers, fighter jets, and ballistic missiles, and the Pantsir providing medium-ranged protection against cruise missiles, low-flying strike aircraft, and drones."[231] Russia currently operates out of Hmeymim air base on a 40-year agreement and continues to entrench its position there, as demonstrated by its recent building of reinforced concrete aircraft shelters.[232] In August 2020, Syria agreed to give Russia additional land and coastal waters to expand its Hmeymim air base.[233]

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."[234] The IISS similarly reports that Russia has used Syria as "a test bed for the development of joint operations and new weapons and tactics."[235] In fact, Russia has tested hundreds of pieces of new equipment in Syria. In December 2018:

> Russian Deputy Prime Minister Yury Borisov detailed to local media...the various new weapons systems [that] have been introduced to the conflict. These included the Pantsir S1 anti-aircraft and Iskander-M ballistic missile systems on the ground, Tupolev Tu-160 supersonic strategic bombers, Tu-22M3 supersonic bombers and Tu-95 propeller-driven bombers, as well as Mikoyan MiG-29K fighters and Ka-52K Katran helicopters in the air.[236]

Overall, Russian arms sales abroad reportedly exceeded $13 billion in 2019, surpassing sales in 2018 by more than $2 billion.[237]

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.[238] 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."[239]

The U.S. and Russia have a deconfliction hotline to avoid midair collisions and incidents, but incidents have occurred on the ground as well as in the air. In November 2018, Ambassador James Jeffrey, U.S. Special Representative for Syria Engagement, told news media that "American and Russian forces have clashed a dozen times in Syria—sometimes with exchanges of fire."[240]

In October 2018, Egyptian President Abdel Fattah al-Sisi signed a strategic cooperation treaty with Russia.[241] 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.[242] Russia is a major exporter of arms to Egypt, which agreed to purchase 20 Su-35 fighter jets in 2018 for $2 billion.[243] Production of the Su-35 jets began in May 2020.[244]

In Libya, Russia continues to support Field Marshal Khalifa Haftar with weapons and military advisers. According to the Department of Defense, Russia's Wagner Group continues to be involved militarily in Libya.[245] Despite its ties to Haftar, Russia has also focused on

growing business ties with the Libyan government in Tripoli.[246]

Russia has stepped up its military operations in the Mediterranean significantly, often harassing U.S. and allied vessels involved in operations against the Islamic State. In April 2020, for example, a U.S. Navy aircraft over the Mediterranean Sea was intercepted by a Russian Su-35 jet—the second time in four days that "Russian pilots made unsafe maneuvers while intercepting US aircraft."[247] The Russian jet had taken off from Hmeymim air base in Syria. This happened again in May when two Russian Su-35 jets unsafely intercepted a U.S. Navy P-8A maritime patrol aircraft over international waters in the Eastern Mediterranean.[248]

From April–August 2017, 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. The submarine stopped twice in the eastern Mediterranean to launch cruise missiles into Syria and conducted drills in the Baltic Sea and off the coast of Libya. This was one of the first times since the Cold War that the U.S. and NATO allies had tracked a Russian submarine during combat operations.[249] In February 2020, General Wolters revealed that Russian submarines are becoming more active and harder for the United States to track.[250]

Russia's position in Syria, including its expanded area-access/area-denial capabilities and increased warship and 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 ongoing desire of the U.S. and its European allies to encourage closer ties between the region and the transatlantic community:

> Russia seeks to sever the transatlantic bond forged with the Western Balkans… by sowing instability. Chiefly Russia has sought to inflame preexisting ethnic, historic, and religious tensions. Russian propaganda magnifies this toxic ethnic and religious messaging, fans public disillusionment with the West, as well as institutions inside the Balkan nations, and misinforms the public about Russia's intentions and interests in the region.[251]

Senior members of the Russian government have alleged that NATO enlargement in the Balkans is one of the biggest threats to Russia.[252] In June 2017, Montenegro became NATO's 29th member state, and in March 2020, North Macedonia became NATO's 30th member state, both joining Albania and Croatia as NATO members in the Balkans.

Russia stands accused of being behind a failed plot to break into Montenegro's parliament on election day in 2016, assassinate its former prime minister, and install a pro-Russian government. In May 2019, two Russian nationals, believed to be the masterminds behind the plot, were convicted in absentia along with 12 other individuals for organizing and carrying out the failed coup. The trial judge stated that the convicted Russians who organized the plot "knowingly tried to terrorize Montenegrins, attack others, threaten and hurt basic constitutional and social structures."[253]

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. Russia was the largest investor in Montenegro until October 2020, when it was surpassed by China.[254]

North Macedonia's accession to NATO was similarly targeted by Russia, which had warned the nation against joining the alliance and sought to derail the Prespa agreement that paved the way for membership by settling

long-standing Greek objections to Macedonia's name.[255] In 2018, after North Macedonia was invited to join NATO, Russia's ambassador to the EU stated that "there are errors that have consequences."[256] In July 2018, Greece expelled two Russian diplomats and banned entry by two Russian nationals because of their efforts to undermine the name agreement; Russian actions in Macedonia included disinformation surrounding the vote, websites and social media posts opposing the Prespa agreement, and payments to protestors as well as politicians and organizations opposing the agreement.[257]

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 [2017], 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.[258]

The so-called Russian–Serbian Humanitarian Center at Niš is "widely believed to be a Russian spy base" and is located "only 58 miles from NATO's Kosovo Force mission based in Pristina."[259]

In February 2020, Serbia purchased the Pantsir S1 air-defense system from Russia despite objections and potential sanctions from the United States.[260] Russia has used its cultural ties to increase its role in Serbia, positioning itself as the defender of orthodoxy and investing funds in the refurbishing of orthodox churches. It also has helped to establish more than 100 pro-Russian non-governmental organizations and media outlets in Macedonia.[261]

Serbia and Russia have signed a strategic partnership agreement that is focused on economic issues. Russia's inward investment is focused on the transport and energy sectors. Except for those in the Commonwealth of Independent States, Serbia is the only country in Europe that has a free trade deal with Russia. In January 2019, Serbia and Russia signed 26 agreements relating to energy, railway construction, and strategic education cooperation.[262]

In a January 2019 state visit to Serbia, Vladimir Putin stated a desire for a free trade agreement between Serbia and the Russian-led Eurasian Economic Union, to be signed by the end of the year. An agreement between the two countries was signed in October 2019 "following veiled warnings from the European Union."[263] In addition, Russia has held out the possibility of $1.4 billion in infrastructure aid to Serbia aimed at building the Turk Stream pipeline and increasing Russia's energy leverage in the region. Russia also has continued to oppose Kosovo's recognition as an independent sovereign country and has condemned Kosovo's creation of its own army.[264]

However, Serbia still participates in military exercises far more often without Russia than with Russia. "In 2017," for example, "Serbian forces participated in 2 joint exercises with Russia and Belarus but held 13 exercises with NATO members and 7 with U.S. units."[265] Like Russia, Serbia is a member of NATO's Partnership for Peace program. Additionally, Serbia has been part of the U.S. National Guard's State Partnership Program, partnering with the State of Ohio since 2006.

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

way to prevent Bosnia and Herzegovina from entering the transatlantic community.

Republika Srpska's current unofficial leader, Milorad Dodik, has long advocated independence for the region and has enjoyed a very close relationship with the Kremlin. President Željka Cvijanović also claims that Republika Srpska will continue to maintain its partnership with Russia.[266] Recent events in Ukraine, especially the annexation of Crimea, have inspired more separatist rhetoric in Republika Srpska. In September 2018, two weeks before elections in Bosnia and Herzegovina, Russian Foreign Minister Lavrov visited Sarajevo, but he also visited Banja Luka in Republika Srpska, where he visited the site of "a future Serbian–Russian Orthodox cultural center."[267]

In many ways, Russia's relationship with Republika Srpska is akin to its relationship with Georgia's South Ossetia and Abkhazia occupied regions: more like a relationship with another sovereign state than a relationship with a semi-autonomous 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. In September 2016, Dodik was treated like a head of state on a visit to Moscow just days before a referendum that chose January 9 as Republika Srpska's "statehood day," a date filled with religious and ethnic symbolism for the Serbs.[268] In October 2018, just days before elections, Dodik again visited Russia where he watched the Russian Grand Prix in a VIP box with Putin.[269] Republika Srpska continues to host its "statehood day" in defiance of a ruling by Bosnia's federal constitutional court that both the celebration and the referendum establishing it were illegal.[270]

On January 9, 2020, Bosnian Serbs again held "statehood day."[271] At the 2018 "statehood day," then-president Dodik and the self-proclaimed leaders of South Ossetia had "signed a memorandum on cooperation between the 'states.'"[272] Russia has reportedly trained a Republika Srpska paramilitary force in Russia at the nearby Niš air base 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."[273] Veterans organizations in Russia and Republika Srpska have developed close ties.[274]

Russia has cultivated strong ties with the security forces of Republika Srpska. Russian police take part in exchanges with the security forces, and Russian intelligence officers reportedly teach at the police academy and local university. On April 4, 2018, the Republika Srpska authorities opened a new $4 million training center "at the site of a former army barracks in Zaluzani, outside Banja Luka." The site serves as the headquarters for "anti-terrorist units, logistics units, and a department to combat organized crime."[275]

Russia does not want Kosovo to be seen as a successful nation pointed toward the West. Rather, it seeks to derail Kosovo's efforts to integrate into the West, often by exploiting the Serbian minority's grievances. In the most jarring example, in January 2017, a train traveling from Belgrade to Mitrovica, a heavily Serb town in Kosovo, was stopped at the Kosovar border. The Russian-made train was "painted in the colors of the Serbian flag and featured pictures of churches, monasteries, and medieval towns, as well as the words 'Kosovo is Serbian' in 21 languages."[276]

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.

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 Russia's

periodic aggressive maneuvers near U.S. and NATO vessels—and with the significant exception of the Kerch Strait—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, and except in remote areas in the Arctic Sea, search and rescue capabilities are readily available. Moreover, maritime-launched terrorism is not a significant problem, and piracy is virtually nonexistent.

Sea. In May 2018, 17 Russian fighter jets buzzed the HMS *Duncan*, which was serving as the flagship of Standing NATO Maritime Group Two (SNMG2), operating in the Black Sea. Commodore Mike Utley, who was leading SNMG2, stated that the ship was "probably the only maritime asset that has seen a raid of that magnitude in the last 25 years," and then-British Defense Minister Gavin Williamson described the behavior as "brazen Russian hostility."[277] In April 2018, a fully armed Russian jet buzzed a French frigate operating in the eastern Mediterranean.[278]

Russian threats to the maritime theater also include activity near undersea fiber-optic cables. In July 2019, a Russian submarine reportedly was trying to tap information flowing through undersea cables near Russia's northern shore in the Barents Sea. The cables "carry 95 percent of daily worldwide communications" in addition to "financial transactions worth over $10 trillion a day."[279] Thus, any disruption would cause a catastrophic reduction in the flow of capital.

The *Yantar*, a mother ship to two Russian minisubmersibles, 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.[280] 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.[281]

Airspace. Russia has continued its provocative military flights near U.S. and European airspace over the past year. In April 2021, Lieutenant General David Krumm from Joint Base Elmendorf–Richardson, Alaska, revealed that during the past year, there was a large increase in Russian activity and the U.S. intercepted more than 60 Russian aircraft.[282] That was the "most action the Alaska Air Defense Identification Zone—a region spanning 200 nautical miles that reaches past U.S. territory and into international airspace—ha[d] seen since the Soviet Union fell in 1991."[283] In October 2020, F-22 Raptor stealth fighter jets scrambled "to intercept Russian long-range bombers and fighters flying off Alaska's coast" in "the 14th such incident off Alaska's coast in 2020."[284]

In March and April 2019, the Royal Air Force scrambled fighters twice in five days to intercept Russian bombers flying near U.K. airspace off Scotland while the U.S., Australia, and 11 NATO allies were taking part in the Joint Warrior exercise in Scotland.[285] Also in March 2019, Italian jets operating from Keflavík in Iceland intercepted two Russian Tu-142 Bear bombers flying in Iceland's air surveillance area.[286]

Aggressive Russian flying has occurred near North American airspace as well. In January 2019, two U.S. F-22s and two Canadian CF-18 fighters scrambled when two Russian Tu-160 Blackjack bombers flew into Arctic airspace patrolled by the Royal Canadian Air Force.[287]

Russian flights have also targeted U.S. ally Japan. Twice in one day in June 2019, two Russian Tupolev Tu-95 bombers entered Japanese airspace—over Minamidaito Island east of Okinawa and over Hachijo Island southeast of Tokyo. Japan sent out fighter jets to warn them.[288] In incidents in January, March, and May 2019, Japan scrambled fighter jets to intercept a Russian Il-38N maritime patrol aircraft (MPA) flying over the Sea of Japan.[289] Nor is it only MPAs that fly near Japan; for instance, Russian Su-24 attack aircraft were intercepted in December 2018 and January 2019 incidents.[290] Between April 1, 2018, and March 31, 2019, Japan had to scramble jets 343 times to intercept Russian aircraft, although that was 47 times less than was necessary in the preceding year.[291]

The principal threat from Russian airspace incursions, however, remains near NATO territory in Eastern Europe, specifically in the Black Sea and Baltic regions. In the Black Sea region, in December 2020, Russia scrambled one of its Su-30 fighter jets to prevent U.S. and French reconnaissance planes from crossing the Russian border, even though they were flying over international waters.[292] In March 2021, NATO fighter jets scrambled 10 times in one day "to shadow Russian bombers and fighters during an unusual peak of flights over the North Atlantic, North Sea, Black Sea and Baltic Sea."[293] In the Baltics, in April 2021, "NATO scrambled fighter jets from bases in Estonia, Lithuania and Poland to track and intercept Russian fighters, bombers and surveillance aircraft over the Baltic Sea."[294]

There have been several incidents involving Russian military aircraft flying in Europe without using their transponders. In April 2020, two maritime Tu-142 reconnaissance and anti-submarine warfare planes flew over the Barents, Norwegian, and North Seas but had switched off their transponders. As a result, two Norwegian F-16s were scrambled to identify the planes.[295] In September 2019, a Russian Air Force Sukhoi Su-34 fighter flew over Estonian airspace without filing a flight plan or maintaining radio contact with Estonian air navigation officials because the plane's transponder had been switched off. This was the second violation of Estonia's airspace by a Russian aircraft in 2019.[296] In August 2019, two Russian Su-27 escort jets flew over the Baltic Sea without a flight plan and without turning on their transponders.[297]

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, Russia's antagonistic behavior in international waters is a threat to freedom of the seas.

