Europe

Over the past year, America's reengagement with Europe continued. The resurgence of Russia, brought into starkest relief in Ukraine, and the continued fight against the Islamic State (IS) in Iraq, Syria, and Libya brought Europe back into the top tier of U.S. international interests, and the U.S. increased its financial and military investment in support of European deterrence. The 51 countries in the U.S. European Command (EUCOM) area of responsibility include approximately one-fifth of the world's population, 10.7 million square miles of land, and 13 million square miles of ocean.

Some of America's oldest (France) and closest (the United Kingdom) allies are found in Europe. The U.S. and Europe share a strong commitment to the rule of law, human rights, free markets, and democracy. During the 20th century, millions of Americans fought alongside European allies in defense of these shared ideals—the foundations on which America was built.

America's economic ties to the region are likewise important. A stable, secure, and economically viable Europe is in America's economic interest. For more than 70 years, the U.S. military presence has contributed to regional security and stability, economically benefiting both Europeans and Americans. The economies of the member states of the European Union (EU), now 28 but soon to be 27,[1] along with the United States, account for approximately half of the global economy. The U.S. and the members of the EU are also each other's principal trading partners.

Europe is also important to the U.S. because of its geographical proximity to some of the world's most dangerous and contested regions. From the eastern Atlantic Ocean to the Middle East, up to the Caucasus through Russia, and into the Arctic, Europe is enveloped by an arc of instability. The European region also has some of the world's most vital shipping lanes, energy resources, and trade choke points.

European basing for U.S. forces provides the ability to respond robustly and quickly to challenges to U.S. economic and security interests in and near the region. Russian naval activity in the North Atlantic and Arctic has necessitated a renewed focus on regional command and control and has led to increased U.S. and allied air and naval assets operating in the Arctic. In addition, Russia's strengthened position in Syria has led to a resurgence of Russian naval activity in the Mediterranean that has contributed to "congested" conditions.[2]

Threats to Internal Stability. In recent years, Europe has faced turmoil and instability brought about by high government debt, high unemployment, the threat of terrorist attacks, and a massive influx of migrants. Political fragmentation resulting from these pressures, disparate views on how to solve them, and a perceived lack of responsiveness among politicians threaten to erode stability even further, as centrist political parties and government institutions are seen as unable to deal effectively with the public's concerns.

Economic Factors. While Europe may finally have turned a corner with reasonable growth in 2017 (the eurozone grew by 2.5 percent), growth slowed again in the first quarter of 2018.[3] Unemployment across the 19-country eurozone bloc stands at 8.5 percent; for all 28

EU members, it averages 7.1 percent.[4] Greece has the EU's highest unemployment rate: 20.6 percent; Spain's is 16.1 percent, and Italy's is 11 percent.[5] Average youth unemployment across the eurozone is even greater, standing at 17.3 percent.[6]

In addition to jobless youth, income disparities between older and younger Europeans have widened. A January 2018 International Monetary Fund report noted that "[i]nequality across generations...erodes social cohesion and polarizes political preferences, and may ultimately undermine confidence in political institutions."[7] High government debt is another obstacle to economic vitality.[8] Italy's debt-to-GDP ratio is 131.8 percent. Greece's is even higher at 178.6 percent, and Portugal's is 125.7 percent. In addition, Europe's banking sector is burdened by $1.17 trillion in nonperforming loans.[9] The Italian banking sector's woes are especially troubling, followed by those of French and Spanish banks.[10]

The interconnectedness of the global economy and global financial system means that any new economic crisis in Europe will have profound impacts in the U.S. as well. Asked whether things were going in the right direction in the European Union, 49 percent of Europeans responded that they are going in the wrong direction, and 35 percent responded that they are headed in the right direction.[11]

Migrant Crisis. The biggest political issue in Europe and the most acute threat to stability is migration. An Ipsos Institute poll released in September 2017 found that 78 percent of Turks, 74 percent of Italians, 66 percent of Swedes, 65 percent of Germans, and 58 percent of French citizens believed that the number of migrants in their nations had become too large over the previous five years.[12] Conflicts in Syria and Iraq, as well as open-door policies adopted by several European nations—importantly, Germany and Sweden in 2015—led large numbers of migrants from across Africa, Asia, and the Middle East to travel to Europe in search of safety, economic opportunity, and the benefits of Europe's most generous welfare states. Russia also sought to weaponize migrant flows by intentionally targeting civilians in Syria "in an attempt to overwhelm European structures and break European resolve."[13]

Germany registered 890,000 asylum seekers in 2015, 280,000 in 2016, and 186,644 in 2017.[14] Today, one in eight people living in Germany is a foreign national, and half are from non-EU nations.[15] Other European nations such as Austria, Italy, and Sweden have also taken in large numbers of migrants. Italy, for instance, has seen 600,000 migrants arrive since 2014.[16]

The impact of the migrant crisis is widespread and will continue for decades to come. Specifically, it has buoyed fringe political parties in some European nations and has imposed steep financial, security, and societal costs. The impact on budgets is significant. Germany reportedly plans to "spend close to $90 billion to feed, house and train refugees between 2017 and 2020."[17] The costs of this crisis, which affect both federal and state governments in Germany, include processing asylum applications, administrative court costs, security, and resettlement for those migrants who accept; in Germany, families receive up to $3,540 to resettle back in their home countries.[18] For a host of reasons, integrating migrants into European economies has fallen flat.[19] "In Sweden and Norway, foreigners are three times more likely to be jobless than local people."[20]

A tenuous agreement with Turkey in March 2016 has largely capped migrant flows through the Balkans and Greece, but arrivals have not stopped altogether. Rather, they have decreased and shifted to the central and western Mediterranean. In May 2018, the EU Commission proposed that the EU's border force be increased from 1,200 to 10,000.[21] Austria, Denmark, France, Germany, Norway, and Sweden have reintroduced and continue to maintain temporary border controls.[22] An April 2018 YouGuv survey that asked "What are the top two issues facing the EU right now?" found immigration to be the top issue for people in Denmark, Finland, France, Germany, Greece, Italy, Lithuania, Poland, Sweden, and the United Kingdom, with terrorism the second most

important issue cited in every country but Italy.[23]

A perceived lack of responsiveness from political elites has led to a loss of support among established political parties in many European countries.

- In France, in the first round of 2017's presidential elections, about half of voters cast their ballots for candidates espousing anti-EU views. In the second round, 9 percent cast a blank ballot (a protest vote), the highest level in the history of the Fifth Republic.[24]

- In Austria, Sebastian Kurz of the People's Party became prime minister in December 2017 promising tighter immigration controls.

- In Germany, Chancellor Angela Merkel's center-right Christian Democratic Union/Christian Social Union (CDU/CSU) coalition and the center-left Social Democrats (SPD) lost seats in Parliament following elections in September 2017.[25] The nationalist, anti-immigrant AFD entered Parliament for the first time, winning 94 seats.[26] Nearly 1 million former CDU/CSU voters and nearly 500,000 SPD voters voted for the AFD.[27]

- In Italy, the trend of eroding established parties continued in the March parliamentary elections, which saw the populist Five Star Movement emerge as the largest single party, followed by the nationalist Lega party, which campaigned heavily on the issue of immigration.

The migrant crisis has had a direct impact on NATO resources as well. In February 2016, Germany, Greece, and Turkey requested NATO assistance to deal with illegal trafficking and illegal migration in the Aegean Sea.[28] That month, NATO's Standing Maritime Group 2 deployed to the Aegean to conduct surveillance, monitoring, and reconnaissance of smuggling activities, and the intelligence gathered was sent to the Greek and Turkish coast guards and to Frontex, the European Border and Coast Guard Agency.[29] NATO Strategic Direction South, a new NATO hub in Naples with a focus on threats emanating from the Middle East and North Africa region, was scheduled to become operational in July 2018.[30]

Terrorism. Terrorism remains all too familiar in Europe, which has experienced a spate of terrorist attacks in the past two decades. March 2018 attacks in Carcassonne and Trèbes, France, cost four innocent lives[31] and left 15 injured.[32] The migrant crisis has increased the risk and exacerbated the already significant workload of European security services. In Germany alone, the estimated number of Salafists has doubled to 11,000 in just five years.[33] In May 2017, the U.S. Department of State took the rare step of issuing a travel alert for all of Europe, citing the persistent threat from terrorism.[34] Today, the State Department warns Americans to exercise increased caution in a number of Western European countries.[35]

Although terrorist attacks may not pose an existential threat to Europe, they do affect security and undermine U.S. allies by increasing instability, forcing nations to spend more financial and military resources on counterterrorism operations, and jeopardizing the safety of U.S. servicemembers, their families, and facilities overseas. In 2017, noting the challenges presented by an increasingly complex and fluid security situation in Europe, the International Institute for Strategic Studies (IISS) concluded that "[a]s a result of this blending of internal and external security tasks, the requirement for closer cooperation between civilian and military actors emerged as a more comprehensive challenge for domestic security than was anticipated."[36]

U.S. Reinvestment in Europe. Continued Russian aggression has caused the U.S. to turn its attention back to Europe and reinvest military capabilities on the continent. General Curtis M. Scaparrotti, Supreme Allied Commander and EUCOM Commander, has

described the change as "returning to our historic role as a warfighting command focused on deterrence and defense."[37]

In April 2014, the U.S. launched Operation Atlantic Resolve (OAR), a series of actions meant to reassure U.S. allies in Europe, particularly those bordering Russia. Under OAR and funded through the European Deterrence Initiative (EDI), the U.S. has increased its forward presence in Europe, invested in European basing infrastructure and prepositioned stocks and equipment and supplies, engaged in enhanced multinational training exercises, and negotiated agreements for increased cooperation with NATO and Baltic states.