Russia's reckless aerial activity in the region also remains a threat to civilian aircraft flying in European airspace. That the provocative and hazardous behavior of the Russian armed forces or Russian-sponsored groups poses a threat to civilian aircraft in Europe was amply demonstrated by the July 2014 downing of Malaysia Airlines Flight MH17, killing all 283 passengers and 15 crewmembers, over the skies of southeastern Ukraine.

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, "a victory in information warfare 'can be much more important than victory in a classical military conflict, because it is bloodless, yet the impact is overwhelming and can paralyse all of the enemy state's power structures.'"[298]

Russia continues to probe U.S. critical infrastructure. In January 2019, testifying before the Senate Select Committee on Intelligence, then-Director of National Intelligence Daniel R. Coats assessed that:

> Russia has the ability to execute cyber attacks in the United States that generate localized, temporary disruptive effects on critical infrastructure—such as disrupting an electrical distribution network for at least a few hours—similar to those demonstrated in Ukraine in 2015 and 2016. Moscow is mapping our critical infrastructure with the long-term goal of being able to cause substantial damage.[299]

Russia continued to conduct cyberattacks on government and private entities in 2020 and 2021. In December 2020, Russian hackers "broke into a range of key government networks, including in the Treasury and Commerce Departments, and had free access to

their email systems."[300] According to *The New York Times*, "[a]bout 18,000 private and government users downloaded a Russian tainted software update—a Trojan horse of sorts—that gave its hackers a foothold into victims' systems, according to SolarWinds, the company whose software was compromised."[301] Multiple U.S. government agencies, the Pentagon, nuclear labs, and several *Fortune* 500 companies had been using the SolarWinds software on their computers.[302]

In April 2021, the U.S. Treasury sanctioned Russia for the SolarWinds hack. It also sanctioned 32 Russian "entities and individuals" who had carried out "Russian government-directed attempts to influence the 2020 U.S. presidential election, and other acts of disinformation and interference."[303]

In May 2021, a Russia-based hacking group known as DarkSide launched a cyberattack against Colonial Pipeline, "the operator of one of the nation's largest fuel pipelines."[304] The 5,500-mile pipeline, "responsible for carrying fuel from refineries along the Gulf Coast to New Jersey," was down for six days.[305] Colonial Pipeline paid DarkSide $90 million in bitcoin as a ransom payment,[306] but the Department of Justice was able to recover approximately $2.3 million of that amount a few weeks later.[307] In June 2021, REvil, a Russian cybercriminal group, launched a ransomware attack on JBS, "the world's largest meat processing company."[308] As a result of the cyberattack, JBS was forced to shut down all nine of its U.S. plants for a brief period.[309]

However, the United States is not Russia's only target. In February 2020, the U.S. and its key allies accused Russia's main military intelligence agency, the GRU, of a broad cyberattack against the Republic of Georgia. According to *The New York Times*, the attack "took out websites and interrupted television broadcasts."[310] The attack was limited, but through its accusation, the U.S. sought to deter Moscow from intervening in the 2020 presidential election.

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. Cyber activity continues to be a significant part of Russia's efforts to manipulate and undermine democratic elections in Europe and elsewhere.

In addition to official intelligence and military cyber assets, Russia employs 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 its 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."[311]

Russia's cyber capabilities are advanced and of key importance in realizing the state's strategic aims. Russia has used cyberattacks to further the reach and effectiveness of its propaganda and disinformation campaigns, and its ongoing cyberattacks 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 cyberattacks 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 serious challenge both to the U.S. and to 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 with respect to America's allies in the region is different. 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 ensure their continued relevance.

Russian provocations that are much less serious than any scenario involving a nuclear exchange pose the most serious challenge to American interests, particularly in Central and Eastern Europe, the Arctic, the Balkans, and the South Caucasus. As the 2021 Worldwide Threat Assessment states:

> Moscow will continue to employ a variety of tactics this year meant to undermine US influence, develop new international norms and partnerships, divide Western countries and weaken Western alliances, and demonstrate Russia's ability to shape global events as a major player in a new multipolar international order. Russia will continue to develop its military, nuclear, space, cyber, and intelligence capabilities, while actively engaging abroad and leveraging its energy resources, to advance its agenda and undermine the United States.[312]

For these reasons, the *Index of U.S. Military Strength* 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	✓				

Endnotes

1. International Institute for Strategic Studies, *The Military Balance 2021: The Annual Assessment of Global Military Capabilities and Defence Economics* (London: Routledge, 2021), pp. 164–217.
2. Michael Birnbaum, "Russian Submarines Are Prowling Around Vital Undersea Cables. It's Making NATO Nervous," *The Washington Post*, December 22, 2017, https://www.washingtonpost.com/world/europe/russian-submarines-are-prowling-around-vital-undersea-cables-its-making-nato-nervous/2017/12/22/d4c1f3da-e5d0-11e7-927a-e72eac1e73b6_story.html (accessed June 19, 2021).
3. Paul Stronski, "Implausible Deniability: Russia's Private Military Companies," Carnegie Endowment for International Peace *Commentary*, June 2, 2020, https://carnegieendowment.org/2020/06/02/implausible-deniability-russia-s-private-military-companies-pub-81954 (accessed June 19, 2021).
4. Kimberly Marten, "The Puzzle of Russian Behavior in Deir al-Zour," War on the Rocks, July 5, 2018, https://warontherocks.com/2018/07/the-puzzle-of-russian-behavior-in-deir-al-zour/ (accessed June 19, 2021).
5. Thomas Gibbons-Neff, "How a 4-Hour Battle Between Russian Mercenaries and U.S. Commandos Unfolded in Syria," *The New York Times*, May 24, 2018, https://www.nytimes.com/2018/05/24/world/middleeast/american-commandos-russian-mercenaries-syria.html (accessed June 19, 2021).
6. Maria Tsvetkova, "Russian Toll in Syria Battle Was 300 Killed and Wounded: Sources," Reuters, February 15, 2018, https://www.reuters.com/article/us-mideast-crisis-syria-russia-casualtie/russian-toll-in-syria-battle-was-300-killed-and-wounded-sources-idUSKCN1FZ2DZ (accessed June 19, 2021).
7. Luke Harding, "Lawsuit Targets Russian Mercenary Company over Role in Syria," *The Guardian*, March 15, 2021, https://www.theguardian.com/world/2021/mar/15/lawsuit-seeks-justice-for-suspected-russian-killing-of-syrian-detainee (accessed June 19, 2021).
8. Maria Tsvetkova and Anton Zverev, "Exclusive: Kremlin-Linked Contractors Help Guard Venezuela's Maduro—Sources," Reuters, January 25, 2019, https://www.reuters.com/article/us-venezuela-politics-russia-exclusive/exclusive-kremlin-linked-contractors-help-guard-venezuelas-maduro-sources-idUSKCN1PJ22M (accessed June 19, 2021).
9. Tom Balmforth, "Russia Sends Lavrov to Venezuela to 'Counteract' U.S. Sanctions," Reuters, February 4, 2020, https://www.reuters.com/article/us-russia-venezuela-lavrov/russia-sends-lavrov-to-venezuela-to-counteract-u-s-sanctions-idUSKBN1ZY19Q (accessed June 19, 2021).
10. Reuters, "Russian Air Force Planes Land in Venezuela Carrying Troops: Reports," March 24, 2019, https://www.reuters.com/article/us-venezuela-politics-idUSKCN1R50NB (accessed June 19, 2021).
11. Andrew Osborn, "Russian Nuclear-Capable Bomber Aircraft Fly to Venezuela, Angering U.S.," Reuters, December 11, 2018, https://www.reuters.com/article/us-venezuela-russia-airforce/russian-nuclear-capable-bomber-aircraft-fly-to-venezuela-angering-u-s-idUSKBN1OA23L (accessed June 19, 2021).
12. Daria Litvinova, "Russia in Venezuela: As Moscow Accuses U.S. of 'Information War,' What Is Putin's Role in the Standoff?" CBS News, updated May 1, 2019, https://www.cbsnews.com/news/russia-in-venezuela-why-vladimir-putin-backs-nicolas-maduro-in-standoff-with-donald-trump-us/ (accessed June 19, 2021).
13. International Institute for Strategic Studies, *The Military Balance 2017: The Annual Assessment of Global Military Capabilities and Defence Economics* (London: Routledge, 2017), p. 186.
14. Radio Free Europe/Radio Liberty, "Putin Creates National Guard Force," July 4, 2016, https://www.rferl.org/a/putin-national-guard-dissent-riots/27836301.html (accessed June 19, 2021), and International Institute for Strategic Studies, *The Military Balance 2017*, p. 169.
15. International Institute for Strategic Studies, *The Military Balance 2017*, p. 186.
16. Warsaw Institute, Russia Monitor, "Russia's Rosgvardia Sets Foot in Belarus," December 22, 2020, https://warsawinstitute.org/russias-rosgvardia-sets-foot-belarus/ (accessed June 19, 2021).
17. Press release, "Russia's Economy Loses Momentum amid COVID-19 Resurgence, Says New World Bank Report," The World Bank, December 16, 2020, https://www.worldbank.org/en/news/press-release/2020/12/16/russias-economy-loses-momentum-amid-covid-19-resurgence-says-new-world-bank-report (accessed June 19, 2021).
18. Anna Andrianova, "Russian Economy Rebounding from Covid Slump After Lockdown," Bloomberg, updated April 2, 2021, https://www.bloomberg.com/news/articles/2021-04-01/russian-economy-continues-climb-from-covid-slump-after-lockdown (accessed June 19, 2021).
19. Table 1, "The 40 Countries with the Highest Military Expenditure in 2020," in Diego Lopes Da Silva, Nan Tian, and Alexandra Marksteiner, "Trends in World Military Expenditure, 2020," Stockholm International Peace Research Institute *Fact Sheet*, April 2021, p. 2, https://sipri.org/sites/default/files/2021-04/fs_2104_milex_0.pdf (accessed June 19, 2021).

20. Andrew S. Bowen, "Russian Armed Forces: Military Modernization and Reforms," Congressional Research Service *In Focus* No. 11603, July 20, 2020, https://crsreports.congress.gov/product/pdf/IF/IF11603 (accessed June 19, 2021).
21. Siemon T. Wezeman, "Russia's Military Spending: Frequently Asked Questions," Stockholm International Peace Research Institute *Backgrounder*, April 27, 2020, https://www.sipri.org/commentary/topical-backgrounder/2020/russias-military-spending-frequently-asked-questions (accessed June 19, 2021).
22. Table 5, "Russian Defence Expenditure as % of GDP," in International Institute for Strategic Studies, *The Military Balance 2021*, p. 174.
23. Richard Connolly and Mathieu Boulègue, "Russia's New State Armament Programme: Implications for the Russian Armed Forces and Military Capabilities to 2027," Chatham House: The Royal Institute of International Affairs *Research Paper*, May 2018, p. 2, https://www.chathamhouse.org/sites/default/files/publications/research/2018-05-10-russia-state-armament-programme-connolly-boulegue-final.pdf (accessed June 24, 2021).
24. Hans M. Kristensen and Matt Korda, "Russian Nuclear Weapons, 2021," *Bulletin of the Atomic Scientists*, Vol. 77, No. 2 (March 2021), p. 94, https://www.tandfonline.com/doi/pdf/10.1080/00963402.2021.1885869?needAccess=true (accessed June 19, 2021).
25. Maxim Starchak, "Year 2020 in Review: Results of Russia's Nuclear Weapons Modernization," Jamestown Foundation *Eurasia Daily Monitor*, Vol. 18, Issue 7 (January 13, 2021), https://jamestown.org/program/year-2020-in-review-results-of-russias-nuclear-weapons-modernization/ (accessed June 19, 2021), and Franz-Stefan Gady, "Russia's Most Powerful Intercontinental Ballistic Missile to Enter Service in 2021," *The Diplomat*, March 30, 2018, https://thediplomat.com/2018/03/russias-most-powerful-intercontinental-ballistic-missile-to-enter-service-in-2021/ (accessed June 19, 2021).
26. "Russia's Hypersonic Ballistic Missile and Laser System in Final Tests, Putin Says," *The Moscow Times*, April 11, 2019, https://www.themoscowtimes.com/2019/04/11/russias-hypersonic-ballistic-missile-laser-system-final-tests-putin-says-a65204 (accessed June 19, 2021).
27. Starchak, "Year 2020 in Review: Results of Russia's Nuclear Weapons Modernization."
28. International Institute for Strategic Studies, *The Military Balance 2017*, p. 159.
29. Tom Bowman, "U.S. Military Advantage over Russia and China 'Eroding,' Pentagon Says," NPR, January 19, 2018, https://www.npr.org/2018/01/19/579088536/u-s-military-advantage-over-russia-and-china-eroding-says-pentagon (accessed June 19, 2021).
30. Kyle Mizokami, "Russia Is Field Testing Its New Armata Tank in Syria," *Popular Mechanics*, April 22, 2020, https://www.popularmechanics.com/military/weapons/a32228809/russia-armata-tank/ (accessed June 24, 2021).
31. "Russia to Receive Advanced Armata Tanks in 2022," *The Moscow Times*, March 4, 2021, https://www.themoscowtimes.com/2021/03/04/russia-to-receive-advanced-armata-tanks-in-2022-a73149 (accessed June 19, 2021).
32. International Institute for Strategic Studies, *The Military Balance 2021*, p. 170.
33. Alex Lockie, "Russia Admits Defeat on Its 'Stealth' F-35 Killer by Canceling Mass Production of the Su-57 Fighter Jet," *Business Insider*, July 12, 2018, https://www.businessinsider.com/russia-admits-defeat-su-57-not-going-into-mass-production-2018-7 (accessed June 19, 2021).
34. "Russian Fighter Jet Crashes Near Crimea, Pilot Missing," *The Moscow Times*, March 26, 2020, https://www.themoscowtimes.com/2020/03/26/russian-fighter-jet-crashes-near-crimea-pilot-missing-a69753 (accessed June 19, 2021).
35. Ryan Pickrell, "Russia Is Talking About Scrapping Its Only Aircraft Carrier, Putting the Troubled Ship out of Its Misery," *Business Insider*, April 8, 2019, https://www.businessinsider.com/russia-is-talking-about-scrapping-kuznetsov-its-only-aircraft-carrier-2019-4 (accessed June 19, 2021).
36. Zahra Ullah, Darya Tarasova, and Brad Lendon, "Russia's Only Aircraft Carrier Catches Fire; 1 Dead and 2 Missing," CNN, updated December 12, 2019, https://www.cnn.com/2019/12/12/europe/russian-carrier-fire-intl/index.html (accessed June 19, 2021).
37. Benjamin Brimelow, "Russia's Unlucky Aircraft Carrier Is Getting Ready for Its Return to Action," *Business Insider*, April 19, 2021, https://www.businessinsider.com/russian-aircraft-carrier-kuznetsov-getting-ready-for-return-to-action-2021-4 (accessed June 19, 2021).
38. Ryan Pickrell, "Russia Is Planning to Build Its First Nuclear-Powered Aircraft Carrier After Breaking Its Only Flattop," *Business Insider*, May 8, 2019, https://www.businessinsider.com/russia-wants-to-build-its-first-nuclear-powered-aircraft-carrier-2019-5 (accessed June 19, 2021).
39. Franz-Stefan Gady, "Russia Lays Down 2 Project 22350 *Admiral Gorshkov*-Class Stealth Frigates," *The Diplomat*, April 24, 2019, https://thediplomat.com/2019/04/russia-lays-down-2-project-22350-admiral-gorshkov-class-stealth-frigates/ (accessed June 19, 2021).