European Deterrence Initiative. As cataloged by The Heritage Foundation, "Initial funding for the EDI in FY 2015 [when it was known as the European Reassurance Initiative] was $985 million." Funding was renewed in FY 2016, but "the $789 million authorization was $196 million less than in FY 2015." The Obama Administration asked for a substantial increase in FY 2017, and funding "jumped to $3.4 billion for the year." Under the Trump Administration, funding once again rose significantly to nearly $4.8 billion in FY 2018, and the DOD requested $6.5 billion for FY 2019.[38]

Testifying in March 2018, General Scaparrotti was clear about the importance of EDI funding in returning to a posture of deterrence:

> These resources, in addition to the base budget funding that supports USEUCOM, enable our headquarters and Service components to: 1) increase presence through the use of rotational forces; 2) increase the depth and breadth of exercises and training with NATO allies and theater partners; 3) preposition supplies and equipment to facilitate rapid reinforcement of U.S. and allied forces; 4) improve infrastructure at key locations to improve our ability to support steady state and contingency operations; and 5) build the capacity of allies and partners to contribute to their own deterrence and defense.[39]

Forward Presence. In September 2017, the 2nd Armored Brigade Combat Team, 1st Infantry Division, replaced the outgoing BCT in a "heel to toe" rotation schedule. The BCT deployed to sites across Bulgaria, Germany, Hungary, Poland, and Romania, with the largest portion of the forces stationed in Poland.

In November 2017, Army Chief of Staff General Mark Milley emphasized the value of ground forces in deterrence: "The air [and] maritime capabilities are very important, but I would submit that ground forces play an outsize role in conventional deterrence and conventional assurance of allies. Because your physical presence on the ground speaks volumes."[40]

In addition to back-to-back rotations of armor, the U.S. has maintained a rotational aviation brigade in Europe since February 2017.[41] Although the brigade is based in Illesheim, Germany, five Black Hawk helicopters and 80 soldiers were forward deployed to Lielvarde Air Base in Latvia, five Black Hawks and 50 soldiers were forward deployed to Mihail Kogalniceanu Air Base in Romania, and 100 soldiers along with four Black Hawks and four Apache helicopters were forward deployed to Powidz, Poland, as of October 2017.[42] The 4th Combat Aviation Brigade, 4th Infantry Division, was scheduled to take over the aviation brigade in August 2018.[43]

In addition to rotational armored and aviation brigades, the U.S. has beefed up its presence in Norway. A 330-Marine rotational deployment will remain in Vaernes, Norway, through the end of 2018 to train and exercise with Norwegian forces.[44] In June, the Norwegian government invited the U.S. to increase its presence to 700 Marines beginning in 2019, deploying on a five-year rotation and basing in the Inner Troms region in the Arctic rather than in central Norway.[45] Operation Atlantic Resolve's naval component has consisted in part of increased deployments of U.S. ships to the Baltic and Black Seas. Additionally, the Navy has taken part in bilateral and NATO exercises. In May 2018, the Navy announced the reestablishment of the Second Fleet, covering

the northern Atlantic, including the GIUK gap, formerly disbanded in 2011.[46]

Prepositioned Stocks. The U.S. Army has prepositioned additional equipment across Europe as part of Operation Atlantic Resolve. A prepositioning site in Eygelshoven, Netherlands, opened in December 2016 and will store 1,600 vehicles including "M1 Abrams Tanks, M109 Paladin Self-Propelled Howitzers and other armored and support vehicles."[47] A second site in Dülmen, Germany, opened in May 2017 and will hold equipment for an artillery brigade.[48] Other prepositioning sites include Zutendaal, Belgium; Miesau, Germany; and Powidz, Poland. The Polish site, which has been selected by the Army for prepositioned armor and artillery, is expected to cost $200 million (funded by NATO) and will open in 2021.[49]

Equipment and ammunition sufficient to support a division will continue to arrive in Europe through 2021.[50] The U.S. Air Force, Special Forces, and Marine Corps are beefing up prepositioned stocks; the Marine Corps Prepositioning Program in Norway is emphasizing cold-weather equipment.[51]

Infrastructure Investments. The U.S. plans to use $214.2 million of FY 2018 EDI funds to upgrade air bases in Europe.[52] The U.S. plans additional temporary deployments of fifth-generation aircraft to European air bases. According to EUCOM, "we continuously look for opportunities for our fifth-generation aircraft to conduct interoperability training with our allies and partners in the European theater."[53] Construction of hangers at Naval Air Station Keflavik in Iceland for U.S. P-8 sub-hunter aircraft will constitute a $14 million investment.[54] The U.S. has stated that it still has no plans for permanent basing of forces in Iceland and that the P-8s, while frequently rotating to Keflavik, will remain permanently based at Sigonella in Italy.[55]

Multinational Training. In FY 2017, according to General Scaparrotti, "USEUCOM conducted over 2,500 military-to-military engagements, including over 700 State Partnership Program events in 22 countries, and under Section 1251 authority, USEUCOM trained nine allies in 22 exercises."[56] The combat training center at Hohenfels, Germany, is one of a very few located outside of the continental United States at which large-scale combined-arms exercises can be conducted, and more than 60,000 U.S. and allied personnel train there annually.

U.S.–European training exercises further advance U.S. interests by developing links between America's allies in Europe and National Guard units back in the U.S. At a time when most American servicemembers do not recall World War II or the Cold War, cementing bonds with allies in Europe is a vital task. Currently, 22 nations in Europe have a state partner in the U.S. National Guard.[57]

In addition to training with fellow NATO member states, the U.S. Joint Multinational Training Group–Ukraine (JMTG–U) will train up to five Ukrainian battalions a year through 2020.[58] Canada, Estonia, Latvia, Lithuania, and the U.K. also participate in JMTG-U.[59]

U.S. Nuclear Weapons in Europe. It is believed that until the end of the Cold War, the U.S. maintained approximately 2,500 nuclear warheads in Europe. Unofficial estimates put the current figure at between 150 and 200 warheads based in Italy, Turkey, Germany, Belgium, and the Netherlands.[60]

All of these weapons are free-fall gravity bombs designed for use with U.S. and allied dual-capable aircraft. The bombs are undergoing a Life Extension Program that is expected to add at least 20 years to their life span.[61] In 2018, the U.S. will carry out tests of a new B61-12 gravity bomb, which Paul Waugh, Director of Air-Delivered Capabilities at the Air Force's nuclear division, says "ensures the current capability for the air-delivered leg of the U.S. strategic nuclear triad well into the future for both bombers and dual-capable aircraft supporting NATO."[62] The B61-12, according to U.S. officials, is intended to be three times more accurate than earlier versions.[63]

Important Alliances and Bilateral Relations in Europe

The United States has a number of important multilateral and bilateral relationships

TABLE 3

Initial Correlation of Ground Forces in the Vicinity of the Baltic States, 2017

	NATO Forces in Baltic States	Russian Federation, Western Military District
Major formations Brigade (BDE) equivalents*	2 armored/mechanized (NATO EFP** and U.S. armored BDE) 6 infantry/motorized (Baltic states and U.S. Stryker BDE)	~ 8 motor rifle ~ 4 tank 6 airborne/air assault 3 artillery 1 rocket artillery

Weapon Systems (estimated)	NATO	Russia	Ratio (NATO : Russia)
Main battle tanks	129	757	1 : 5.9
Infantry fighting vehicles	280	1,276	1 : 4.6
Self-propelled howitzers	32	342	1 : 10.7
Rocket artillery	0	270	0 : 270

* Russian motor rifle, tank, and airborne/air assault regiments are considered equivalent to brigades.
** Enhanced Forward Presence.
NOTE: These figures are estimates of forces available in the initial days and weeks of a conventional fight. They include active units in the Western Military District and forces available in defense of the Baltic States.
SOURCE: RAND Corporation, "Assessing the Conventional Force Imbalance in Europe — Implications for Countering Russian Local Superiority," p. 9, Table 1, https://www.rand.org/pubs/research_reports/RR2402.html (accessed August 8, 2018).

heritage.org

in Europe. First and foremost is NATO, the world's most important and arguably most successful defense alliance.

The North Atlantic Treaty Organization. NATO is an intergovernmental, multilateral security organization that was designed originally to defend Western Europe from the Soviet Union. It anchored the U.S. firmly in Europe, solidified Western resolve during the Cold War, and rallied European support following the terrorist attacks on 9/11. Since its creation in 1949, NATO has been the bedrock of transatlantic security cooperation, and it is likely to remain so for the foreseeable future.

The past year saw continued focus on military mobility and logistics in line with NATO's 2014 Readiness Action Plan (RAP). The RAP was designed to reassure nervous member states and put in motion "longer-term changes to NATO's forces and command structure so that the Alliance will be better able to react swiftly and decisively to sudden crises."[64]

NATO Response Force. Following the 2014 Wales summit, NATO announced the creation of a Very High Readiness Joint Task Force (VJTF) as part of the RAP to enhance the NATO Response Force (NRF).[65] The VJTF is "a new Allied joint force that will be able to deploy within a few days to respond to challenges that arise, particularly at the periphery of NATO's territory."[66] A rotational plan for the VJTF's land component was established to maintain this capability through 2023.[67]

The VJTF also represents a significant improvement in deployment time. Part of the VJTF can deploy within 48 hours, which is a marked improvement over the month that its predecessor, the Immediate Response Force, needed to deploy.[68] According to an assessment

TABLE 4

NATO Capability to Gain Control of the Air Over Baltic States, 2017

Aircraft	NATO	Russia
Fourth generation	**5,094** 2,928 U.S., 2,529 non-U.S.	**1,251**
Fifth generation	**363** 159 F–22A (U.S. only), 20 B–2 (U.S. only), ~175 F–35A/B/C*	—
Air Missile Defense		
Advanced long-range SAMs	—	17 regiments of SA-20/21 and SA-23 (approximately 272 launchers)
Advanced medium-range SAMs	—	3 brigades of SA-11/17 (approximately 72 launchers)
Advanced short-range SAMs	—	24+ battalions (approximately 288 launchers)

* May not yet be combat-ready.
NOTE: These figures are estimates of forces available in the initial days and weeks of a conventional fight. They include active units in the Western Military District and forces available in defense of the Baltic States.
SOURCE: RAND Corporation, "Assessing the Conventional Force Imbalance in Europe — Implications for Countering Russian Local Superiority," p. 9, Table 2, https://www.rand.org/pubs/research_reports/RR2402.html (accessed August 8, 2018).

heritage.org

published by the Norwegian Institute of International Affairs, the entire NRF will undergo "a much more rigorous and demanding training program than the old NRF. Future NRF rotations will see many more snap-exercises and short notice inspections."[69]

This does not mean, however, that the VJTF and NRF are without their problems. Readiness remains a concern. For instance, NATO reportedly believes that the VJTF would be too vulnerable during its deployment phase to be of use in Poland or the Baltics.[70] Another concern is the 26,000-strong Initial Follow-on Forces Group (IFFG), which makes up the rest of the NRF and would deploy following the VJTF. The IFFG reportedly would need 30–45 days to deploy in the event of a conflict.[71]

Denmark, France, Italy, Germany, the Netherlands, Norway, Poland, Spain, and the United Kingdom have a combined 334 battalions, but only nine (three British, three French, and three German) could be combat ready within 30 days, and only five battalions from Italy (which is leading the land component of the NRF in 2018)[72] could be combat ready within 10 days.[73]

Enhanced Forward Presence. The centerpiece of NATO's renewed focus on collective defense is the four multinational battalions stationed in Poland and the Baltic States as part of the alliance's Enhanced Forward Presence (EFP).