40. Ibid. and Xavier Vavasseur, "Project 22350 Gorshkov-Class Frigates to Join Russia's Black Sea Fleet," *Naval News*, April 2, 2020, https://www.navalnews.com/naval-news/2020/04/project-22350-gorshkov-class-frigates-to-join-russias-black-sea-fleet/ (accessed June 19, 2021).
41. Thomas Nilsen, "Russian Navy Gets Go-ahead for Design of New Nuclear Powered Destroyers," *The Barents Observer*, August 28, 2017, https://thebarentsobserver.com/en/security/2017/08/russian-navy-gets-go-ahead-design-new-nuclear-powered-destroyers (accessed June 19, 2021).
42. Joseph Trevithick, "Russia Has Abandoned Its Massive Nuclear Destroyer and Supersized Frigate Programs," The War Zone, April 21, 2020, https://www.thedrive.com/the-war-zone/33099/russia-has-abandoned-its-massive-nuclear-destroyer-and-supersized-frigate-programs (accessed June 19, 2021).
43. Snehesh Alex Philip, "India Gets Ukrainian Engines for Its Stealth Frigates, Sends Them to Shipbuilder in Russia," *The Print*, January 19, 2021, https://theprint.in/defence/india-gets-ukrainian-engines-for-its-stealth-frigates-sends-them-to-shipbuilder-in-russia/587923/ (accessed June 19, 2021).
44. Andrew Osborn, "Despite Putin's Swagger, Russia Struggles to Modernize Its Navy," Reuters, February 21, 2019, https://www.reuters.com/article/us-russia-military-insight/despite-putins-swagger-russia-struggles-to-modernize-its-navy-idUSKCN1QA0U7 (accessed June 19, 2021).
45. Philip, "India Gets Ukrainian Engines for Its Stealth Frigates, Sends Them to Shipbuilder in Russia."
46. International Institute for Strategic Studies, *The Military Balance 2021*, pp. 164 and 171.
47. Sputnik, "Russia Could Go Beyond Planned Series of 10 Borei-Class Nuclear-Powered Subs, Government Says," May 17, 2021, https://sputniknews.com/military/202105171082913306-russia-could-go-beyond-planned-series-of-10-borei-class-nuclear-powered-subs-government-says/ (accessed June 20, 2021).
48. Dave Makichuk, "Russia's Kalibr Missile Puts US on the Back-Heel," *Asia Times*, March 12, 2021, https://asiatimes.com/2021/03/russias-kalibr-missile-puts-us-on-the-back-heel/ (accessed June 19, 2021).
49. TASS, "Russian Naval Ship Test-Fires Kalibr Cruise Missile from Arctic Sea," August 31, 2021, https://tass.com/defense/1332025 (accessed September 1, 2021).
50. Charlie Gao, "Russia's Husky Class Submarine: Armed with Nuclear Torpedoes and Hypersonic Missiles?" *The National Interest*, The Buzz Blog, May 10, 2018, https://nationalinterest.org/blog/the-buzz/russias-husky-class-submarine-armed-nuclear-torpedoes-25784 (accessed June 19, 2021), and Michael Peck, "Russia Wants to Arm Its New Husky-Class Submarines with Hypersonic Missiles," *The National Interest,* The Buzz Blog, May 31, 2018, http://nationalinterest.org/blog/the-buzz/russia-wants-arm-its-new-husky-class-submarines-hypersonic-26063 (accessed June 19, 2021).
51. Gao, "Russia's Husky Class Submarine: Armed with Nuclear Torpedoes and Hypersonic Missiles?"
52. International Institute for Strategic Studies, *The Military Balance 2017*, p. 174.
53. Franz Stefan-Gady, "First Project 636.3 *Kilo*-Class Attack Sub to Enter Service with Russia's Pacific Fleet This Month," *The Diplomat*, November 22, 2019, https://thediplomat.com/2019/11/first-project-636-3-kilo-class-attack-sub-to-enter-service-with-russias-pacific-fleet-this-month/ (accessed June 19, 2021), and International Institute for Strategic Studies, *The Military Balance 2021*, p. 171.
54. International Institute for Strategic Studies, *The Military Balance 2017*, p. 174.
55. Ben Connable, Abby Doll, Alyssa Demus, Dara Massicot, Clint Reach, Anthony Atler, William Mackenzie, Matthew Povlock, and Lauren Skrabala, *Russia's Limit of Advance: Analysis of Russian Ground Force Deployment Capabilities and Limitations*, RAND Corporation, 2020, pp. xvii and 56, https://www.rand.org/pubs/research_reports/RR2563.html (accessed June 19, 2021).
56. Andrew Osborn, "Russia Expands Military Transport Fleet to Move Troops Long Distances," Reuters, March 7, 2017, http://www.reuters.com/article/russia-navy-expansion-idUSL5N1GK470 (accessed June 19, 2021).
57. Roger McDermott, "Moscow Weighs Options to Procure S-500 Air-Defense Systems," Jamestown Foundation *Eurasia Daily Monitor*, Vol. 18, Issue 48 (March 24, 2021), https://jamestown.org/program/moscow-weighs-options-to-procure-s-500-air-defense-systems/ (accessed June 19, 2021).
58. U.S. Defense Intelligence Agency, *Challenges to Security in Space*, released February 11, 2019, p. 23, https://www.dia.mil/Portals/27/Documents/News/Military%20Power%20Publications/Space_Threat_V14_020119_sm.pdf (accessed June 4, 2021). For release date, see news release, "Defense Intelligence Agency Releases Report on Challenges to U.S. Security in Space," Defense Intelligence Agency, February 11, 2019, https://www.dia.mil/news/articles/article-view/article/1754150/defense-intelligence-agency-releases-report-on-challenges-to-us-security-in-spa/ (accessed June 19, 2021).
59. Sandra Erwin, "Space Force Official: Russian Missile Tests Expose Vulnerability of Low-Orbiting Satellites," *SpaceNews*, December 16, 2020, https://spacenews.com/space-force-official-russian-missile-tests-expose-vulnerability-of-low-orbiting-satellites/ (accessed June 19, 2021).

60. TASS, "Latest Voronezh Radars to Replace All Russian Existing Airspace Control Systems," February 15, 2021, https://tass.com/defense/1256441 (accessed June 19, 2021).
61. General Tod D. Wolters, United States Air Force, Commander, United States European Command, statement on EUCOM posture before the Committee on Armed Services, U.S. Senate, February 25, 2020, p. 3, https://www.armed-services.senate.gov/imo/media/doc/Wolters_02-25-20.pdf (accessed June 19, 2021). Emphasis in original.
62. Olevs Nikers, "Russia's Offshore 'Missile Tests': Psychologically Undermining the Economic Security of the Baltics," Jamestown Foundation *Eurasia Daily Monitor,* Vol. 15, Issue 74 (May 15, 2018), https://jamestown.org/program/russias-offshore-missile-tests-psychologically-undermining-the-economic-security-of-the-baltics/ (accessed June 19, 2021), and Michael Birnbaum, "Russia Tests Missiles in the Baltic Sea, a Day After Baltic Leaders Met with Trump," *The Washington Post,* April 4, 2018, https://www.washingtonpost.com/world/europe/russia-tests-missiles-in-the-baltic-sea-a-day-after-baltic-leaders-met-with-trump/2018/04/04/0a35e222-380d-11e8-af3c-2123715f78df_story.html?utm_term=.8f8c10f97f62 (accessed June 19, 2021).
63. Samuel Osborne, "Russian Live Missile Tests Force Latvia to Close Airspace over Baltic Sea: 'It's Hard to Comprehend,'" *The Independent,* April 5, 2018, https://www.independent.co.uk/news/world/europe/russia-latvia-missile-tests-baltic-sea-airspace-donald-trump-baltic-leaders-white-house-a8289451.html (accessed June 19, 2021).
64. Nikers, "Russia's Offshore 'Missile Tests': Psychologically Undermining the Economic Security of the Baltics," and Birnbaum, "Russia Tests Missiles in the Baltic Sea, a Day After Baltic Leaders Met with Trump."
65. Osborne, "Russian Live Missile Tests Force Latvia to Close Airspace over Baltic Sea: 'It's Hard to Comprehend.'"
66. Col. Tomasz K. Kowalik and Dominik P. Jankowski, "The Dangerous Tool of Russian Military Exercises," Foreign Policy Association, Foreign Policy Blogs, June 7, 2017, https://foreignpolicyblogs.com/2017/06/07/dangerous-tool-russian-military-exercises/ (accessed June 19, 2021). Article "originally published by [the] Center for European Policy Analysis."
67. Nike Ching, "Blinken Heads to Ukraine After Russia Sends 150K Troops to Border," Voice of America, April 30, 2021, https://www.voanews.com/europe/blinken-heads-ukraine-after-russia-sends-150k-troops-border (accessed June 19, 2021), and Vladimir Isachenkov, "Russian Military Says Its Troops Back to Bases After Buildup," Associated Press, April 29, 2021, https://apnews.com/article/world-news-moscow-ukraine-europe-russia-629232949b5253512a58ca6fef215af9 (accessed June 19, 2021).
68. Dave Johnson, "VOSTOK 2018: Ten Years of Russian Strategic Exercises and Warfare Preparation," *NATO Review*, December 20, 2018, https://www.nato.int/docu/review/2018/Also-in-2018/vostok-2018-ten-years-of-russian-strategic-exercises-and-warfare-preparation-military-exercices/EN/index.htm (accessed June 19, 2021).
69. U.S. Strategic Command, "Remarks by Gen. Curtis M. Scaparrotti at the 2016 Deterrence Symposium," La Vista, Nebraska, July 27, 2016, http://www.stratcom.mil/Media/Speeches/Article/986470/2016-deterrence-symposium/ (accessed June 19, 2021).
70. International Institute for Strategic Studies, *The Military Balance 2017*, p. 187.
71. Andrew Higgins, "300,000 Troops and 900 Tanks: Russia's Biggest Military Drills Since Cold War," *The New York Times*, August 28, 2018, https://www.nytimes.com/2018/08/28/world/europe/russia-military-drills.html (accessed June 19, 2021).
72. Ibid. and Johnson, "VOSTOK 2018: Ten Years of Russian Strategic Exercises and Warfare Preparation."
73. Mathieu Boulègue, "Russia's Vostok Exercises Were Both Serious Planning and a Show," Chatham House: The Royal Institute of International Affairs, September 17, 2018, https://www.chathamhouse.org/expert/comment/russia-s-vostok-exercises-were-both-serious-planning-and-show (accessed June 19, 2021). Also posted on IntelliBriefs, September 18, 2018, http://intellibriefs.blogspot.com/2018/09/russias-vostok-exercises-were-both.html (accessed June 19, 2021).
74. Ibid. and Johnson, "VOSTOK 2018: Ten Years of Russian Strategic Exercises and Warfare Preparation."
75. Higgins, "300,000 Troops and 900 Tanks: Russia's Biggest Military Drills Since Cold War," and Sam LaGrone, "China Sent Uninvited Spy Ship to Russian Vostok 2018 Exercise Alongside Troops, Tanks," U.S. Naval Institute News, September 17, 2018, https://news.usni.org/2018/09/17/china-sent-uninvited-spy-ship-russian-vostok-2018-exercise-alongside-troops-tanks (accessed June 19, 2021).
76. Vladimir Putin, "On the National Security Strategy of the Russian Federation," Decree of the President of the Russian Federation No. 400, Moscow, July 2, 2021, pp. 11–12, https://www.academia.edu/49526773/National_Security_Strategy_of_the_Russian_Federation_2021 (accessed July 20, 2021).
77. Ibid., p. 12.
78. Connolly and Boulègue, "Russia's New State Armament Programme: Implications for the Russian Armed Forces and Military Capabilities to 2027," p. 16.
79. International Institute for Strategic Studies, *The Military Balance 2017*, p. 15.
80. Kristensen and Korda, "Russian Nuclear Weapons, 2021," p. 90.