- The U.S. serves as the framework nation in Orzysz, Poland, near the Suwalki Gap. The U.S.-led battlegroup consists of 795 American troops[74] augmented by 72 from Croatia, 120 from Romania, and 130 from the United Kingdom.[75]

- In Estonia, the United Kingdom serves as the framework nation with 800 troops in an armored infantry battalion along with main battle tanks and artillery and 200 troops from Denmark and one Coast Guard officer from Iceland.[76]

- In Latvia, Canada is the framework nation with 450 troops and armored fighting vehicles augmented by 18 troops from Albania, 160 from Italy, 169 from Poland, 49 from Slovenia, 322 from Spain, and two headquarters staff officers from Slovakia.[77]

- In Lithuania, Germany serves as the framework nation with 699 troops augmented by another 187 from Croatia, 266 from France, 224 from the Netherlands, and 28 from Norway.[78]

EFP troops are under NATO command and control; a Multinational Division Headquarters Northeast located in Elblag, Poland, coordinates the four battalions.[79] In February 2017, the Baltic States signed an agreement to facilitate the movement of NATO forces among the countries.[80]

In addition, NATO has established eight Force Integration Units located in Sofia, Bulgaria; Tallinn, Estonia; Riga, Latvia; Vilnius, Lithuania; Bydgoszcz, Poland; Bucharest, Romania; Szekesfehervar, Hungary; and Bratislava, Slovakia.[81] These new units "will help facilitate the rapid deployment of Allied forces to the Eastern part of the Alliance, support collective defence planning and assist in coordinating training and exercises."[82]

At the Warsaw summit, NATO also agreed to create a multinational framework brigade based in Craiova, Romania, under the control of Headquarters Multinational Division Southeast in Bucharest.[83] The HQ became operational in June 2017.[84] Reportedly, "the force will initially be built around a Romanian brigade of up to 4,000 soldiers, supported by troops from nine other NATO countries, and complementing a separate deployment of 900 U.S. troops who are already in place."[85] Unfortunately, the U.S. and allied naval presence in the Black Sea has declined significantly since 2014.

In February 2018, Canada announced that it was rejoining the NATO Airborne Warning and Control System (AWACS), which it had announced it was leaving in 2011, "with operational standdown coming in 2014."[86] Addressing a NATO capability gap, Belgium, Germany, Luxembourg, the Netherlands, and Norway are jointly procuring eight A330 air-to-air refueling aircraft, to be deployed from 2020–2024.[87]

This past year has seen a significant refocusing on logistics issues within the alliance. An internal alliance assessment in 2017 reportedly concluded that NATO's "ability to logistically support rapid reinforcement in the much-expanded territory covering SACEUR's (Supreme Allied Commander Europe) area of operation has atrophied since the end of the Cold War."[88] NATO established two new commands in 2018: a joint force command for the Atlantic and a logistics and military mobility command.[89] These commands consist of a combined total of 1,500 personnel, with the logistics headquartered in Ulm, Germany.[90]

In recent years, the shortfalls in the alliance's ability to move soldiers and equipment swiftly and efficiently have occasionally been glaring. In January 2018, German border guards stopped six U.S. M109 Paladin howitzers en route from Poland to multinational exercises in Bavaria because the trucks being used to transport the artillery were allegedly too wide and heavy for German roadways. In addition, contractors driving the trucks were missing paperwork and trying to transport the howitzers outside of the allowed 9:00 p.m.–5:00 a.m. window.

Training Exercises. In order to increase interoperability and improve familiarity with allied warfighting capabilities, doctrines, and operational methods, NATO conducts frequent joint training exercises. NATO has increased the number of these exercises from 108 in 2017 to 180 in 2018.[91]

The broad threat that Russia poses to Europe's common interests makes military-to-military cooperation, interoperability,

and overall preparedness for joint warfighting especially important in Europe, yet they are not implemented uniformly. For example, day-to-day interaction between U.S. and allied officer corps and joint preparedness exercises have been more regular with Western European militaries than with frontier allies in Central Europe, although the situation has improved markedly since 2014.

Cyber Capabilities. Another key area in which NATO is seeking to bolster its capabilities is development of a robust response to increasing cyber threats and threats from space. In 2017, senior NATO officials stated that the alliance plans to spend $3.24 billion "to upgrade its satellite and computer technology over the next three years."[92] The alliance is seeking ways to work more closely with the EU on cyber issues, but "despite political-level agreement to work together, EU–NATO cyber cooperation remains difficult and the institutional options often limited."[93]

Nevertheless, cyber is recognized as a critical area of competition, and NATO is expanding its efforts to gain greater expertise and capability in this area. In 2018, Japan and Australia became the first non-NATO countries outside of the EU to join the Cooperative Cyber Defence Centre of Excellence (CCDCOE) in Tallinn.[94]

Ballistic Missile Defense. NATO announced the initial operating capability of the Ballistic Missile Defense (BMD) system in 2016.[95] An Aegis Ashore site in Deveselu, Romania, became operational in May 2016.[96] Other components include a forward-based early-warning BMD radar at Kürecik, Turkey, and BMD-capable U.S. Aegis ships forward deployed at Rota, Spain.[97] A second Aegis Ashore site in Redzikowo, Poland, which broke ground in May 2016, was expected to be operational in 2017,[98] but Poland announced in March 2018 that construction of the site would be delayed two years, which means that it would not become operational until 2020.[99] Ramstein Air Base in Germany hosts a command and control center.[100]

In January 2017, the Russian embassy in Norway threatened that if Norway contributes ships or radar to NATO BMD, Russia "will have to react to defend our security."[101] Denmark, which agreed in 2014 to equip at least one frigate with radar to contribute to NATO BMD and made further progress in 2016 toward this goal, was threatened by Russia's ambassador in Copenhagen, who stated, "I do not believe that Danish people fully understand the consequences of what may happen if Denmark joins the American-led missile defense system. If Denmark joins, Danish warships become targets for Russian nuclear missiles."[102]A new Danish Defence Agreement announced in early 2018 reiterated the nation's planned contribution to BMD.[103]

The Dutch will equip four *Iver Huitfeldt*-class frigates with a SMART-L Multi-Mission/Naval (MM/N) D-band long-range radar, which is "capable of detecting exo-atmospheric targets up to 2,000 kilometers away."[104] In December 2016, the German Navy announced plans to upgrade radar on three F124 *Sachsen*-class frigates in order to contribute sea-based radar to NATO BMD.[105]

The U.K. operates a BMD radar at RAF Fylingdales in England. In November 2015, the U.K. stated that it plans to build new ground-based BMD radar as a contribution.[106] It expects the new radar to be in service by the mid-2020s.[107] The U.K. reportedly will also "investigate further the potential of the Type 45 Destroyers to operate in a BMD role."[108]

It also has been reported that Belgium intends to procure M-class frigates that "will be able to engage exo-atmospheric ballistic missiles."[109] Belgium and the Netherlands are jointly procuring the frigates.

In October 2017, the U.S. and allies from Canada, France, Germany, Italy, the Netherlands, Spain, and the United Kingdom took part in a three-and-a-half-week BMD exercise Formidable Shield off the Scottish Coast.[110] It is intended that Formidable Shield will be a yearly exercise.[111]

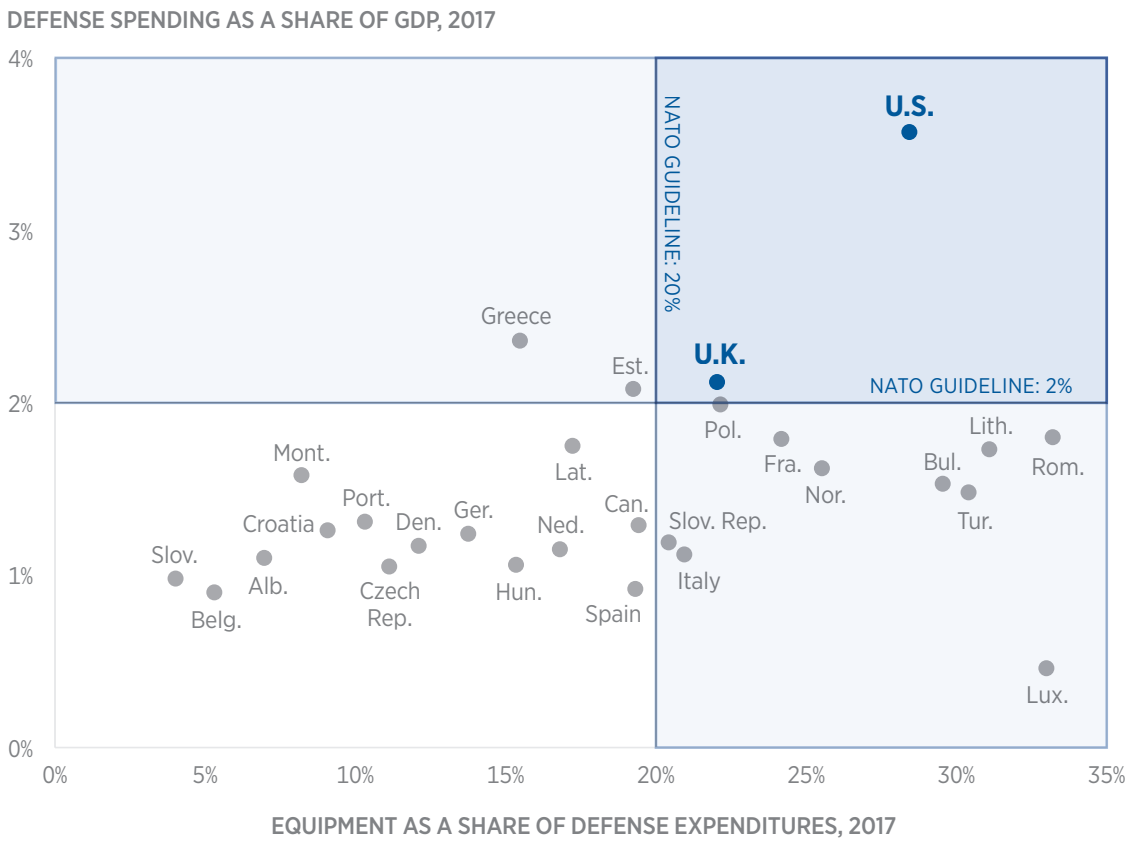
Quality of Armed Forces in the Region

As an intergovernmental security alliance, NATO is only as strong as its member states. A

CHART 5

Few NATO Members Follow Defense Spending Guidelines

NATO members are expected to spend at least 2 percent of their GDP on defense, and at least 20 percent of their defense spending is supposed to go to equipment. Only the U.S. and the U.K. do both, though Estonia and Poland nearly meet both guidelines.