81. International Institute for Strategic Studies, *The Military Balance 2017*, p. 15.

82. Tom O'Connor, "Russia Conflict with NATO and U.S. Would Immediately Result in Nuclear War, Russian Lawmaker Warns," *Newsweek*, May 30, 2017, http://www.newsweek.com/russia-politician-nuclear-weapons-us-nato-crimea-617613 (accessed June 19, 2021).

83. Wolters, statement on EUCOM posture, p. 3.

84. Barry D. Watts, *Nuclear–Conventional Firebreaks and the Nuclear Taboo*, Center for Strategic and Budgetary Assessments, 2013, p. 43, https://csbaonline.org/uploads/documents/Nuclear-Conventional-Firebreaks-Report1.pdf (accessed June 19, 2021).

85. Shaun Waterman, "Russia Threatens to Strike NATO Missile Defense Sites," *The Washington Times*, May 3, 2012, http://www.washingtontimes.com/news/2012/may/3/russia-threatens-strike-nato-missile-defense-sites/?page=all (accessed June 19, 2021), and David Reid, "Russia Threatens Military Response to Any NATO Action over Nuclear-Ready Missile," CNBC, June 26, 2019, https://www.cnbc.com/2019/06/26/russia-threatens-response-to-nato-over-nuclear-ready-ssc-8-missile.html (accessed June 19, 2021).

86. Patrick Tucker, "US Missile Defenses Are About to Level up," *Defense One*, August 4, 2020, https://www.defenseone.com/technology/2020/08/us-missile-defenses-are-about-level/167462/ (accessed June 19, 2021).

87. Michael R. Gordon, "U.S. Says Russia Tested Missile, Despite Treaty," *The New York Times*, January 29, 2014, http://www.nytimes.com/2014/01/30/world/europe/us-says-russia-tested-missile-despite-treaty.html (accessed June 19, 2021).

88. Radio Free Europe/Radio Liberty, "Report: Russia Has Deployed More Medium-Range Cruise Missiles than Previously Thought," February 10, 2019, https://www.rferl.org/a/report-russia-has-deployed-more-medium-range-cruise-missiles-than-previously-thought/29761868.html (accessed June 19, 2021).

89. Michael R. Gordon, "Russia Deploys Missile, Violating Treaty and Challenging Trump," *The New York Times*, February 14, 2017, https://www.nytimes.com/2017/02/14/world/europe/russia-cruise-missile-arms-control-treaty.html (accessed June 19, 2021).

90. Jim Garamone, "NATO Agrees: Russia in Material Breach of INF Treaty," U.S. Department of Defense, December 5, 2018, https://dod.defense.gov/News/Article/Article/1705843/nato-agrees-russia-in-material-breach-of-inf-treaty/ (accessed June 19, 2021).

91. Fact Sheet, "President Donald J. Trump to Withdraw the United States from the Intermediate-Range Nuclear Forces (INF) Treaty," The White House, February 1, 2019, https://trumpwhitehouse.archives.gov/briefings-statements/president-donald-j-trump-withdraw-united-states-intermediate-range-nuclear-forces-inf-treaty/ (accessed June 29, 2021), and press statement by Michael R. Pompeo, U.S. Secretary of State, "U.S. Withdrawal from the INF Treaty on August 2, 2019," U.S. Embassy and Consulates in Russia, August 2, 2019, https://ru.usembassy.gov/u-s-withdrawal-from-the-inf-treaty-on-august-2-2019/ (accessed June 20, 2021).

92. News release, "Russian Banker Sentenced in Connection with Conspiracy to Work for Russian Intelligence," U.S. Department of Justice, May 25, 2016, https://www.justice.gov/opa/pr/russian-banker-sentenced-connection-conspiracy-work-russian-intelligence (accessed June 20, 2021).

93. Sara Murray, Sam Fossum, and Lindsay Benson, "Maria Butina Released from Federal Prison, Deported to Russia," CNN, updated October 25, 2019, https://www.cnn.com/2019/10/25/politics/maria-butina-released/index.html (accessed June 19, 2021).

94. Deutsche Welle, "Hundreds of Russian and Chinese Spies in Brussels—Report," February 9, 2019, https://www.dw.com/en/hundreds-of-russian-and-chinese-spies-in-brussels-report/a-47437958 (accessed June 19, 2021).

95. Warren Strobel and John Walcott, "Fewer Russian Spies in U.S. but Getting Harder to Track," Reuters, March 28, 2018, https://www.reuters.com/article/us-usa-russia-spies/fewer-russian-spies-in-u-s-but-getting-harder-to-track-idUSKBN1H40JW (accessed June 19, 2021).

96. BBC News, "Sergei Skripal: Who Is the Former Russian Intelligence Officer?" March 29, 2018, http://www.bbc.com/news/world-europe-43291394 (accessed June 20, 2021); Martin Evans and Victoria Ward, "Salisbury Nerve Agent Backlash: Residents Outraged as 500 Told They May Be at Risk a Week After Spy Attack," *The Telegraph*, March 12, 2018, https://www.telegraph.co.uk/news/2018/03/11/salisbury-public-warned-wash-clothes-nerve-agent-attack/ (accessed June 20, 2021); and Ella Wills, "Police Officer Discharged from Hospital After Salisbury Spy Poisoning Speaks Out: 'Life Will Probably Never Be the Same,'" *Evening Standard,* March 22, 2018, https://www.standard.co.uk/news/uk/police-officer-discharged-from-hospital-after-salisbury-spy-poisoning-speaks-out-for-first-time-life-a3797041.html (accessed June 20, 2021).

97. Lauren Said-Moorhouse and Samuel Quashie-Idun, "Salisbury Declared Novichok-Free Nearly a Year After Nerve Agent Attack," CNN, March 1, 2019, https://www.cnn.com/2019/03/01/uk/salisbury-novichok-cleanup-gbr-intl/index.html (accessed June 20, 2021).

98. News release, "Statement from the United States, France, Germany, and the United Kingdom on the Attack in Salisbury," The White House, March 15, 2018, https://ni.usembassy.gov/statement-united-states-france-germany-united-kingdom-attack-salisbury/ (accessed June 20, 2021).

99. Heidi Blake, Tom Warren, Richard Holmes, Jason Leopold, Jane Bradley, and Alex Campbell, "From Russia with Blood: The Kremlin's Ruthless Assassination Program and Vladimir Putin's Secret War on the West," BuzzFeed News, June 15, 2017 (including June 16, 2017, update), https://www.buzzfeed.com/heidiblake/from-russia-with-blood-14-suspected-hits-on-british-soil?utm_term=.dtzm1n1mZB#.po1WlrlWp0 (accessed June 20, 2021).
100. Ali Watkins, "Russia Escalates Spy Games After Years of U.S. Neglect," *Politico*, June 1, 2017, http://www.politico.com/story/2017/06/01/russia-spies-espionage-trump-239003 (accessed June 20, 2021).
101. BBC News, "US Charges Russian Spies over Yahoo Breach," March 15, 2017, http://www.bbc.com/news/technology-39281063 (accessed June 20, 2021).
102. Katie Bo Williams, "US Sanctions Russia over Hacking, Expels 35 Officials," *The Hill*, December 29, 2016, http://thehill.com/policy/national-security/312119-us-announces-sanctions-on-russia (accessed June 20, 2021).
103. Nadia Schadlow and Brayden Helwig, "Protecting Undersea Cables Must be Made a National Security Priority," *Defense News*, July 1, 2020, https://www.defensenews.com/opinion/commentary/2020/07/01/protecting-undersea-cables-must-be-made-a-national-security-priority/ (accessed June 20, 2021), and Marcia Wendorf, "Both the U.S. and Russia Are Stalking the World's Undersea Cables," Interesting Engineering, August 16, 2019, https://interestingengineering.com/both-the-us-and-russia-are-stalking-the-worlds-undersea-cables (accessed June 28, 2021).
104. Cristina Silva, "New Cold War: Is Russia Spying on the U.S. from a Nicaragua Military Compound?" *Newsweek*, May 22, 2017, http://www.newsweek.com/new-cold-war-russia-spying-us-nicaragua-military-compound-613427 (accessed June 20, 2021).
105. Evan Ellis, "Russian Engagement in Latin America: An Update," Center for Strategic and International Studies *Commentary*, December 19, 2017, https://www.csis.org/analysis/russian-engagement-latin-america-update (accessed June 20, 2021).
106. Ivan Ulises Klyszcz, "Russia's Central American Engagements," Foreign Policy Research Institute *Russia Foreign Policy Paper*, October 2019, p. 18, https://www.fpri.org/wp-content/uploads/2019/10/rfp1klyszcz.pdf (accessed June 20, 2021).
107. Brett Forrest, "In Cold War Echo, Russia Returns to U.S.'s Backyard," *The Wall Street Journal*, January 31, 2018, https://www.wsj.com/articles/russia-returns-to-u-s-s-backyard-1517403600 (accessed June 20, 2021).
108. Estonian Foreign Intelligence Service, *International Security and Estonia 2019*, p. 4, https://www.valisluureamet.ee/pdf/raport-2019-ENG-web.pdf (accessed June 20, 2021).
109. State Security Department of the Republic of Lithuania and Defence Intelligence and Security Service Under the Ministry of National Defence, *National Threat Assessment 2021*, p. 6, https://www.vsd.lt/wp-content/uploads/2021/03/2021-EN-el_.pdf (accessed June 20, 2021).
110. State Security Department of the Republic of Lithuania and Second Investigation Department Under the Ministry of National Defence, *National Threat Assessment 2019*, p. 6, https://www.vsd.lt/wp-content/uploads/2019/02/2019-Gresmes-internetui-EN.pdf (accessed June 20, 2021).
111. Latvian State Security Service, *Annual Report for 2018*, April 2019, pp. 18–24, https://vdd.gov.lv/en/useful/publications/annual-report-on-the-activities-of-latvian-state-security-service-in-2018.art139 (accessed June 20, 2021).
112. Per Olaf Salming, "Kremlin Intimidation: Putin Renames Air Force Regiment 'Tallinn Regiment,'" *UpNorth*, January 30, 2018, https://upnorth.eu/kremlin-intimidation-putin-renames-air-force-regiment-tallinn-regiment/ (accessed June 20, 2021).
113. Bill Gertz, "Russia Waging Information Warfare, General Says," *The Washington Free Beacon*, March 24, 2017, http://freebeacon.com/national-security/russia-waging-information-warfare-general-says/ (accessed June 20, 2021).
114. Alexis Mrachek, "Don't Believe Russia's Disinformation About Coronavirus," The Daily Signal, April 7, 2020, https://www.dailysignal.com/2020/04/07/dont-believe-russias-disinformation-about-coronavirus/.
115. Baltic News Service/TBT Staff, "Fake News About US Troops Posted on BNS Website and Cyber Attack Suspected," *The Baltic Times*, April 13, 2017, http://www.baltictimes.com/fake_news_about_us_troops_posted_on_bns_website_and_cyber_attack_suspected/ (accessed June 20, 2021).
116. BBC News, "Hackers Post Fake Stories on Real News Sites 'to Discredit NATO,'" July 30, 2020, https://www.bbc.com/news/technology-53594440 (accessed June 20, 2021).
117. Bill Gertz, "Russia Steps up Anti-U.S. Military Propaganda," *The Washington Free Beacon*, April 27, 2017, http://freebeacon.com/national-security/russia-steps-anti-u-s-military-propaganda/ (accessed June 20, 2021).
118. John Vandiver, "Poland Hit by Wave of Fake News Before Start of Major Military Exercise with US," *Stars and Stripes*, May 29, 2020, https://www.stripes.com/news/europe/poland-hit-by-wave-of-fake-news-before-start-of-major-military-exercise-with-us-1.631647 (accessed June 20, 2021).