NOTES: Figures are estimates for 2017. Iceland is not listed because it has no military.
SOURCE: NATO, "Defence Expenditures of NATO Countries (2010–2017)," March 15, 2018, https://www.nato.int/cps/ic/natohq/news_152830.htm (accessed July 16, 2018).

heritage.org

2017 RAND report found that France, Germany, and the U.K. would face difficulty in quickly deploying armored brigades to the Baltics in the event of a crisis. The report concludes that getting "deployments up to brigade strength would take...a few weeks in the French case and possibly more than a month in the British or German case" and that "[a] single armored brigade each appears to represent a maximum sustainable effort." In addition, there are "questions regarding their ability to operate at the level required for a conflict with the Russians, whether because of training cutbacks, neglected skills, or limited organic support capabilities." The report further states that "the faster British, French, and German forces needed to get to the Baltics, the more direct assistance they would need from the United States in the form of strategic airlift."[112]

Belgium, Britain, France, Germany, Luxembourg, Spain, and Turkey are procuring A400M air transports from Airbus; however,

a report published in February 2018 noted an agreement that Airbus had signed to allow it to negotiate deals with individual nations to opt out of including features deemed too difficult to include.[113] Additionally, "the agreement recognizes that Airbus needs more time to deliver the plane than originally planned and paves the way for negotiations over a new delivery schedule."[114]

Article 3 of the 1949 North Atlantic Treaty, NATO's founding document, states that at a minimum, members "will maintain and develop their individual and collective capacity to resist armed attack."[115] Regrettably, only a handful of NATO members are living up to their Article 3 commitment. In 2017, four countries spent the required 2 percent of gross domestic product (GDP) on defense—Estonia (2.08 percent); Greece (2.36 percent); the United Kingdom (2.12 percent); and the United States (3.57 percent)—and Poland spent almost the required amount (1.99 percent).[116] During the past year, however, NATO defense spending continued to trend upward:

> In 2017, the trend continued, with European Allies and Canada increasing their defence expenditure by almost 5%. Many Allies have put in place national plans to reach 2% [of GDP] by 2024 and are making progress towards that goal. In real terms, defence spending among European Allies and Canada increased by 4.87% from 2016 to 2017, with an additional cumulative spending increase of USD 46 billion for the period from 2015 to 2017, above the 2014 level.[117]

Germany. Germany remains an economic powerhouse that punches well below its weight in terms of defense. In 2017, it spent only 1.24 percent of GDP on defense and 13.75 percent of its defense budget on equipment.[118] In February 2018, German Defense Minister Ursula von der Leyen stated, "We will need significantly more funds in coming years so the Bundeswehr (armed forces) can accomplish the missions and assignments that parliament gives it."[119] However, lackluster defense spending is unlikely to change; Germany plans to "lift its defence budget from €38.75bn this year to €42.65bn in 2021. With the economy set for continued expansion, military spending would still account for less than 1.5 per cent of GDP four years from now."[120]

Federal elections in September 2017 led to months of negotiations on forming a coalition. The resulting three-party coalition made up of the Christian Democratic Union, Christian Social Union, and Social Democratic Party will not mean a significant change in terms of defense spending.[121] Although Germany is beginning to take on a larger role within NATO as the framework nation for the NATO EFP in Lithuania and has taken some decisions to strengthen its military capabilities, its military remains underfunded and underequipped. An April 2017 RAND report stated that Germany "has only two battalions with equipment modern enough to serve as a worthy battlefield adversary for Russia."[122]

In addition to stationing troops in the Baltics, Germany is the second largest contributor to NATO's Kosovo Force (KFOR) mission[123] and the second largest contributor to the Resolute Support Mission in Afghanistan.[124] In March 2018, the Bundestag approved a bill that increased the maximum number of German troops that can deploy in support of Resolute Support by one-third, raising it to 1,300.[125] The Bundestag also extended the mandate for Germany's participation in NATO's Sea Guardian maritime security operation, as well as deployments in support of the U.N. peacekeeping mission in Mali and South Sudan and participation in the counter-ISIS coalition.[126]

In March 2018, the German government also announced that it was planning to cut the number of German troops fighting ISIS in Iraq from 1,200 to 800 and expand its military training mission to include the Iraqi Army in addition to the Peshmerga.[127] In addition to training, through the summer of 2017, Germany supplied Kurdish Peshmerga forces with 1,200 anti-tank missiles and 24,000 assault rifles as they fought against ISIS.[128]

German troops contribute to NATO's Very High Readiness Joint Task Force, as well as to Baltic Air Policing.[129] Germany will take over the rotating head of the VJTF in January 2019. However, an ominous internal Ministry of Defense report leaked in February 2018 questioned the readiness and ability of the brigade that will lead the VJTF, citing a lack of equipment. According to reports, "the brigade had only nine of 44 Leopard 2 tanks, and three of the 14 Marder armored personnel carriers that it needs. It is also missing night vision goggles, support vehicles, winter clothing and body armor."[130]

The myriad examples of the deleterious state of Germany's armed forces are worrisome. At one point in late 2017 and early 2018, the German Navy had no working submarines; all six of its Type 212 class submarines were in dry-dock awaiting repairs or not ready for active service.[131] In December 2017, Germany's F-125 *Baden-Württemberg*–class frigate failed sea trials because of "software and hardware defects."[132] In addition, the frigate reportedly had "problems with its radar, electronics and the flameproof coating on its fuel tanks. The vessel was also found to list to the starboard,"[133] and lacked sufficiently robust armaments, as well as the ability to add them.[134] Germany returned the ship to the shipbuilder following delivery.[135]

The Luftwaffe faces similar problems. At the end of 2017, for instance, none of the German air force's 14 transport aircraft were available for deployment.[136] In 2017, according to a report from the German Defense Ministry, only 39 of 128 Eurofighters on average were available, usually for lack of spare parts and long maintenance periods.[137] An even grimmer report in a German magazine in May 2018 found that a lack of missiles and problems with the Eurofighter air defense systems, which alerts pilots to potential attacks,[138] meant that only four are ready for actual combat missions.[139] Among other examples, only 26 of 93 Tornadoes are ready for action.[140]

Germany's army is similarly ill equipped and understaffed, with 21,000 vacant positions in its officer corps.[141] In February 2018, only 95 of 244 Leopard 2 tanks were in service.[142] In December 2017, the Army outsourced helicopter training to a private company because the condition of its own helicopters prevented pilots from getting enough flight time.[143] In 2017, one-tenth of Germany's military helicopter pilots lost their licenses for lack of adequate flying time.[144]

Germany is seeking a replacement for its 90 Tornado aircraft, set to be retired in 2030. In April 2018, three companies submitted bids to deliver the replacement, which the Luftwaffe plans will "enter service in about 2025."[145] The Tornado replacement will need to be able to carry both nuclear and conventional weapons, as the Tornadoes are dual-capable aircraft equipped to carry B61 tactical nukes in addition to conventional payloads.[146]

Germany's military faces institutional challenges to procurement that include an understaffed procurement office with 1,300 vacancies, which is equal to 20 percent of its entire workforce,[147] and the need for special approval by a parliamentary budget committee for any expenditure of more than €25 million.[148]

In February 2017, Germany and Norway announced joint development and procurement of naval anti-surface missiles.[149] In October 2017, Germany announced plans to purchase five corvettes for its Navy at a total cost of €1.5 billion.[150]

The Bundeswehr plans to add 5,000 new soldiers to its ranks along with 1,000 civilians and 500 reservists by 2024.[151] In April 2017, the Bundeswehr established a new cyber command, which initially will consist of 260 staff but will number around 13,500 by the time it becomes fully operational in 2021.[152]

In February 2017, Germany decided to replace its short-range air defense systems. Once complete, this upgrade, which could cost as much as €3.3 billion by 2030, will help to close a gap in Europe's short-range air defense weapons that was identified in 2016.[153] Continued problems with the procurement of A400M cargo aircraft have raised questions about whether Germany will have replacement transport

aircraft ready before its C-160 fleet is due to be retired in 2021. According to one account, a "confidential German military report said there was a 'significant risk' that the A400M would not meet all its tactical requirements" in time to replace the aging C-160.[154]

France. France sees itself as a global power, remains one of the most capable militaries within the NATO alliance, and retains an independent nuclear deterrent capability. Although France rejoined NATO's Integrated Command Structure in 2009, it remains outside the alliance's nuclear planning group. France spent 1.79 percent of GDP on defense in 2017 and 24.17 percent of defense spending on equipment, attaining one of two NATO benchmarks.[155] The outlook for defense investment has improved following initial defense cuts under President Emmanuel Macron that led the Chief of Defense to resign in protest.

In July 2018, President Macron signed a law increasing defense spending over six years, including a $2.1 billion increase for the current year, with France spending 2 percent of GDP on defense by 2025. One-third of the planned increases will not take effect until 2023, after the next French general election. Much of the increased spending will be used for intelligence and military procurement, including "the acquisition of more than 1,700 armored vehicles for the Army as well as five frigates, four nuclear-powered attack submarines and nine offshore patrol vessels for the Navy." Procurements for the Air Force would include "12 in-flight refueling tankers, 28 Rafale fighter jets and 55 upgraded Mirage 2000 fighters."[156]

France is upgrading its sea-based and air-based nuclear deterrent. "It is estimated the cost of this process will increase from $4.4bn in 2017 to $8.6bn per year in 2022–2025," according to the IISS, "but decrease thereafter—with these outlays likely to come at the expense of conventional procurements."[157] France opened a cyber-operational command in December 2016. The Army plans to employ 2,600 cyber soldiers supported by 600 cyber experts, along with 4,400 reservists, and to invest €1 billion in this effort by 2019.[158]

France withdrew the last of its troops from Afghanistan at the end of 2014, although all French combat troops had left in 2012. As of April 2017, France had 1,100 soldiers deployed in the campaign against the Islamic State, along with 10 Rafale fighter jets and four CAESAR self-propelled howitzers.[159] By September 2017, French planes operating from bases in Jordan, the United Arab Emirates, and occasional maritime platforms had flown 7,136 missions, including 1,375 strikes and 2,152 targets neutralized.[160] French artillery has taken part in supporting the ground offensive against the IS since September 2016,[161] and France has helped to train Iraqi forces. Around 40 French Special Operations Forces on the ground are actively engaged in tracking down and locating some of the 1,700 French nationals that have joined ISIS.[162]

The September 2017 death of a Special Forces soldier was the first combat death in Operation Chammal (French operations in Iraq).[163] In April 2018, France joined the U.S. and U.K. in targeting the Assad regime over its use of chemical weapons.[164] According to French Air Force Chief of Staff Andre Lanata, the pace of Operation Chammal is having a deleterious impact on French forces. In addition to such other problems as a shortage of drones and refueling tankers, Lanata has stated that he is "having a hard time (recruiting and retaining personnel) in a number of positions, from plane mechanics to intelligence officers, image analysts and base defenders."[165]

In Europe, France's deployment of 266 troops, along with armored fighting vehicles, to Lithuania[166] contributes to NATO's Enhanced Forward Presence. The French military is very active in Africa, with over 4,000 troops taking part in anti-terrorism operations in Burkina Faso, Chad, Mali, Mauritania, and Niger as part of Operation Barkhane.[167] France also has over 1,450 troops in Djibouti and troops in Côte d'Ivoire, Gabon, and Senegal.[168] In addition, France has a close relationship with the United Arab Emirates and stations 850 troops in the UAE; a 15-year defense agreement between the countries came into force in 2012.[169]

France recently added 11,000 soldiers to its Army.[170] Operation Sentinelle, launched in January 2015 to protect the country from terrorist attacks, is the largest operational commitment of French forces and accounts for some 13,000 troops.[171] Operation Sentinelle soldiers helped to foil an attack near the Louvre museum in February 2017 and an attempted attack on a soldier patrolling Orly Airport in March 2017.[172] In October, Sentinelle soldiers killed a terrorist who had killed two people at a train station in Marseille.[173]

Frequent deployments, especially in Operation Sentinelle, have placed significant strains on French forces and equipment.[174] "In early September 2017," according to the IISS, "the chief of defense staff declared that the French armed forces have been used to '130% of their capacities and now need time to regenerate.'"[175] To counteract the strain on soldiers, the government both extended deployment pay to soldiers taking part in and created a new "medal for Protection of the Territory" for troops deployed for 60 days in Operation Sentinelle.[176]

The United Kingdom. America's most important bilateral relationship in Europe is the Special Relationship with the United Kingdom.

In his famous 1946 "Sinews of Peace" speech—now better known as his "Iron Curtain" speech—Winston Churchill described the Anglo–American relationship as one that is based first and foremost on defense and military cooperation. From the sharing of intelligence to the transfer of nuclear technology, a high degree of military cooperation has helped to make the Special Relationship between the U.S. and the U.K. unique. U.K. Prime Minister Margaret Thatcher made clear the essence of the Special Relationship between the U.K. and the U.S. when she first met U.S.S.R. President Mikhail Gorbachev in 1984: "I am an ally of the United States. We believe the same things, we believe passionately in the same battle of ideas, we will defend them to the hilt. Never try to separate me from them."[177]

In 2015, the U.K. conducted a Strategic Defence and Security Review (SDSR), the results of which have driven a modest increase in defense spending and an effort to reverse some of the cuts that had been implemented pursuant to the previous review in 2010. Through 2015, defense spending had dropped to 2.08 percent of GDP,[178] and U.K. forces suffered as a consequence. In 2016, the U.K. moved to repair the damage in capability and capacity by increasing spending to 2.17 percent of GDP, with 22.56 percent of this devoted to equipment purchases.[179] In 2017, the U.K. spent 2.14 percent of GDP on defense and 22.03 percent of GDP on equipment.[180] In recent years, it has increased funding for its highly respected Special Forces.

Funding procurement is an issue. As noted by the Royal United Services Institute, "The 2015 SDSR bridged the gap between a 5% increase in the total budget and a 34% increase in procurement spending by promising substantial efficiency savings over its first five years."[181] Those efficiencies were insufficient, and this led to a funding gap of £4.9 billion and £21 billion for the Ministry of Defence's decade-long procurement plans.[182] A widely anticipated defense review, the Defence Modernisation Programme, is due out in mid-2018 and will take a fresh look at U.K. capabilities, requirements, and funding.

Though its military is small in comparison to the militaries of France and Germany, the U.K. maintains one of the most effective armed forces in European NATO. Former Defense Secretary Michael Fallon stated in February 2017 that the U.K. will have an expeditionary force of 50,000 troops by 2025.[183] However, an April 2018 report from the National Audit Office found that the military was 8,200 people (5.7 percent) short of its required level, a shortfall that it will take at least five years to rectify.[184] The same report also found a gap of 26 percent for intelligence analysts.[185]

By 2020, if funding is sustained, the Royal Air Force (RAF) will operate a fleet of F-35 and Typhoon fighter aircraft, the latter being upgraded to carry out ground attacks. While the U.K. is committed to purchasing 138 F-35s, rising acquisition costs and defense budget pressure have led some, including the Deputy

Chief of the U.K. Defence Staff, to raise the possibility that the number of F-35s acquired might have to be cut.[186]

The RAF recently brought into service a new fleet of air-to-air refuelers, which is particularly noteworthy because of the severe shortage of this capability in Europe. With the U.K., the U.S. produced and has jointly operated an intelligence-gathering platform, the RC-135 Rivet Joint aircraft, that has already seen service in Mali, Nigeria, and Iraq and is now part of the RAF fleet.

The U.K. operates seven C-17 cargo planes and has started to bring the European A400M cargo aircraft into service after years of delays. The 2015 SDSR recommended keeping 14 C-130Js in service even though they initially were going to be removed from the force structure. The Sentinel R1, an airborne battlefield and ground surveillance aircraft, originally was due to be removed from the force structure in 2015, but its service is being extended to at least 2025, and the U.K. will soon start operating the P-8 Poseidon maritime patrol aircraft (MPA). The U.K. has procured nine P-8A maritime patrol aircraft, which will come into service in 2019.[187] A £132 million facility to house the P-8s is under construction at RAF Lossiemouth in Scotland,[188] to be completed in 2020.[189] In the meantime, the U.K. has relied on allied MPAs to fill the gap. In 2017, 17 MPAs from the U.S., Canada, France, Germany, and Norway deployed to RAF Lossiemouth.[190]

The Royal Navy's surface fleet is based on the new Type-45 Destroyer and the older Type-23 Frigate. The latter will be replaced by the Type-26 Global Combat Ship sometime in the 2020s. In total, the U.K. operates only 19 frigates and destroyers, which most experts agree is dangerously low for the commitment asked of the Royal Navy (in the 1990s, the fleet numbered nearly 60 surface combatants). In December, 12 of 13 Type-23 Frigates and all six Type-45 Destroyers were in port, leaving only one Royal Navy frigate on patrol.[191]

The U.K. will not have an aircraft carrier in service until the first *Queen Elizabeth*-class carrier enters service in the 2020s. This will be the largest carrier operated in Europe. Two of her class will be built, and both will enter service. The *Queen Elizabeth* underwent sea trials in June 2017[192] and was commissioned in December.[193] By the end of 2017, the U.K. had taken delivery of 14 F-35Bs, the variant that will be operated jointly by the RAF and the Royal Navy.[194] Additionally, the Royal Navy is introducing seven *Astute*-class attack submarines as it phases out its older *Trafalgar*-class. Crucially, the U.K. maintains a fleet of 13 Mine Counter Measure Vessels (MCMVs) that deliver world-leading capability and play an important role in Persian Gulf security contingency planning.

Perhaps the Royal Navy's most important contribution is its continuous-at-sea, submarine-based nuclear deterrent based on the *Vanguard*-class ballistic missile submarine and the Trident missile. In July 2016, the House of Commons voted to renew Trident and approved the manufacture of four replacement submarines to carry the missile. However, the replacement submarines are not expected to enter service until 2028 at the earliest.[195] In March 2018, Prime Minister Theresa May announced a £600m increase for procurement of the new *Dreadnought*-class submarines, stating that the extra funds "will ensure the work to rebuild the UK's new world-class submarines remains on schedule."[196]

The U.K. remains a leader inside NATO, serving as framework nation for NATO's EFP in Estonia and as a contributing nation for the U.S.-led EFP in Poland. In March, the U.K. announced the first operational deployment of four Lynx Wildcat reconnaissance helicopters to Estonia for a period of four months.[197] The Royal Air Force has taken part in Baltic Air Policing four times, including most recently from April–August 2016.[198] Four RAF Typhoons were deployed to Romania for four months in May 2017 to support NATO's Southern Air Policing mission,[199] and another four were deployed from May–September 2018.[200] "In the face of an increasingly assertive Russia," U.K. Defence Minister Gavin Williamson has stated, "the UK has significantly stepped

up its commitment to Europe and today I can confirm a further package of support, showing how we remain at the forefront on European security."[201]

The U.K. also maintains a sizeable force of 500 troops in Afghanistan[202] as part of NATO's Resolute Support mission and contributes to NATO's Kosovo Force,[203] Standing NATO Maritime Group 2, and Mine Countermeasures Group Two.[204] U.K. forces are an active part of the anti-ISIS coalition, and the U.K. joined France and the U.S. in launching airstrikes against the Assad regime in April 2018 over its use of chemical weapons against civilians.[205]

Turkey. Turkey remains an important U.S. ally and NATO member, but the increasingly autocratic presidency of Recep Tayyip Erdogan and a recent thaw in relations between Turkey and Russia have introduced troubling challenges. Turkey has been an important U.S. ally since the closing days of World War II. During the Korean War, it deployed a total of 15,000 troops and suffered 721 killed in action and more than 2,000 wounded. Turkey joined NATO in 1952, one of only two NATO members (the other was Norway) that had a land border with the Soviet Union. Today, it continues to play an active role in the alliance, but not without difficulties.