119. Kalev Stoicescu and Pauli Järvenpää, *Contemporary Deterrence: Insights and Lessons from Enhanced Forward Presence*, International Centre for Defense and Security, January 2019, p. 13, https://icds.ee/wp-content/uploads/2019/01/ICDS_Report_Contemporary_Deterrence_Stoicescu_J%C3%A4rvenp%C3%A4%C3%A4_January_2019.pdf (accessed June 20, 2021).
120. Atlantic Council, Digital Forensic Research Lab, "#BalticBrief: The Kremlin's Loudspeaker in Latvia," November 18, 2018, https://medium.com/dfrlab/balticbrief-the-kremlins-loudspeaker-in-latvia-14c6398b2473 (accessed June 20, 2021).
121. Kathrin Hille, Neil Buckley, Courtney Weaver, and Guy Chazan, "Vladimir Putin Signs Treaty to Annex Crimea," *Financial Times*, March 18, 2014, http://www.ft.com/cms/s/0/d93e4c7c-ae6d-11e3-8e41-00144feab7de.html (accessed June 20, 2021).
122. Janusz Bugajski and Peter B. Doran, "Black Sea Rising: Russia's Strategy in Southeast Europe," Center for European Policy Analysis *Black Sea Strategic Report* No. 1, February 2016, p. 8, https://docs.wixstatic.com/ugd/644196_29f8496cc1934185865b81480c4561b5.pdf (accessed June 20, 2021).
123. Neil MacFarquhar, "Putin Opens Bridge to Crimea, Cementing Russia's Hold on Neighbor," *The New York Times*, May 15, 2018, https://www.nytimes.com/2018/05/15/world/europe/putin-russia-crimea-bridge.html (accessed June 20, 2021).
124. UNIAN Information Agency, "Shipping Volumes at Mariupol Port Fall 10% Against 2017—Media," January 9, 2019, https://www.unian.info/economics/10402497-shipping-volumes-at-mariupol-port-fall-10-against-2017-media.html (accessed June 20, 2021).
125. Ann M. Simmons, "New Rail Bridge to Crimea Strengthens Russia's Hand Against Ukraine," *The Wall Street Journal*, updated December 26, 2019, https://www.wsj.com/articles/new-rail-bridge-to-crimea-strengthens-russias-hand-against-ukraine-11577379297 (accessed June 20, 2021).
126. "Deployment: Ukraine," in International Institute for Strategic Studies, *The Military Balance 2021*, p. 205. Ukraine has put the number of Russian troops in occupied Crimea at more than 31,000; however, with Russia's military buildup in April 2021, the number could now be closer to 40,000. Ukrinform, "Already 31,500 Russian Troops Deployed in Occupied Crimea," November 7, 2019, https://www.ukrinform.net/rubric-polytics/2813512-already-31500-russian-troops-deployed-in-occupied-crimea.html (accessed June 20, 2021), and Dan DeLuce, "Steady Increase in Russian Troops in Crimea on Ukraine Border, Pentagon Says," NBC News, updated April 20, 2021, https://www.nbcnews.com/news/world/steady-increase-russian-troops-crimea-ukraine-border-says-pentagon-n1264546 (accessed June 20, 2021).
127. Michael Petersen, "The Naval Power Shift in the Black Sea," War on the Rocks, January 9, 2019, https://warontherocks.com/2019/01/the-naval-power-shift-in-the-black-sea/ (accessed June 20, 2021).
128. Dmitry Gorenburg, "Is a New Russian Black Sea Fleet Coming? Or Is It Here?" War on the Rocks, July 31, 2018, https://warontherocks.com/2018/07/is-a-new-russian-black-sea-fleet-coming-or-is-it-here/ (accessed June 20, 2021).
129. UNIAN Information Agency, "U.S. Experts Show Russian Military Equipment Transferred to Crimea amid Recent Build-up," May 6, 2021, https://www.unian.info/world/russian-aggression-u-s-experts-show-russian-military-equipment-transferred-to-crimea-amid-recent-buildup-11411557.html (accessed June 20, 2021).
130. Reuters, "Russia Decides to Deploy Nuclear-Capable Strategic Bombers to Crimea: RIA," March 18, 2019, https://www.reuters.com/article/us-ukraine-crisis-crimea-bombers-idUSKCN1QZ1WV (accessed June 20, 2021).
131. Bugajski and Doran, "Black Sea Rising: Russia's Strategy in Southeast Europe," p. 3.
132. Gorenburg, "Is a New Russian Black Sea Fleet Coming? Or Is It Here?"
133. Vavasseur, "Project 22350 Gorshkov-Class Frigates to Join Russia's Black Sea Fleet."
134. "Russia: SSGN Severodvinsk to Get Caliber Cruise Missiles," *Naval Today*, August 16, 2012, http://navaltoday.com/2012/08/16/russia-ssgn-severodvinsk-to-get-caliber-cruise-missiles/ (accessed June 20, 2020), and Sam Jones and Kathrin Hille, "Russia's Military Ambitions Make Waves in the Black Sea," *Financial Times*, May 13, 2016, https://next.ft.com/content/1b9c24d8-1819-11e6-b197-a4af20d5575e (accessed June 20, 2021).
135. Petersen, "The Naval Power Shift in the Black Sea."
136. Mark Episkopos, "Russia's New S-350 Air Defense System Could See Combat in Crimea and Syria," *The National Interest*, The Reboot Blog, August 15, 2020, https://nationalinterest.org/blog/reboot/russias-new-s-350-air-defense-system-could-see-combat-crimea-and-syria-166969 (accessed June 26, 2021).
137. Sergey Sukhankin, "Russia Pours More Military Hardware into 'Fortress Crimea,'" Jamestown Foundation *Eurasia Daily Monitor*, Vol. 14, Issue 147 (November 14, 2017), https://jamestown.org/program/russia-pours-military-hardware-fortress-crimea/ (accessed June 20, 2021).
138. Petersen, "The Naval Power Shift in the Black Sea."
139. International Institute for Strategic Studies, *The Military Balance 2021*, p. 205.

140. Meetings Coverage and Press Releases, "Situation in Eastern Ukraine Remains 'Tense and Volatile' Despite Post-Ceasefire Reduction in Fighting, Security Council Told During Briefing," U.N. Security Council, December 11, 2015, https://www.un.org/press/en/2015/sc12154.doc.htm (accessed June 20, 2021).
141. Reuters, "Two Ukrainian Soldiers Killed in Eastern Ukraine: Military," April 6, 2021, https://www.reuters.com/article/us-ukraine-crisis-casualties/two-ukrainian-soldiers-killed-in-eastern-ukraine-military-idUSKBN2BT0KV (accessed June 20, 2021).
142. Crimea.Realities, "Russian Court Leaves Jailed Ukrainian Sailors in Pretrial Detention," Radio Free Europe/Radio Liberty, January 15, 2019, https://www.rferl.org/a/russian-court-leaves-jailed-ukrainian-sailors-in-pretrial-detention/29711363.html (accessed June 20, 2021).
143. Ivan Nechepurenko and Andrew Higgins, "Russia and Ukraine Swap Dozens of Prisoners, in a 'First Step to Stop the War,'" *The New York Times*, updated April 9, 2021, https://www.nytimes.com/2019/09/07/world/europe/russia-ukraine-prisoner-swap.html (accessed June 20, 2021).
144. Heather Knauert, Spokesperson, statement on "Russia's Harassment of International Shipping Transiting the Kerch Strait and Sea of Azov," U.S. Department of State, August 30, 2018, https://ru.usembassy.gov/russias-harassment-of-international-shipping-transiting-the-kerch-strait-and-sea-of-azov/ (accessed June 26, 2021).
145. Current Time, Crimea.Realities, and Stuart Greer, "Ukraine's Mariupol Port Struggles to Stay Afloat amid Russian 'Hybrid War,'" Radio Free Europe/Radio Liberty, November 21, 2019, https://www.rferl.org/a/ukraine-s-mariupol-port-struggles-to-stay-afloat-amid-russian-hybrid-war-/30285170.html (accessed June 20, 2021).
146. Cory Welt, "Moldova: An Overview," Congressional Research Service *In Focus* No. 10894, updated March 9, 2020, https://crsreports.congress.gov/product/pdf/download/IF/IF10894/IF10894.pdf/ (accessed June 28, 2021).
147. Radio Free Europe/Radio Liberty, "OSCE Expresses Concern over Russian Forces Actions in Transdniester," August 16, 2018, https://www.rferl.org/a/osce-expresses-concerns-russian-forces-transdniester/29437831.html (accessed June 20, 2021), and press release, "OSCE Mission to Moldova Concerned About Unsanctioned Military Exercises in the Security Zone," Organization for Security and Co-operation in Europe, August 15, 2018, https://www.osce.org/mission-to-moldova/390644 (accessed June 20, 2021).
148. Dumitru Minzarari, "Russia Perfecting Its Elections Interference Toolkit in Moldova," Jamestown Foundation *Eurasia Daily Monitor*, Vol. 16, Issue 12 (January 31, 2019), https://jamestown.org/program/russia-perfecting-its-elections-interference-toolkit-in-moldova/ (accessed June 20, 2021).
149. Sergey Sukhankin, "Kaliningrad: From Boomtown to Battle-Station," European Council on Foreign Relations *Commentary*, March 27, 2017, https://www.ecfr.eu/article/commentary_kaliningrad_from_boomtown_to_battle_station_7256 (accessed June 20, 2021).
150. Michael Krepon and Joe Kendall, "Beef up Conventional Forces; Don't Worry About a Tactical Nuke Gap," *Breaking Defense*, March 28, 2016, http://breakingdefense.com/2016/03/beef-up-conventional-forces-dont-worry-about-a-tactical-nuke-gap/ (accessed June 20, 2021), and Sukhankin, "Kaliningrad: From Boomtown to Battle-Station."
151. State Security Department of the Republic of Lithuania and Second Investigation Department Under the Ministry of National Defence, *National Threat Assessment 2019*, p. 22.
152. International Institute for Strategic Studies, *The Military Balance 2020*: *The Annual Assessment of Global Military Capabilities and Defence Economics* (London: Routledge, 2020), p. 171.
153. Kalev Stoicescu and Henrik Praks, "Strengthening the Strategic Balance in the Baltic Sea Area," International Centre for Defence and Security *Report*, March 2016, p. 14, https://icds.ee/wp-content/uploads/2016/Kalev_Stoicescu__Henrik_Praks_-_Strengthening_the_Strategic_Balance_in_the_Baltic_Sea_Area.pdf (accessed June 20, 2021).
154. International Institute for Strategic Studies, *The Military Balance 2017*, p. 216, and Damien Sharkov, "Russian Military Asks Weapons Makers to Extend Range and Precision of Nuclear-Capable Iskander Missiles," *Newsweek*, May 19, 2017, http://www.newsweek.com/russia-military-weapons-maker-nato-arms-missiles-iskander-nuclear-capable-612409 (accessed June 20, 2021).
155. Andrew Osborn, "Russia Approves Warplane Deployment on Disputed Island Near Japan," Reuters, February 2, 2018, https://uk.reuters.com/article/uk-japan-russia-islands-military/russia-approves-warplane-deployment-on-disputed-island-near-japan-idUKKBN1FM179 (accessed June 20, 2021).
156. Kyodo News, "Russia Plans to Beef up Missile Defense on Northern Kurils, Close to Islands Claimed by Japan," *The Japan Times*, September 3, 2019, https://www.japantimes.co.jp/news/2019/09/03/national/russia-plans-beef-missile-defense-northern-kurils-close-islands-claimed-japan/ (accessed June 20, 2021).
157. Associated Press, "Russia Deploys Missiles to Pacific Islands Claimed by Japan," December 1, 2020, https://apnews.com/article/international-news-world-war-ii-kuril-islands-japan-russia-15dbd41dba12496daaeb1b59e5244681 (accessed June 20, 2021).

158. Franz-Stefan Gady, "Russia Is Building Military Barracks on Disputed Kuril Islands," *The Diplomat*, December 19, 2018, https://thediplomat.com/2018/12/russia-is-building-military-barracks-on-disputed-kuril-islands/ (accessed June 20, 2021).

159. Jason Lemon, "Russia Plans to Build up Troops near Western Border to Combat Increasing Threat from NATO," *Newsweek*, May 31, 2021, https://www.newsweek.com/russia-plans-build-troops-near-western-border-combat-increasing-threat-nato-1596293 (accessed June 20, 2021).

160. Roger McDermott, "Russia's Armed Forces Strengthen Western Military District," Jamestown Foundation *Eurasia Daily Monitor*, Vol. 17, Issue 91 (June 24, 2020), https://jamestown.org/program/russias-armed-forces-strengthen-western-military-district/ (accessed June 20, 2021).

161. Charles Dick, "Russia Ground Forces Posture Towards the West," Chatham House: The Royal Institute of International Affairs, Russia and Eurasia Programme *Research Paper*, April 2019, p. 12, https://www.chathamhouse.org/sites/default/files/publications/research/2019-04-04-Dick.pdf (accessed June 20, 2021).

162. Nick Paton Walsh, "Satellite Images Show Huge Russian Military Buildup in the Arctic," CNN, updated April 5, 2021, https://www.cnn.com/2021/04/05/europe/russia-arctic-nato-military-intl-cmd/index.html (accessed June 20, 2021).

163. Tom Parfitt, "Russia Plants Flag on North Pole Seabed," *The Guardian*, August 2, 2007, https://www.theguardian.com/world/2007/aug/02/russia.arctic (accessed June 20, 2021).

164. Dmitry Gorenburg, "Russia's New and Unrealistic Naval Doctrine," War on the Rocks, July 26, 2017, https://warontherocks.com/2017/07/russias-new-and-unrealistic-naval-doctrine/ (accessed June 20, 2021).

165. Daniel Brown, "Russia's Northern Fleet Beefs up Its Nuclear Capabilities to Phase 'NATO Out of Arctic,'" *Business Insider*, June 1, 2017, http://www.businessinsider.com/russias-northern-fleet-beefs-up-its-nuclear-capabilities-phase-nato-out-arctic-2017-6 (accessed June 20, 2021).

166. Joseph Trevithick, "Three Russian Ballistic Missile Submarines Just Surfaced Through the Arctic Ice Together," The War Zone, March 26, 2021, https://www.thedrive.com/the-war-zone/39953/three-russian-ballistic-missile-submarines-just-surfaced-through-the-arctic-ice-together (accessed June 24, 2021).

167. Thomas Nilsen, "Russian Bombers Simulated an Attack Against This Radar on Norway's Barents Sea Coast," *The Barents Observer*, March 5, 2018, https://thebarentsobserver.com/en/security/2018/03/russian-bombers-simulated-attack-against-radar-norways-barents-sea-coast (accessed June 20, 2021).

168. Thomas Nilsen, "Arctic Challenge 2017 Set for Take Off," *The Barents Observer*, May 16, 2017, https://thebarentsobserver.com/en/security/2017/05/arctic-challenge-2017-set-take (accessed June 20, 2019), and Nilsen, "Russian Bombers Simulated an Attack Against This Radar on Norway's Barents Sea Coast."

169. "Russian Pacific Fleet Il-38N MPA Practice ASW in Arctic," Navy Recognition, April 2, 2018, https://www.navyrecognition.com/index.php/news/defence-news/2018/april-2018-navy-naval-defense-news/6109-russian-pacific-fleet-il-38n-mpa-practice-asw-in-arctic.html (accessed June 20, 2021).

170. Thomas Nilsen, "U.S. Navy Will Build Airport Infrastructure in Northern Norway to Meet Upped Russian Submarine Presence," *The Barents Observer*, April 16, 2021, https://thebarentsobserver.com/en/security/2021/04/us-navy-build-airport-infrastructure-northern-norway-meet-increased-russian (accessed June 20, 2021).

171. Kostya Manenkov and Vladimir Isachenkov, "Russia's Northernmost Base Projects Its Power Across Arctic," Associated Press, May 18, 2021, https://apnews.com/article/arctic-europe-russia-business-technology-b67c5b28d917f03f9340d4a7b4642790 (accessed June 20, 2021).

172. Thomas Nilsen, "FSB Gets Right to Confiscate Land from People," *The Barents Observer*, May 16, 2017, https://thebarentsobserver.com/en/security/2017/05/fsb-gets-right-confiscate-land-people (accessed June 20, 2021).