Turkey is vitally important to Europe's energy security. It is the gateway to the resource-rich Caucasus and Caspian Basin and controls the Bosporus, one of the world's most important shipping straits. Several major gas and oil pipelines run through Turkey. As new oilfields are developed in the Central Asian states, and given Europe's dependence on Russian oil and gas, Turkey can be expected to play an increasingly important role in Europe's energy security.

On July 15, 2016, elements of the Turkish armed forces reportedly attempted a coup d'état against the increasingly Islamist-leaning leadership of President Erdogan. This was the fourth coup attempt since 1960 (the fifth if one counts the so-called postmodern coup in 1997). In each previous case, the military was successful, and democracy was returned to the people; in this case, however, Erdogan immediately enforced a state of emergency and cracked down on many aspects of government, the military, and civil society. Following the failed coup attempt, thousands of academics, teachers, journalists, judges, prosecutors, bureaucrats, and soldiers were fired or arrested. As of April 2018, "More than 150,000 people have been detained and 110,000 civil servants dismissed since the coup attempt."[206]

The post-coup crackdown has had an especially negative effect on the military. In April 2018, Erdogan announced the firing of an additional 3,000 military officers; more than 11,000 military members have been fired since the 2016 coup attempt.[207] Turkey's military is now suffering from a loss of experienced generals and admirals as well as an acute shortage of pilots, and NATO Supreme Allied Commander General Scaparrotti has stated that Erdogan's military purges have "degraded" NATO's capabilities.[208]

The failed plot has enabled Erdogan to consolidate more power. A referendum that was approved by a narrow margin in April 2017 granted the president's office further powers—such as eliminating the position of prime minister in the government—that came into effect following the June 2018 general election.[209] An interim report by election observers from the Organization for Security and Co-operation in Europe found an "unlevel playing field" and stated that the two sides of the campaign "did not have equal opportunities."[210] Erdogan's response to the coup has further eroded Turkey's democracy, once considered a model for the region.

Senior government officials' erratic and at times hyperbolic statements alleging U.S. involvement in the coup, combined with Erdogan's rapprochement with Russian President Vladimir Putin, have brought U.S.–Turkish relations to an all-time low. In December 2017, Turkey signed a $2.5 billion agreement with Russia to purchase S-400 air defense systems.[211] In April 2018, President Erdogan announced that delivery of the S-400s would be brought forward from 2020 to July 2019 and

raised the possibility of additional defense cooperation with Russia.[212]

In April 2017, former Turkish Defense Minister and current Deputy Prime Minister Fikri Işık stated that no S-400s would be integrated into the NATO air defense systems.[213] U.S. officials pointed out the ineffectiveness of older Russian-made air defenses in Syria, which failed to intercept any of the 105 missiles launched by U.S. and allied forces in retaliation for the Assad regime's use of chemical weapons in April 2018.[214] Radars on Russia's newer S-400 systems deployed to Syria were active but did not engage the incoming strikes.[215] Turkey, however, has stated that the purchase of the S-400s is a "done deal."[216]

Also in April 2018, construction began on a $20 billion nuclear power plant in Mersin Province on Turkey's south central coast. The plant is being built by the Russian state corporation Rosatom. In March 2018, Turkey condemned the poisoning of a former Russian spy on British soil[217] but demurred from either naming Russia as the perpetrator or expelling Russian diplomats from Turkey.[218] Despite warmed relations, Turkish and Russian interests do not always neatly align, especially in Syria, where Turkey remains very much the junior player. In February 2018, for instance, Russia was assisting the Assad regime's targeting of forces that were supported by Turkey.[219]

The U.S. decision in May 2017 to arm Syrian Kurds of the People's Protection Units (YPG) further angered Turkey, which considers the YPG to be connected to the Kurdistan Workers Party (PKK), long viewed by Ankara as its primary threat.[220] In January 2018, Turkey launched a major offensive military operation near the Syrian city of Afrin. At issue was the creation of a "30,000-strong border security force in north-east Syria, built around the SDF [Syrian Democratic Forces]. In Ankara's eyes, this offers the YPG permanent title to the land it has carved out. Mr. Erdogan vowed to 'drown' and/or 'strangle' this 'army of terror before it is born.'"[221] U.S. officials have expressed public consternation at Turkey's military engagement in Syria and coordination with Russia. In April, Assistant Secretary of State for European and Eurasian Affairs Wess Mitchell voiced that uneasiness: "The ease with which Turkey brokered arrangements with the Russian military to facilitate the launch of its Operation Olive Branch in Afrin District, arrangements to which America was not privy, is gravely concerning."[222]

Nevertheless, U.S. security interests in the region lend considerable importance to America's relationship with Turkey. Turkey is home to Incirlik Air Base, a major U.S. and NATO air base, but it was reported early in 2018 that U.S. combat operations at Incirlik had been significantly reduced and that the U.S. was considering permanent reductions.[223] In January, the U.S. relocated an A-10 squadron from Incirlik to Afghanistan to avoid operational disruptions. According to U.S. officials, "Turkey has been making it harder to conduct air operations at the base, such as requesting the U.S. suspend operations to allow high-ranking Turkish officials to use the runway. Officials said this sometimes halts U.S. air operations for more than a day."[224]

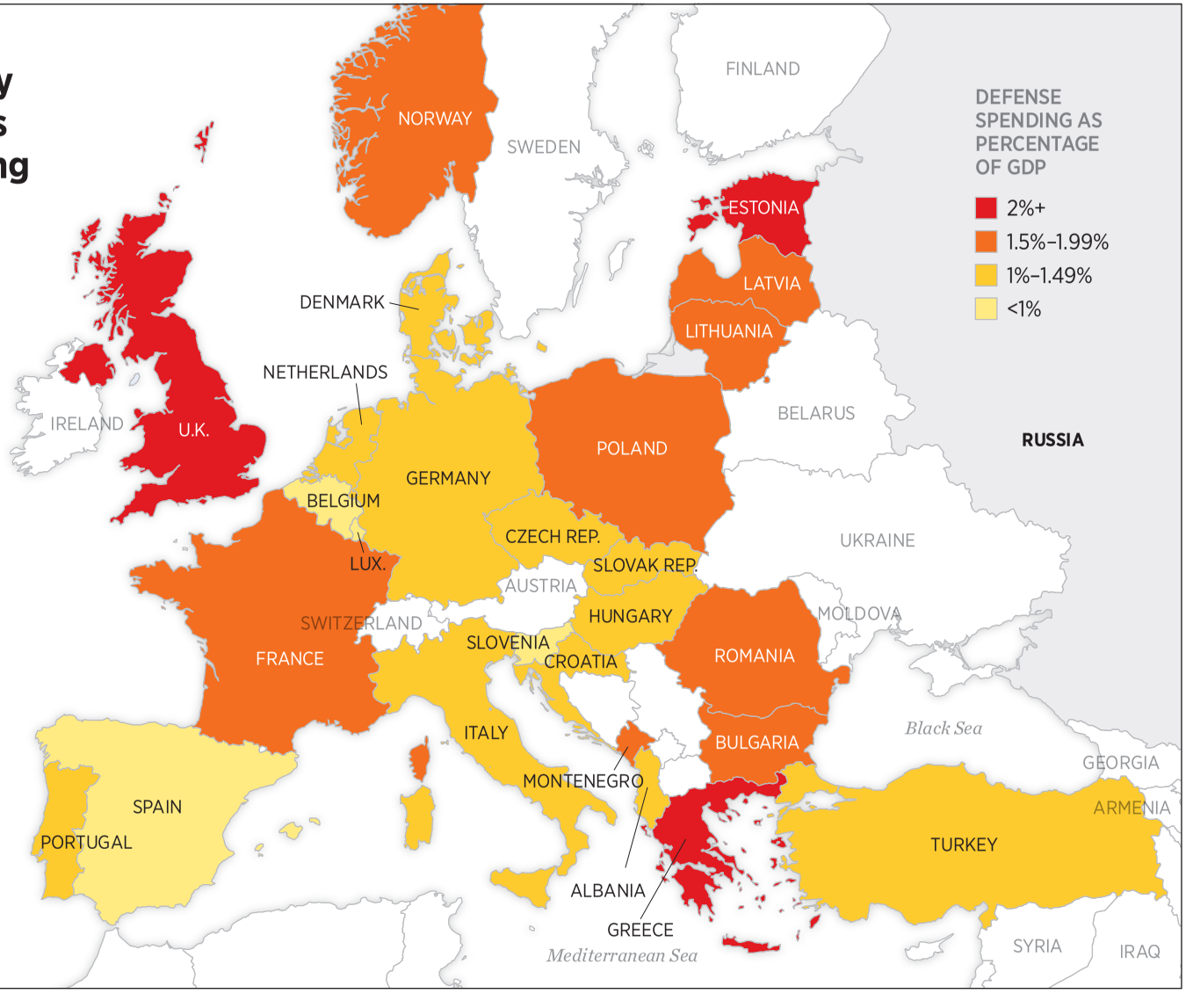
In addition to a drawdown in operations in the Middle East, Germany's decision to leave the base also has soured American views on Incirlik,[225] although U.S. officials sought to downplay tensions with Turkey after reports surfaced. An official at EUCOM, for example, stated that "Incirlik still serves as [a] forward location that enables operational capabilities and provides the U.S. and NATO the strategic and operational breadth needed to conduct operations and assure our allies and partners."[226]

One cause for optimism has been NATO's decision to deploy air defense batteries to Turkey and increased AWACS flights in the region after the Turkish government requested them in late 2015.[227] In January 2018, deployments of NATO air defense batteries to Incirlik were extended until June.[228] In addition, after an initial period of vacillation in dealing with the threat from the Islamic State, a spate of IS attacks that rocked the country has led Turkey to play a bigger role in attacking the terrorist group, with NATO AWACS aircraft, for

MAP 1

Threat Proximity Largely Dictates Military Spending

In Europe, NATO members closer to Russia and the Middle East spend, in general, more on defense than those further away.