173. Atle Staalesen, "New FSB Base Opens Way for More Operations in Arctic," *The Barents Observer*, January 3, 2019, https://thebarentsobserver.com/en/security/2019/01/new-fsb-base-opens-way-more-operations-arctic (accessed June 20, 2021).

174. BBC News, "Putin Creates New National Guard in Russia 'to Fight Terrorism,'" April 6, 2016, https://www.bbc.com/news/world-europe-35975840 (accessed June 20, 2021).

175. Atle Staalesen, "National Guard Becomes Arctic Protector," *The Barents Observer*, January 28, 2019, https://thebarentsobserver.com/en/security/2019/01/national-guard-becomes-arctic-protector (accessed June 20, 2021).

176. Reuters, "Russia's Novatek Approves Arctic LNG 2 Financing of $11 bln by End-Q2," April 23, 2021, https://www.reuters.com/business/energy/russias-novatek-approves-arctic-lng-2-financing-11-bln-by-end-q2-2021-04-23/ (accessed June 20, 2021).

177. Atle Staalesen, "It's an Order from the Kremlin: Shipping on Northern Sea Route to Reach 80 Million Tons by 2024," *The Barents Observer*, May 15, 2018, https://thebarentsobserver.com/en/arctic/2018/05/its-order-kremlin-shipping-northern-sea-route-increase-80-million-tons-2024 (accessed June 20, 2021).

178. Atle Staalesen, "Shipping on Northern Sea Route Breaks Record," *The Barents Observer*, December 22, 2020, https://thebarentsobserver.com/en/arctic/2020/12/shipping-northern-sea-route-breaks-record (accessed June 20, 2021).
179. Pavel Felgenhauer, "Russia Claims Total Military Superiority in the Arctic," Jamestown Foundation *Eurasia Daily Monitor*, Vol. 16, Issue 36 (March 14, 2019), https://jamestown.org/program/russia-claims-total-military-superiority-in-the-arctic/ (accessed June 20, 2021).
180. Elizabeth McLaughlin, "The Race for the Arctic: As New Frontier Opens, Russia Leaves US in Its Wake," ABC News, May 10, 2017, http://abcnews.go.com/International/race-arctic-frontier-opens-russia-leaves-us-wake/story?id=47304875 (accessed June 20, 2021), and Andrew Osborn, "Putin's Russia in Biggest Arctic Military Push Since Soviet Fall," Reuters, January 30, 2017, http://mobile.reuters.com/article/idUSKBN15E0W0 (accessed June 20, 2021).
181. Atle Staalesen, "New Arctic Naval Base Built in 6 Months," *The Barents Observer*, January 30, 2019, https://thebarentsobserver.com/en/civil-society-and-media/2019/01/new-arctic-naval-base-built-6-months (accessed June 20, 2021).
182. Atle Staalesen, "Russian Navy Announces It Will Significantly Expand Arctic Air Patrols," *The Barents Observer*, January 2, 2018, https://thebarentsobserver.com/en/security/2018/01/russian-navy-announces-it-will-significantly-increase-arctic-air-patrols (accessed June 20, 2021), and Atle Staalesen, "Navy Pilots Take Off to New Arctic Bases," *The Barents Observer*, March 13, 2019, https://thebarentsobserver.com/en/2019/03/navy-pilots-take-new-arctic-bases (accessed June 20, 2021).
183. Robbie Gramer, "Here's What Russia's Military Build-Up in the Arctic Looks Like," *Foreign Policy*, January 25, 2017, http://foreignpolicy.com/2017/01/25/heres-what-russias-military-build-up-in-the-arctic-looks-like-trump-oil-military-high-north-infographic-map/?utm_content=buffer12641&utm_medium=social&utm_source=twitter.com&utm_campaign=buffer (accessed June 20, 2021).
184. David Axe, "Russia's Arctic MiGs can Cover the Country's Entire Northern Shipping Route," *Forbes*, March 18, 2021, https://www.forbes.com/sites/davidaxe/2021/03/18/russias-arctic-migs-can-cover-the-countrys-entire-northern-shipping-route/?sh=4c9071cb7866 (accessed June 20, 2021).
185. Staalesen, "Navy Pilots Take Off to New Arctic Bases."
186. Thomas Nilsen, "Russia Resumes North Pole Patrols with Fighter Jets," *The Barents Observer*, February 2, 2019, https://thebarentsobserver.com/en/security/2019/02/russia-resumes-north-pole-patrols-fighter-jets (accessed June 20, 2021).
187. Thomas Nilsen, "In Polar Night, Russia Exercises Strategic Bombers and Newest Frigate," *The Barents Observer*, January 27, 2019, https://thebarentsobserver.com/en/security/2019/01/polar-night-russia-exercises-strategic-bombers-and-newest-frigate (accessed June 20, 2021).
188. Thomas Nilsen, "Video: Russian Bombers Outside Norway for Second Time in a Week," *The Barents Observer*, April 4, 2019, https://thebarentsobserver.com/en/security/2019/04/video-russian-bombers-outside-norway-second-time-week (accessed June 20, 2021).
189. Nilsen, "Arctic Challenge 2017 Set for Take Off," and Nilsen, "Russian Bombers Simulated an Attack Against This Radar on Norway's Barents Sea Coast."
190. TASS, "Russian Pacific Fleet Il-38N MPA Practice ASW in Arctic," Navy Recognition, April 2018 Naval Defense Industry News, https://www.navyrecognition.com/index.php/news/defence-news/2018/april-2018-navy-naval-defense-news/6109-russian-pacific-fleet-il-38n-mpa-practice-asw-in-arctic.html (accessed June 20, 2021).
191. Kyle Mizokami, "Watch Russia Bombers Fly over U.S. Submarines During Arctic Exercise," *Popular Mechanics*, March 12, 2020, https://www.popularmechanics.com/military/navy-ships/a31446211/russia-bombers-us-submarines/ (accessed June 20, 2021), and Thomas Nilsen, "Russian Sub Hunters Worry Air Traffic Controllers. Norway Scrambled F-16s and F-35s," *The Barents Observer*, April 30, 2020, https://thebarentsobserver.com/en/security/2020/04/russian-sub-hunter-worries-air-traffic-controllers-norway-scrambled-f-16s-and-f-35s (accessed June 20, 2021).
192. Damien Sharkov, "Russia Deploys Air Radar on Arctic Wrangel Island," *Newsweek*, January 4, 2017, http://www.newsweek.com/russia-deploys-air-radar-arctic-wrangel-island-538527 (accessed June 20, 2021).
193. Thomas Nilsen, "Russia Plans to Lay Trans-Arctic Fiber Cable Linking Military Installations," *The Barents Observer*, April 24, 2018, https://thebarentsobserver.com/en/security/2018/04/russia-slated-lay-military-trans-arctic-fibre-cable (accessed June 20, 2021).
194. Thomas Nilsen, "Work on a Russian Trans-Arctic Fiber Optic Cable Starts This Spring," *The Barents Observer*, April 21, 2021, https://thebarentsobserver.com/en/industry-and-energy/2021/04/work-trans-arctic-fiber-optic-cable-starts-may (accessed June 20, 2021).
195. Thomas Nilsen, "Russia to Test-Launch Rockets Near Norway's Arctic Coast in Last Days of Trident Juncture," Radio Canada International, Eye on the Arctic, October 31, 2018, http://www.rcinet.ca/eye-on-the-arctic/2018/10/31/russia-missile-launch-norway-finnmark-arctic-flight-nato-trident-juncture/ (accessed June 20, 2021).

196. Thomas Nilsen, "Northern Fleet Frigate Fired Missile at Target on Novaya Zemlya as British Reconnaissance Aircraft was Watching," *The Barents Observer*, March 25, 2021, https://thebarentsobserver.com/en/security/2021/03/northern-fleet-makes-ready-missile-tests (accessed June 20, 2021).

197. Mathieu Boulègue, "Russia's Military Posture in the Arctic: Managing Hard Power in a 'Low Tension' Environment," Chatham House: The Royal Institute of International Affairs *Research Paper*, June 2019, p. 16, https://www.chathamhouse.org/sites/default/files/2019-06-28-Russia-Military-Arctic_0.pdf (accessed June 27, 2021).

198. Stephen Blank, "Russia's New Arctic Base Continue[s] the Militarization of the High North," Jamestown Foundation *Eurasia Daily Monitor*, Vol. 12, Issue 202 (November 6, 2015), http://www.jamestown.org/single/?tx_ttnews%5Btt_news%5D=44572&no_cache=1#.VxqCwfkrJph (accessed June 20, 2021); Osborn, "Putin's Russia in Biggest Arctic Military Push Since Soviet Fall"; and Franz Stefan-Gady, "Russia Launches New Nuclear-Powered Icebreaker," *The Diplomat*, May 27, 2019, https://thediplomat.com/2019/05/russia-launches-new-nuclear-powered-icebreaker/ (accessed June 20, 2021).

199. Reuters, "Russia Says World's Largest Nuclear Icebreaker Embarks on Arctic Voyage," September 22, 2020, https://www.reuters.com/article/us-russia-arctic-icebreaker/russia-says-worlds-largest-nuclear-icebreaker-embarks-on-arctic-voyage-idUSKCN26D1FO (accessed June 20, 2021).

200. Thomas Nilsen, "Russia's New Giant Icebreaker Sailed Straight to the North Pole," *The Barents Observer*, October 5, 2020, https://thebarentsobserver.com/en/arctic/2020/10/russias-new-giant-icebreaker-sailed-straight-north-pole (accessed June 20, 2021).

201. Gorenburg, "Russia's New and Unrealistic Naval Doctrine."

202. Brown, "Russia's NATO Northern Fleet Beefs up Its Nuclear Capabilities to Phase 'NATO Out of Arctic.'"

203. Kyle Mizokami, "Russia Launches Belgorod, the World's Longest Submarine," *Popular Mechanics*, April 24, 2019, https://www.popularmechanics.com/military/navy-ships/a27243915/russia-launches-belgorod-the-worlds-longest-submarine/ (accessed June 20, 2021).

204. Alex Lockie, "Russia Says It's Going to Arm a Submarine with 6 Nuclear 'Doomsday' Devices," *Business Insider*, March 12, 2019, https://www.businessinsider.com/russia-to-arm-a-secretive-submarine-with-6-nuclear-doomsday-devices-2019-3 (accessed June 20, 2021). See also TASS, "Russian Northern Fleet Creates Submarine Division for Deep-Water Operations," Navy Recognition, posted April 27, 2018, https://www.navyrecognition.com/index.php/naval-news/naval-news-archive/2018/april-2018-navy-naval-defense-news/6169-russian-northern-fleet-creates-submarine-division-for-deep-water-operations.html (accessed June 20, 2021), and RIA Novosti, "Russia to Convert Belgorod Submarine for Special Missions," RP Defense, February 9, 2012, http://rpdefense.over-blog.com/article-russia-to-convert-belgorod-submarine-for-special-missions-98932964.html (accessed June 20, 2021).

205. Lockie, "Russia Says It's Going to Arm a Submarine with 6 Nuclear 'Doomsday' Devices."

206. Sputnik, "Russian Navy to Receive Biggest and Most Unique Nuclear Submarine in the World," updated April 23, 2017, https://sputniknews.com/military/201704231052905471-russia-navy-biggest-sub/ (accessed June 20, 2021).

207. TASS, "Russia's Khabarovsk Submarine to Be Launched in Fall 2021," *Naval News*, April 19, 2021, https://www.navalnews.com/naval-news/2021/04/russias-khabarovsk-submarine-to-be-launched-in-fall-2021/ (accessed June 20, 2021).

208. Ronald O'Rourke, Laura B. Comay, Peter Folger, John Frittelli, Marc Humphries, Jane A. Leggett, Jonathan L. Ramseur, Pervaze A. Sheikh, and Harold F. Upton, "Changes in the Arctic: Background and Issues for Congress," Congressional Research Service *Report for Members and Committees of Congress* No. R41153, updated May 17, 2021, p. 20, https://fas.org/sgp/crs/misc/R41153.pdf (accessed June 20, 2021).

209. Civil Georgia, "Moscow, Sokhumi Endorse Final Text of New Treaty," November 22, 2014, http://www.civil.ge/eng/article.php?id=27841 (accessed June 20, 2021).

210. Civil Georgia, "Tbilisi Condemns Russia's Move to Sign New Treaty with Sokhumi," November 22, 2014, http://www.civil.ge/eng/article.php?id=27842 (accessed June 20, 2021).

211. Radio Free Europe/Radio Liberty, "U.S. Condemns Russian Military Deal with Georgian Breakaway Region," January 26, 2018, https://www.rferl.org/a/u-s-condemns-russian-ossetia-military-deal-georgia/29000754.html (accessed June 20, 2021), and press statement, "Russia's Violations of Georgian Sovereignty," U.S. Department of State, January 26, 2018, https://2017-2021.state.gov/russias-violations-of-georgian-sovereignty/index.html (accessed June 20, 2021).

212. News release, "Georgia—Javelin Missiles and Command Launch Units," U.S. Department of Defense, Defense Security Cooperation Agency, November 20, 2017, http://www.dsca.mil/major-arms-sales/georgia-javelin-missiles-and-command-launch-units (accessed June 20, 2021), and Agenda.ge, "After Javelins Georgia to Receive Further Defence Weaponry from US, Stingers," June 20, 2018, https://agenda.ge/en/news/2018/1321 (accessed June 20, 2021).

213. Adrian Croft, "Georgia Says Russia Bent on 'Creeping Annexation' of Breakaway Regions," Reuters, February 26, 2015, http://www.reuters.com/article/us-georgia-russia-idUSKBN0LU2M020150226 (accessed June 20, 2021).
214. U.S. Embassy in Georgia, "Statement on Continued 'Borderization' Activities Along the ABL, as Well as Disinformation Campaign Against the Lugar Center," May 27, 2020, https://ge.usembassy.gov/u-s-embassy-statement-on-continued-borderization-activities-along-the-abl-as-well-as-the-disinformation-campaign-against-the-lugar-center-may-27/#.Xs57tRzLz2g.twitter (accessed June 20, 2021).
215. Andrew Osborn, "Russia to Beef up Military Presence in Former Soviet Space," *The Telegraph*, August 18, 2010, http://www.telegraph.co.uk/news/worldnews/europe/russia/7952433/Russia-to-beef-up-military-presence-in-former-Soviet-space.html (accessed June 20, 2021).
216. International Institute for Strategic Studies, *The Military Balance 2020*, p. 184.
217. Joshua Kucera and Bradley Jardine, "Armenia Elects Protest Leader as Prime Minister," Eurasianet, May 8, 2018, https://eurasianet.org/s/armenia-elects-protest-leader-as-prime-minister (accessed June 20, 2021).
218. Radio Free Europe/Radio Liberty Armenian Service, "U.S. Frowns on Armenia's Involvement in Russia-Backed Syria Mission," February 13, 2019, https://www.rferl.org/a/us-frowns-on-armenia-s-involvement-in-russia-backed-syria-mission/29768111.html (accessed June 20, 2021).
219. In 1991, the Azerbaijan SSR Parliament dissolved the Nagorno–Karabakh Autonomous Oblast and divided the area among five rayons (administrative regions) in Azerbaijan.
220. Luke Coffey, "Winners and Losers of the Second Karabakh War," *Arab News*, November 21, 2020, https://www.arabnews.com/node/1766356 (accessed June 20, 2021).
221. Andrew Kramer, "Facing Military Debacle, Armenia Accepts a Deal in Nagorno-Karabakh War," *The New York Times*, updated February 25, 2021, https://www.nytimes.com/2020/11/09/world/middleeast/armenia-settlement-nagorno-karabakh-azerbaijan.html (accessed June 20, 2021).
222. Al Jazeera, "Azerbaijan Accuses Armenia of Shooting as Border Tensions Rise," May 28, 2021, https://www.aljazeera.com/news/2021/5/28/azerbaijan-accuses-armenia-of-shooting-as-border-tensions-rise (accessed June 20, 2021).
223. Jack Farchy, "Russia Senses Opportunity in Nagorno–Karabakh Conflict," *Financial Times*, April 19, 2016, https://next.ft.com/content/3d485610-0572-11e6-9b51-0fb5e65703ce (accessed June 20, 2021), and Nurlan Aliyev, "Russia's Arms Sales: A Foreign Policy Tool in Relations with Azerbaijan and Armenia," Jamestown Foundation *Eurasia Daily Monitor*, Vol. 15, Issue 47 (March 28, 2018), https://jamestown.org/program/russias-arms-sales-foreign-policy-tool-relations-azerbaijan-armenia/ (accessed June 20, 2021).
224. Eduard Abrahamyan, "Is Russia Cultivating 'Symmetric Separatism' in Karabakh?" Jamestown Foundation *Eurasia Daily Monitor*; Vol. 16, Issue 83 (June 5, 2019), https://jamestown.org/program/is-russia-cultivating-symmetric-separatism-in-karabakh/ (accessed June 20, 2021).
225. Editorial Board, "The Lessons of Idlib," *The Wall Street Journal*, March 3, 2020, https://www.wsj.com/articles/the-lessons-of-idlib-11583281376 (accessed June 29, 2021).
226. Reuters, "Russia Establishing Permanent Presence at Its Syrian Bases: RIA," December 26, 2017, https://www.reuters.com/article/us-mideast-crisis-syria-russia-bases/russia-establishing-permanent-presence-at-its-syrian-bases-ria-idUSKBN1EK0HD (accessed June 28, 2021).
227. TASS, "Russia Builds up Mediterranean Naval Force," *Naval News*, May 6, 2020, https://www.navalnews.com/naval-news/2020/05/russia-builds-up-mediterranean-naval-force/ (accessed June 20, 2021).
228. Jamie Dettmer, "Russia Expands Military Facilities in Syria," Voice of America, May 12, 2021, https://www.voanews.com/middle-east/russia-expands-military-facilities-syria (accessed June 20, 2021).
229. Reuters, "Russia to Upgrade Its Naval, Air Bases in Syria: Interfax," January 15, 2017, http://www.reuters.com/article/us-mideast-crisis-syria-russia-base-idUSKBN14Z0FQ (accessed June 20, 2021).
230. Jonathan Marcus, "Russia S-400 Syria Missile Deployment Sends Robust Signal," BBC News, December 1, 2015, http://www.bbc.com/news/world-europe-34976537 (accessed June 20, 2021).
231. Ben Brimelow, "Russia's Newest Anti-Air Defenses Are in Syria—and the US Should Be Worried," *Business Insider*, April 11, 2018, http://www.businessinsider.com/pantsir-s1-makes-russian-air-defenses-stronger-2018-2 (accessed June 20, 2021).
232. Atlantic Council, Digital Forensic Research Lab, "#PutinAtWar: Russia Fortifies Air Base in Khmeimim," November 11, 2018, https://medium.com/dfrlab/putinatwar-russia-fortifies-air-base-in-khmeimim-803f4cc07946 (accessed June 20, 2021).

233. Reuters, "Syria Agrees to Let Russia Expand Hmeimim Air Base," August 19, 2020, https://www.reuters.com/article/us-russia-syria-airbase/syria-agrees-to-let-russia-expand-hmeimim-air-base-idUSKCN25F2BP (accessed June 20, 2021).
234. BBC News, "Russia Used Syria as Live-Fire Training—US General," December 22, 2016, http://www.bbc.com/news/world-europe-38402506 (accessed June 20, 2021).
235. International Institute for Strategic Studies, *The Military Balance 2019: The Annual Assessment of Global Military Capabilities and Defence Economics* (London: Routledge, 2019), p. 168.
236. Tom O'Connor, "Russia Is 'Forcing' U.S. Military Out of Syria and Testing New Weapons to Help, Reports Say," *Newsweek*, December 17, 2018, https://www.newsweek.com/russia-forcing-us-out-syria-new-weapons-1262207 (accessed June 20, 2021).
237. Associated Press, "Putin Hails Russian Arms Sales Abroad," December 16, 2019, https://apnews.com/10890594de4c91991cd3c1babdf6406d (accessed June 20, 2021).
238. Ryan Browne, "US Official: Russia Apologized After Russian Jet Performed Barrel Roll over US Plane," CNN, updated May 25, 2017, http://www.cnn.com/2017/05/25/politics/russia-us-aircraft-barrel-roll/ (accessed June 20, 2021).
239. Anne Barnard, "Russia Says Deal Bars American Jets from Much of Syria's Skies. U.S. Says No," *The New York Times*, May 5, 2017, https://www.nytimes.com/2017/05/05/world/middleeast/syria-deescalation-zones-russia-iran-turkey.html (accessed June 20, 2021).
240. Chad Garland, "US and Russian Forces Have Clashed Repeatedly in Syria, US Envoy Says," *Stars and Stripes*, November 23, 2018, https://www.stripes.com/news/us-and-russian-forces-have-clashed-repeatedly-in-syria-us-envoy-says-1.557790 (accessed June 20, 2021).
241. Radio Free Europe/Radio Liberty, "Putin, Egyptian Leader Sign 'Strategic' Partnership Treaty," October 17, 2018, https://www.rferl.org/a/putin-egytian-leader-el-sissi-discuss-increasing-arms-sales-direct-air-links-moscow-visit-sochi/29547819.html (accessed June 20, 2021).
242. Vladimir Isachenkov, "Russia Negotiates Deal for Its Warplanes to Use Egypt Bases," Associated Press, November 30, 2017, https://apnews.com/bdfae4502ca74c1eacdbf6d32252e8f4 (accessed June 20, 2021).
243. "Russia Secures $2Bln Fighter Jet Contract with Egypt—Reports," *The Moscow Times*, March 18, 2019, https://www.themoscowtimes.com/2019/03/18/russia-secures-2bln-fighter-jet-contract-with-egypt-reports-a64842 (accessed June 20, 2021).
244. Derek Bisaccio, "Su-35 Production for Egypt Begins," Defense & Security Monitor Blog, May 18, 2020, https://dsm.forecastinternational.com/wordpress/2020/05/18/egyptian-su-35-production-begins/ (accessed June 20, 2021).
245. News release, "Russia, Wagner Group Continue Military Involvement in Libya," U.S. Africa Command, July 24, 2020, https://www.defense.gov/Explore/News/Article/Article/2287821/russia-wagner-group-continue-military-involvement-in-libya/ (accessed June 20, 2021).
246. James Marson, "After Military Push in Syria, Russia Plays Both Sides in Libya," *The Wall Street Journal*, updated June 7, 2018, https://www.wsj.com/articles/after-military-push-in-syria-russia-plays-both-sides-in-libya-1528372802 (accessed June 20, 2021).
247. Ryan Browne and Chandelis Duster, "Russia Intercepts US Navy Aircraft over Mediterranean Sea," CNN, updated April 20, 2020, https://www.cnn.com/2020/04/20/politics/russian-military-intercepts-us-navy-aircraft/index.html (accessed June 20, 2021).
248. Radio Free Europe/Radio Liberty, "Russian Fighters Intercept U.S. Aircraft, Risk Midair Collision, U.S. Navy Says," May 27, 2020, https://www.rferl.org/a/us-navy-russia-su35-aircraft/30636592.html (accessed June 20, 2021).
249. Julian E. Barnes, "A Russian Ghost Submarine, Its U.S. Pursuers and a Deadly New Cold War," *The Wall Street Journal*, October 20, 2017, https://www.wsj.com/articles/a-russian-ghost-submarine-its-u-s-pursuers-and-a-deadly-new-cold-war-1508509841 (accessed June 20, 2021).
250. Christopher Woody, "Top U.S. Commander in Europe Says Russia's Subs Are Getting Busier, as Trump Cuts Sub-Hunting Planes from the Pentagon Budget," *Business Insider*, February 26, 2020, https://www.businessinsider.com/russia-subs-getting-busier-and-harder-to-track-in-atlantic-2020-2 (accessed June 20, 2021).
251. Daniel Kochis, "A Roadmap for Strengthened Transatlantic Pathways in the Western Balkans," Heritage Foundation *Backgrounder* No. 3286, March 16, 2018, p. 4, https://www.heritage.org/global-politics/report/roadmap-strengthened-transatlantic-pathways-the-western-balkans.
252. Leonid Bershidsky, "Russia Re-Enacts the Great Game in the Balkans," Bloomberg, corrected January 20, 2017, https://www.bloomberg.com/view/articles/2017-01-19/russia-re-enacts-the-great-game-in-the-balkans (accessed June 20, 2021).
253. Andrew E. Cramer and Joseph Orovic, "Two Suspected Russian Agents Among 14 Convicted in Montenegro Coup Plot," *The New York Times*, May 9, 2019, https://www.nytimes.com/2019/05/09/world/europe/montenegro-coup-plot-gru.html (accessed June 20, 2021).

254. Samir Kajosevic, "China Replaces Russia as Largest Investor in Montenegro," Balkan Insight, October 20, 2020, https://balkaninsight.com/2020/10/20/china-replaces-russia-as-largest-investor-in-montenegro/ (accessed June 20, 2021).
255. Andrew Rettman, "Nato to Add Macedonia Despite Putin Warning," *EUobserver*, February 7, 2019, https://euobserver.com/foreign/144109 (accessed June 20, 2021).
256. Helene Cooper and Eric Schmitt, "U.S. Spycraft and Stealthy Diplomacy Expose Russian Subversion in a Key Balkans Vote," *The New York Times*, October 9, 2018, https://www.nytimes.com/2018/10/09/us/politics/russia-macedonia-greece.html (accessed June 20, 2021).
257. Ibid.
258. Kochis, "A Roadmap for Strengthened Transatlantic Pathways in the Western Balkans," p. 9.
259. Ibid., p. 4.
260. Dusan Stojanovic, "Another European Country Has Bought Russian Anti-Aircraft Weapons at Putin's Suggestion—and over US Warnings," *Business Insider*, February 24, 2020, https://www.businessinsider.com/more-russian-weapons-for-serbia-despite-us-sanction-threats-2020-2 (accessed June 20, 2021).
261. Marc Santora and Neil MacFarquhar, "Putin Gets Red Carpet Treatment in Serbia, a Fulcrum Once More," *The New York Times*, January 17, 2019, https://www.nytimes.com/2019/01/17/world/europe/serbia-putin-russia-belgrade-vucic.html (accessed June 20, 2021).
262. Snezana Bjelotomic, "Serbia and Russia Sign 26 Intergovernmental Agreements During Putin's Visit," *Serbian Monitor*, January 18, 2019, https://www.serbianmonitor.com/en/serbia-and-russia-sign-26-intergovernmental-agreements-during-putins-visit/ (accessed June 20, 2021).
263. Radio Free Europe/Radio Liberty Balkan Service, "Serbia Signs Trade Agreement with Russia-Led Eurasian Economic Union," October 25, 2019, https://www.rferl.org/a/serbia-to-ink-trade-agreement-with-russia-led-eurasian-economic-union/30235917.html (accessed June 20, 2021).
264. Radio Free Europe/Radio Liberty, "On Visit to Serbia, Putin Accuses Kosovo of 'Illegally' Setting up an Army," January 17, 2019, https://www.rferl.org/a/ahead-of-high-level-visit-to-serbia-putin-blasts-west-s-role-in-balkans/29714843.html (accessed June 20, 2021).
265. Vincent L. Morelli and Sarah E. Garding, "Serbia: Background and U.S. Relations," Congressional Research Service *Report for Members and Committees of Congress* No. R44955, updated November 16, 2018, p. 13, https://fas.org/sgp/crs/row/R44955.pdf (accessed June 20, 2021).
266. Srpska Republika News Agency and N1 Sarajevo, "RS President: Republika Srpska Has Very Good Relations with Serbia and Russia," N1, January 5, 2019, http://rs.n1info.com/English/NEWS/a449708/RS-President-Republika-Srpska-has-very-good-relations-with-Serbia-and-Russia.html (accessed June 20, 2021).
267. Reuters, "Russia Backs Bosnia's Integrity amid Serb Calls for Secession," September 21, 2018, https://www.reuters.com/article/us-bosnia-russia/russia-backs-bosnias-integrity-amid-serb-calls-for-secession-idUSKCN1M11Q4 (accessed June 20, 2021).
268. Radio Free Europe/Radio Liberty, "Tensions Rise as Bosnian Serbs Vote in Banned Referendum," updated September 25, 2016, https://www.rferl.org/a/balkan-tensions-rise-as-bosnian-serbs-push-ahead-with-banned-referendum/28010813.html (accessed June 208, 2021), and Gordana Knezevic, "Russia's Fingers in Bosnia's Pie," Radio Free Europe/Radio Liberty, September 28, 2016, https://www.rferl.org/a/russia-putin-republika-srpska-bosnia-dodik-referendum-statehood-day/28018362.html (accessed June 20, 2021).
269. Zorica Ilic, "Russia's Balkan Power Games on Show Ahead of Elections," Deutsche Welle, October 6, 2018, https://www.dw.com/en/russias-balkan-power-games-on-show-ahead-of-elections/a-45781149 (accessed June 19, 2021).
270. Andrew Byrne, "Bosnian Serb Forces Take Part in Illegal 'Statehood Day' Parade," *Financial Times*, January 9, 2017, https://www.ft.com/content/5ffff694-d66f-11e6-944b-e7eb37a6aa8e (accessed June 20, 2021).
271. Talha Ozturk and Gorana Jakovljevic, "Bosnian Serbs Celebrate Statehood Day Defying Court Ban," Anadolu Agency, January 9, 2020, https://www.aa.com.tr/en/europe/bosnian-serbs-celebrate-statehood-day-defying-court-ban/1698046# (accessed June 20, 2021).
272. Thea Morrison, "Georgia's Breakaway S.Ossetia Signs Agreements with Republika Srpska," *Georgia Today*, January 11, 2018, http://georgiatoday.ge/news/8733/Georgia%E2%80%99s-Breakaway-S.Ossetia-Signs-Agreements-with-Republika-Srpska (accessed June 20, 2021).
273. Gordana Knezevic, "Talk of Paramilitaries, Real or Imagined, Could Fuel Division," Radio Free Europe/Radio Liberty, February 21, 2018, https://www.rferl.org/a/balkans-talk-of-paramilitaries-fuel-division/29055292.html (accessed June 20, 2021).