NOTES: Figures are estimates for 2017. Iceland is not listed because it has no military. While Greece does spend 2 percent of GDP on defense, it is well below the 20 percent required by NATO for equipment as a share of defense expenditures.
SOURCE: NATO, "Defence Expenditures of NATO Countries (2010–2017)," March 15, 2018, https://www.nato.int/cps/ic/natohq/news_152830.htm (accessed July 16, 2018).

heritage.org

example, that are taking part in counter-ISIS operations flying from Turkey's Konya Air Base.[229] Turkey also hosts a crucial radar at Kurecik, which is part of NATO's BMD.[230]

While visiting Turkey in April, NATO Secretary General Jens Stoltenberg stated that "Turkey is a highly valued NATO Ally, and Turkey contributes to our shared security, our collective defence, in many different ways."[231] Stoltenberg also referenced the significant financial investment NATO was making in the upgrading of Turkey's military infrastructure.[232] The U.S. reportedly designated $6.4 million to build out a second undisclosed site (site K) near Malatya, which is home to an AN/TPY-2 radar with a range of up to 1,800 miles.[233]

The Turks have deployed thousands of troops to Afghanistan and have commanded the International Security Assistance Force (ISAF) twice since 2002. Turkey continues to maintain more than 500 troops in Afghanistan as part of NATO's Resolute Support Mission, making it the sixth-largest troop contributor out of 39 nations.[234] The Turks also have contributed to a number of peacekeeping missions in the Balkans, still maintain 307 troops in Kosovo,[235] and have participated in counter-piracy and counterterrorism missions off the Horn of Africa in addition to deploying planes, frigates, and submarines during the NATO-led operation in Libya.

Turkey has a 355,200-strong active-duty military,[236] making it NATO's second largest after that of the United States. Major current procurement programs include up to 250 new Altay main battle tanks, 350 T-155 Fırtına 155mm self-propelled howitzers, six Type-214 submarines, and more than 50 T-129 attack helicopters.[237] Turkish submarine procurement has faced six-year delays, and the first submarine will not be delivered until 2021.[238] Turkey has also upgraded its M60A3 main battle tanks and its M60T tanks.[239] M60Ts taking part in Operation Olive Branch near Afrin were reportedly "equipped with laser warning receivers, situational awareness systems, and remotely operated weapon stations forming part of an indigenous upgrade package."[240]

In February, President Erdogan expressed a desire to utilize internal military procurements and upgrades, declaring that Turkey "will not buy any defence products, software, and systems from abroad that can be designed, produced, and developed in the country except those required urgently."[241]

Geographically and geopolitically, Turkey remains a key U.S. ally and NATO member. It has been a constructive and fruitful security partner for decades, and maintaining the relationship is in America's interest. The challenge for U.S. and NATO policymakers will be to navigate Erdogan's increasingly autocratic leadership, discourage Ankara's warming relations with Russia, and square differing goals in Syria without alienating Turkey.

The Baltic States. The U.S. has a long history of championing the sovereignty and territorial integrity of the Baltic States that dates back to the interwar period of the 1920s. Since regaining their independence from Russia in the early 1990s, the Baltic States have been staunch supporters of the transatlantic relationship. Although small in absolute terms, the three countries contribute significantly to NATO in relative terms.

Estonia. Estonia has been a leader in the Baltics in terms of defense spending and was one of five NATO members to meet the 2 percent of GDP spending benchmark in 2017.[242] Although the Estonian armed forces total only 6,600 active-duty service personnel (including the army, navy, and air force),[243] they are held in high regard by their NATO partners and punch well above their weight inside the alliance. Between 2003 and 2011, 455 served in Iraq. Perhaps Estonia's most impressive deployment has been to Afghanistan: more than 2,000 troops deployed between 2003 and 2014, sustaining the second-highest number of deaths per capita among all 28 NATO members.

In 2015, Estonia reintroduced conscription for men ages 18–27, who must serve eight or 11 months before being added to the reserve rolls.[244] The number of Estonian conscripts will increase from 3,200 to 4,000 by 2026.[245]

Estonia has demonstrated that it takes defense and security policy seriously, focusing on improving defensive capabilities at home while maintaining the ability to be a strategic actor abroad. Procurements are expected to rise to $210 million by 2020.[246] One recent joint procurement is with neighboring Finland to acquire 12 South Korean–built howitzers by 2021.[247] Estonia has purchased 44 used infantry fighting vehicles from the Netherlands, the last of which were delivered in 2018.[248] In June 2018, Estonia signed a $59 million deal to purchase short-range air defenses, with Mistral surface-to-air missiles to be delivered starting in 2020.[249] According to Estonia's National Defence Development Plan for 2017–2026, "the size of the rapid reaction structure will increase from the current 21,000 to over 24,400."[250]

Estonia has a Cyber Defence League, a reserve force that relies heavily on expertise found in the civilian sector, and is planning "to create our own full spectrum cyber command, from defence to offence."[251] In 2017, Estonia and the U.S. strengthened their bilateral relationship by signing a defense cooperation agreement that builds on the NATO–Estonia Status of Forces Agreement to further clarify the legal framework for U.S. troops in Estonia.[252] In 2019, the U.S. "intends to spend more than $15 million to improve working conditions for special operations forces on missions in the Baltics" by upgrading operations and training facilities at an undisclosed site in Estonia.[253]

Latvia. Latvia's recent military experience also has been centered on operations in Iraq and Afghanistan alongside NATO and U.S. forces. Latvia has deployed more than 3,000 troops to Afghanistan and between 2003 and 2008 deployed 1,165 troops to Iraq. In addition, it has contributed to a number of other international peacekeeping and military missions. These are significant numbers considering that only 5,310 of Latvia's troops are full-time servicemembers; the remainder are reserves.[254] In 2018, Latvia added 710 soldiers to its armed forces.[255]

Latvia's 2016 National Defense Concept clearly defines Russia as a threat to national security and states that "[d]eterrence is enhanced by the presence of the allied forces in Latvia."[256] The concept aims to strengthen the operational capability of the armed forces through "further integration of the National Guard within the Armed Forces, strengthening the Special Tasks Unit (special operations forces), as well as boosting early-warning capabilities, airspace surveillance and air defense."[257]

Latvia plans that a minimum of 8 percent of its professional armed forces will be deployed at any one time but will train to ensure that no less than 50 percent will be combat-ready to deploy overseas if required. In 2018, Latvia met the NATO benchmark of 2 percent of GDP spent on defense, and it will also spend 43 percent of its defense budget on procurement in 2018.[258] Also in 2018, Latvia received the first of three TPS-77 Multi-Role radars,[259] along with two unmanned aircraft systems, from the U.S.[260] In addition, Latvia is procuring "second-hand M109 self-propelled artillery pieces from Austria and has selected the *Stinger* man-portable air-defense system."[261] In January, Latvia announced plans to invest $61.7 million through 2021 on military infrastructure, including the expansion of training areas.[262]

Lithuania. Lithuania is the largest of the three Baltic States, and its armed forces total 18,350 active-duty troops.[263] It reintroduced conscription in 2015.[264] Lithuania has also shown steadfast commitment to international peacekeeping and military operations. Between 2003 and 2011, it sent 930 troops to Iraq. Since 2002, around 3,000 Lithuanian troops have served in Afghanistan, a notable contribution that is divided between a special operations mission alongside U.S. and Latvian Special Forces and command of a Provisional Reconstruction Team (PRT) in Ghor Province, making Lithuania one of only a handful of NATO members to have commanded a PRT. Lithuania continues to contribute to NATO's KFOR and Resolute Support Missions.[265]

In 2018, Lithuania reached the NATO benchmark of 2 percent GDP devoted to spending on defense.[266] The government's 2018 National Threat Assessment clearly identifies Russia as the main threat to the nation.[267] Lithuania is dedicating significant resources to procurement with a focus on land maneuver, indirect fire support, air defense radars, anti-tank weapons systems, and ground-based air defense.[268]

Prime Minister Saulius Skvernelis has identified modernization as the armed forces' "number-one priority."[269] Specifically, "Lithuania's government aims to acquire Boxer infantry fighting vehicles, PzH 2000 self-propelled howitzers and the Norwegian Advanced Surface to Air Missile System" by 2021 and "is also mulling plans to purchase transport and perhaps combat [helicopters]."[270] In 2016, Lithuania reached an agreement to acquire 88 Boxer Infantry Fighting Vehicles, to be delivered by 2021.[271]

Lithuania has also taken steps to mitigate the threat from Russia by reducing its dependence on Russian energy. Its decision to build a liquefied natural gas (LNG) import facility at Klaipėda has begun to pay dividends, breaking Russia's natural gas monopoly in the region. In 2016, Norway overtook Russia as the top exporter of natural gas to Lithuania.[272] In June 2017, a Lithuanian energy company signed an agreement to buy LNG directly from the U.S.[273] In May 2017, the Baltic States agreed to connect their power grids (currently integrated with Belarus and Russia) with Poland's with the goal of creating a link to the rest of Europe and decreasing dependence on Russian energy.[274]

Russian cyber aggression against Lithuania in 2018 targeted "Lithuanian state institutions and the energy sector. In addition to these traditional cyber activities, a new phenomenon has been observed—a large-scale spread of ransomware programmes."[275]

Poland. Situated in the center of Europe, Poland shares a border with four NATO allies, a long border with Belarus and Ukraine, and a 144-mile border with Russia alongside the Kaliningrad Oblast. Poland also has a 65-mile border with Lithuania, making it the only NATO member state that borders any of the Baltic States, and NATO's contingency plans for liberating the Baltic States in the event of a Russian invasion reportedly rely heavily on Polish troops and ports.[276]