274. Vera Mironova and Bogdan Zawadewicz, "Putin Is Building a Bosnian Paramilitary Force," *Foreign Policy*, August 8, 2018, https://foreignpolicy.com/2018/08/08/putin-is-building-a-bosnian-paramilitary-force/ (accessed June 20, 2021).

275. Ibid.

276. Radio Free Europe/Radio Liberty Balkan Service, "Serbia Stops 'Promo Train' to Kosovo's North," January 14, 2017, https://www.rferl.org/a/28233304.html (accessed June 20, 2021).

277. Christopher Woody, "'Good Luck, Guys': 17 Russian Jets Buzzed a British Destroyer and Left a Threatening Message Earlier This Year," *Business Insider*, November 27, 2018, https://www.businessinsider.com/17-russian-jets-buzzed-a-british-destroyer-in-the-black-sea-2018-11 (accessed June 20, 2021).

278. Reuters, "As Syria Tensions Surge, Russian Fighter Jet Buzzes French Warship in Breach of International Law," *The Japan Times,* April 11, 2018, https://www.japantimes.co.jp/news/2018/04/11/world/syria-tensions-surge-russian-fighter-jet-buzzes-french-warship-breah-international-law/#.Wx_gGIpKjcs (accessed June 20, 2021).

279. Marcia Wendorf, "Both the U.S. and Russia Are Stalking the World's Undersea Cables," Interesting Engineering, August 16, 2019, https://interestingengineering.com/both-the-us-and-russia-are-stalking-the-worlds-undersea-cables (accessed June 20, 2021).

280. Kyle Mizokami, "What Is a Russian Spy Ship Doing in the Eastern Mediterranean?" *Popular Mechanics*, September 19, 2017, https://www.popularmechanics.com/military/navy-ships/a28276/yantar-spy-ship-eastern-mediterranean/ (accessed June 20, 2021), and Deb Reichmann, "Russia May Be Targeting Undersea Internet Cables. Here's Why That's Bad," Yahoo News, March 30, 2018, https://www.yahoo.com/news/russia-may-targeting-undersea-internet-213130980.html (accessed June 20, 2021).

281. Ryan Browne and Zachary Cohen, "Russian Spy Ship Spotted 100 Miles off North Carolina Coast," CNN, updated January 22, 2018, https://www.cnn.com/2018/01/22/politics/russia-spy-ship-us-coast/index.html?sr=twCNNp012218russia-spy-ship-us-coast0253PMStory&CNNPolitics=Tw (accessed June 20, 2021).

282. Rachel S. Cohen, "Spike in Russian Aircraft Intercepts Straining Air Force Crews in Alaska, Three-Star Says," *Air Force Times*, April 28, 2021, https://www.airforcetimes.com/news/your-air-force/2021/04/28/spike-in-russian-aircraft-intercepts-straining-air-force-crews-in-alaska-three-star-says/ (accessed June 20, 2021).

283. Ibid.

284. Corey Dickstein, "US Jets Intercept Russian Bombers off Alaskan Coast for 14th Time this Year," *Stars and Stripes*, October 20, 2020, https://www.stripes.com/news/air-force/us-jets-intercept-russian-bombers-off-alaskan-coast-for-14th-time-this-year-1.649318 (accessed June 20, 2021).

285. BBC News, "RAF Lossiemouth Jets Scrambled to Russian Planes Twice in Five Days," April 3, 2019, https://www.bbc.com/news/uk-scotland-highlands-islands-47799660 (accessed June 20, 2021).

286. Jelena Ćirić, "Russian Bombers Enter NATO Airspace Near Iceland," *Iceland Review*, March 19, 2019, https://www.icelandreview.com/news/russian-bombers-enter-nato-airspace-near-iceland/ (accessed June 20, 2021), and Larissa Kyzer, "Russian Bombers Re-Enter NATO Airspace Near Iceland," *Iceland Review*, March 29, 2019, https://www.icelandreview.com/news/russian-bombers-reenter-nato-airspace-near-iceland/ (accessed June 20, 2021).

287. Radio Free Europe/Radio Liberty, "U.S., Canadian Jets Scrambled to Escort Russian Bombers Away from North American Coastline," January 27, 2019, https://www.rferl.org/a/us-canadian-jets-scramble-escort-russian-blackjack-bombers-away/29733515.html (accessed June 20, 2021).

288. Carlos M. Vazquez II and Aya Ichihashi, "Russian Bombers Violated Japan's Airspace Twice in One Day, Defense Ministry Says," *Stars and Stripes*, June 21, 2019, https://www.stripes.com/news/pacific/russian-bombers-violated-japan-s-airspace-twice-in-one-day-defense-ministry-says-1.586945 (accessed June 20, 2021).

289. Franz-Stefan Gady, "Japan Scrambles Fighter Jets to Intercept Russian Military Reconnaissance Plane," *The Diplomat*, March 29, 2019, https://thediplomat.com/2019/03/japan-scrambles-fighter-jets-to-intercept-russian-military-reconnaissance-plane/ (accessed June 20, 2021), and Franz-Stefan Gady, "Japan Scrambles Fighter Jets to Intercept 2 Russian Military Aircraft," *The Diplomat*, May 6, 2019, https://thediplomat.com/2019/05/japan-scrambles-fighter-jets-to-intercept-2-russian-military-aircraft/ (accessed June 20, 2021).

290. Franz-Stefan Gady, "Japan Intercepts 2 Russian Nuclear-Capable Fighter-Bombers," *The Diplomat*, January 17, 2019, https://thediplomat.com/2019/01/japan-intercepts-2-russian-nuclear-capable-fighter-bombers/ (accessed June 20, 2021).

291. Gady, "Japan Scrambles Fighter Jets to Intercept 2 Russian Military Aircraft."

292. Reuters, "Russia Scrambles Fighter Jet to Escort NATO Planes over Black Sea," *The Jerusalem Post*, December 7, 2020, https://www.jpost.com/breaking-news/russia-scrambles-fighter-jet-to-escort-nato-planes-over-black-sea-651422 (accessed June 20, 2021).

293. News release, "NATO Jets Intercept Russian Warplanes During Unusual Level of Air Activity," North Atlantic Treaty Organization, last updated March 30, 2021, https://www.nato.int/cps/en/natohq/news_182897.htm (accessed June 20, 2021).
294. News release, "NATO Fighter Jets Intercept Russian Military Aircraft over the Baltic Sea," North Atlantic Treaty Organization, Allied Air Command, April 21, 2021, https://ac.nato.int/archive/2021/20210420_Baltic_Intercepts (accessed June 20, 2021).
295. Nilsen, "Russian Sub Hunters Worry Air Traffic Controllers. Norway Scrambled F-16s and F-35s."
296. Associated Press, "Russian Aircraft Violates Airspace of NATO Member Estonia," ABC News, September 24, 2019, https://abcnews.go.com/International/wireStory/russian-aircraft-violates-airspace-nato-member-estonia-65818448 (accessed June 20, 2021).
297. Radio Free Europe/Radio Liberty, "NATO Says Russian Su-27 Escort Jets Had No Flight Plans, Turned off Transponders," August 14, 2019, https://www.rferl.org/a/nato-says-russian-su-27-escort-jets-had-no-flight-plans-turned-off-transponders/30109797.html (accessed June 20, 2021).
298. BBC News, "Russian Military Admits Significant Cyber-War Efforts," February 23, 2017, http://www.bbc.com/news/world-europe-39062663 (accessed June 20, 2021).
299. 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, January 29, 2019, p. 6, https://www.dni.gov/files/ODNI/documents/2019-ATA-SFR---SSCI.pdf (accessed June 20, 2021).
300. David Sanger, "Russian Hackers Broke into Federal Agencies, U.S. Officials Suspect," *The New York Times*, May 10, 2021, https://www.nytimes.com/2020/12/13/us/politics/russian-hackers-us-government-treasury-commerce.html?login=smartlock&auth=login-smartlock (accessed June 24, 2021).
301. Ibid.
302. David E. Sanger, Nicole Perlroth, and Eric Schmitt, "Scope of Russian Hacking Becomes Clear: Multiple U.S. Agencies Were Hit," *The New York Times*, updated May 10, 2021, https://www.nytimes.com/2020/12/14/us/politics/russia-hack-nsa-homeland-security-pentagon.html (accessed June 20, 2021).
303. "FACT SHEET: Imposing Costs for Harmful Foreign Activities by the Russian Government," The White House, April 15, 2021, https://www.whitehouse.gov/briefing-room/statements-releases/2021/04/15/fact-sheet-imposing-costs-for-harmful-foreign-activities-by-the-russian-government/ (accessed June 20, 2021).
304. Jenna McLaughlin, "Justice Department Recovers Majority of Colonial Pipeline Ransom: 'We turned the tables on DarkSide,'" Yahoo News, June 7, 2021, https://news.yahoo.com/justice-department-recovers-majority-of-colonial-pipeline-ransom-we-turned-the-tables-on-dark-side-210611828.html (accessed June 20, 2021), and Michael Schwirtz and Nicole Perlroth, "DarkSide, Blamed for Gas Pipeline Attack, Says It Is Shutting Down," *The New York Times*, updated June 8, 2021, https://www.nytimes.com/2021/05/14/business/darkside-pipeline-hack.html (accessed June 20, 2021).
305. Matt Egan and Clare Duffy, "Colonial Pipeline Launches Restart After Six-Day Shutdown," CNBC, updated May 12, 2021, https://www.cnn.com/2021/05/12/business/colonial-pipeline-restart/index.html (accessed June 20, 2021).
306. Ryan Browne, "Hackers Behind Colonial Pipeline Attack Reportedly Received $90 Million in Bitcoin Before Shutting Down," CNBC, May 18, 2021, https://www.cnbc.com/2021/05/18/colonial-pipeline-hackers-darkside-received-90-million-in-bitcoin.html (accessed June 20, 2021).
307. News release, "Department of Justice Seizes $2.3 Million in Cryptocurrency Paid to the Ransomware Extortionists Darkside," U.S. Department of Justice, June 7, 2021, https://www.justice.gov/opa/pr/department-justice-seizes-23-million-cryptocurrency-paid-ransomware-extortionists-darkside (accessed June 19, 2021).
308. BBC News, "JBS: FBI Says Russia-Linked Group Hacked Meat Supplier," June 3, 2021, https://www.bbc.com/news/world-us-canada-57338896 (accessed June 19, 2021).
309. Brett Molina and Mike Snider, "JBS USA, World's Largest Meat Supplier, Shuts Down 9 Beef Plants After Cyberattack; 'Vast Majority' of Plants to Open Wednesday," *USA Today*, June 1, 2021, https://www.usatoday.com/story/money/shopping/2021/06/01/jbs-cyberattack-worlds-largest-meat-supplier-closes-5-beef-plants/7493850002/ (accessed June 19, 2021).
310. David E. Sanger and Marc Santora, "U.S. and Allies Blame Russia for Cyberattack on Republic of Georgia," *The New York Times*, updated February 21, 2020, https://www.nytimes.com/2020/02/20/world/europe/georgia-cyberattack-russia.html (accessed June 19, 2021).
311. Denis Pinchuk, "Patriotic Russians May Have Staged Cyber Attacks on Own Initiative: Putin," Reuters, June 1, 2017, http://www.reuters.com/article/us-russia-economic-forum-putin-cyber-idUSKBN18S56Y (accessed June 19, 2021).
312. Office of the Director of National Intelligence, "Annual Threat Assessment of the US Intelligence Community," April 9, 2021, p. 9, https://www.dni.gov/files/ODNI/documents/assessments/ATA-2021-Unclassified-Report.pdf (accessed June 19, 2021).