Poland has an active military force of 105,000, including a 61,200-strong army with 937 main battle tanks.[277] In November 2016, Poland's Parliament approved a new 53,000-strong territorial defense force to protect infrastructure and provide training in "unconventional warfare tactics."[278] The new force will be established by 2019[279] and is the fifth branch of the Polish military, subordinate to the Minister of Defense.[280] The territorial defense force will tackle hybrid threats, linking "the military closely to society, so that there will be someone on hand in the event of an emergency to organize our defenses at the local level."[281]

The prioritization of this new force has ignited controversy in Polish defense circles.[282] Ninety percent of General Staff leadership and 80 percent of Army leadership left or were replaced following military reforms in 2016, introducing a measure of volatility into defense planning.[283]

In 2017, Poland spent 1.99 percent of GDP on defense and 22.14 percent on equipment, essentially reaching both NATO benchmarks.[284] In April, the Ministry of National Defence stated that its goal is to raise defense spending to 2.5 percent of GDP by 2030.[285] Poland is looking at major equipment purchases and is planning to spend an additional $55 billion on modernization over the next 14 years.[286]

In March 2018, Poland signed a $4.75 billion deal for two Patriot missile batteries, the largest procurement contract in the nation's history.[287] In addition, "Warsaw is negotiating with Washington to buy more Patriots, a new 360-degree radar and a low-cost interceptor missile as part of a second phase of modernization."[288] In February, Poland joined an eight-nation "coalition of NATO countries seeking to jointly buy a fleet of maritime

surveillance aircraft."[289] Additionally, Warsaw has "established a fund to bolster the defence-modernisation ambitions of neighbors under the Regional Security Assistance Program."[290]

Although Poland's focus is territorial defense, it has 247 troops deployed in Afghanistan as part of NATO's Resolute Support Mission.[291] In 2016, Polish F-16s began to fly reconnaissance missions out of Kuwait as part of the anti-IS mission Operation Inherent Resolve.[292] Approximately 60 soldiers deployed to Iraq in 2015 as trainers.[293] Poland's air force has taken part in Baltic Air Policing seven times since 2006, most recently from September 2017.[294] Poland also is part of NATO's EFP in Latvia and has 262 troops taking part in NATO's KFOR mission.[295]

Current U.S. Military Presence in Europe

Former head of U.S. European Command General Philip Breedlove has aptly described the role of U.S. basing in Europe:

> The mature network of U.S. operated bases in the EUCOM AOR provides superb training and power projection facilities in support of steady state operations and contingencies in Europe, Eurasia, Africa, and the Middle East. This footprint is essential to TRANSCOM's global distribution mission and also provides critical basing support for intelligence, surveillance, and reconnaissance assets flying sorties in support of AFRICOM, CENTCOM, EUCOM, U.S. Special Operations Command, and NATO operations.[296]

At its peak in 1953, because of the Soviet threat to Western Europe, the U.S. had approximately 450,000 troops in Europe operating across 1,200 sites. During the early 1990s, both in response to a perceived reduction in the threat from Russia and as part of the so-called peace dividend following the end of the Cold War, U.S. troop numbers in Europe were slashed. Today, around 65,000 active U.S. forces remain in Europe,[297] an 85 percent decrease in personnel and 75 percent reduction in basing from the height of the Cold War.[298]

Until 2013, the U.S. Army had two heavy brigade combat teams in Europe, the 170th and 172nd BCTs in Germany; one airborne Infantry BCT, the 173rd Airborne Brigade in Italy; and one Stryker BCT, the 2nd Armored Cavalry Regiment in Germany, permanently based in Europe. Deactivation of the 170th BCT in October 2012, slightly earlier than the planned deactivation date of 2013, marked the end of a 50-year period during which U.S. combat soldiers had been stationed in Baumholder, Germany. Deactivation of the 172nd BCT took place in October 2013. In all, this meant that more than 10,000 soldiers were removed from Europe. The U.S. has returned one armored BCT to Europe as part of continuous rotations; according to General Breedlove, "[t]he challenge EUCOM faces is ensuring it is able to meet its strategic obligations while primarily relying on rotational forces from the continental United States."[299]

As of April 2014, according to General Breedlove, the U.S. had only 17 main operating bases left in Europe,[300] primarily in Germany, Italy, the United Kingdom, Turkey, and Spain. In April 2017, EUCOM announced that additional closures proposed under the 2015 European Infrastructure Consolidation effort have been postponed while EUCOM conducts a review of U.S. force posture and future requirements.[301] Currently, the U.S. Army is scouting sites in lower Saxony in northern Germany for the potential basing of an additional 4,000 troops.[302]

EUCOM's stated mission is to conduct military operations, international military partnering, and interagency partnering to enhance transatlantic security and defend the United States as part of a forward defensive posture. EUCOM is supported by four service component commands and one subordinate unified command: U.S. Naval Forces Europe (NAVEUR); U.S. Army Europe (USAREUR); U.S. Air Forces in Europe (USAFE); U.S. Marine Forces Europe (MARFOREUR); and U.S. Special Operations Command Europe (SOCEUR).

U.S. Naval Forces Europe. NAVEUR is responsible for providing overall command, operational control, and coordination for maritime assets in the EUCOM and Africa Command (AFRICOM) areas of responsibility. This includes more than 20 million square nautical miles of ocean and more than 67 percent of the Earth's coastline.

This command is currently provided by the U.S. Sixth Fleet based in Naples and brings critical U.S. maritime combat capability to an important region of the world. Some of the more notable U.S. naval bases in Europe include the Naval Air Station in Sigonella, Italy; the Naval Support Activity Base in Souda Bay, Greece; and the Naval Station at Rota, Spain. Naval Station Rota is home to four capable Aegis-equipped destroyers.[303]

In 2017, the U.S. allocated over $21 million to upgrade facilities at Keflavik Air Station in Iceland to enable operations of P-8 Poseidon aircraft in the region.[304] With a combat radius of 1,200 nautical miles, the P-8 is capable of flying missions over the entirety of the GIUK (Greenland, Iceland, and United Kingdom) Gap, which has seen an increase in Russian submarine activity. The U.S. Navy expects to complete the replacement of P-3s with P-8s by FY 2019.[305]

The U.S. Navy also keeps a number of submarines in the area that contribute to EUCOM's intelligence, surveillance, and reconnaissance (ISR) capacities, but with increased Russian naval activity, more are needed. Testifying in March 2018, General Scaparrotti stated that Russia's Arctic buildup and naval investments could put it in a position to control northern sea-lanes within three years.[306] General Scaparrotti testified in 2017 that he did "not have the carrier or the submarine capacity that would best enable me" to address EUCOM requirements.[307]

U.S.–U.K. military cooperation helps the U.S. to keep submarine assets integrated into the European theater. The British Overseas Territory of Gibraltar, for example, frequently hosts U.S. nuclear-powered submarines. Docking U.S. nuclear-powered submarines in Spain is problematic and bureaucratic, making access to Gibraltar's Z berths vital. Gibraltar is the best place in the Mediterranean to carry out repair work. U.S. nuclear submarines also frequently surface in Norwegian waters to exchange crew or take on supplies.

In addition, last year saw a significant uptick in U.S. and allied nuclear submarine portcalls in Norway, with the number of submarines reaching "3 to 4 per month."[308] The U.S. Navy also has a fleet of Maritime Patrol Aircraft and Reconnaissance Aircraft that operate from U.S. bases in Italy, Greece, Spain, and Turkey and complement the ISR capabilities of U.S. submarines.

U.S. Army Europe. USAREUR was established in 1952. Then, as today, the U.S. Army formed the bulk of U.S. forces in Europe. At the height of the Cold War, 277,000 soldiers and thousands of tanks, armored personnel carriers, and tactical nuclear weapons were positioned at the Army's European bases. USAREUR also contributed to U.S. operations in the broader region, such as the U.S. intervention in Lebanon in 1985 when it deployed 8,000 soldiers for four months from bases in Europe. In the 1990s, after the fall of the Berlin Wall, USAREUR continued to play a vital role in promoting U.S. interests in the region, especially in the Balkans.

USAREUR is headquartered in Wiesbaden, Germany. Its core is formed around the permanent deployment of two BCTs: the 2nd Cavalry Regiment, based in Vilseck, Germany, and the 173rd Airborne Brigade in Italy, with both units supported by the 12th Combat Aviation Brigade out of Ansbach, Germany. In addition, the U.S. Army's 21st Theater Sustainment Command has helped the U.S. military presence in Europe to become an important logistics hub in support of Central Command.

The 2nd Cavalry Regiment Field Artillery Squadron began training on a Q-53 radar system in 2017. The radar has been described as a "game changer."[309] The unit is the first in the European theater to acquire this system, which is expected to help the Army monitor the border between NATO and Russia more effectively. In April 2018, the U.S. deployed the National Guard's 678th Air Defense Artillery Brigade

to Europe, the first such unit since drawdowns following the end of the Cold War.[310]

U.S. Air Forces in Europe. USAFE provides a forward-based air capability that can support a wide range of contingency operations. USAFE originated as the 8th Air Force in 1942 and flew strategic bombing missions over the European continent during World War II.

Headquartered at Ramstein Air Base, USAFE has seven main operating bases along with 88 geographically separated locations.[311] The main operating bases are the RAF bases at Lakenheath and Mildenhall in the U.K., Ramstein and Spangdahlem Air Bases in Germany, Lajes Field in the Azores, Incirlik Air Base in Turkey, and Aviano Air Base in Italy. These bases provide benefits beyond the European theater. For example, U.S. Air Force Colonel John Dorrian has said that "any actions by Turkey to shut down or limit U.S. air operations out of Incirlik would be disastrous for the U.S. anti-ISIS campaign." Incirlik is "absolutely invaluable," and "the entire world has been made safer by the operations that have been conducted there."[312] Approximately 39,000 active-duty, reserve, and civilian personnel are assigned to USAFE along with 200 aircraft.[313]

The 2018 EUCOM posture statement describes the value of EDI funding for USAFE:

> In the air domain, we leverage EDI to deploy theater security packages of bombers as well as 4th and 5th generation fighter aircraft to execute deterrence missions and train with ally and partner nation air forces. We are building prepositioned kits for the Air Force's European Contingency Air Operation Sets (ECAOS) and making improvements to existing Allied airfield infrastructure, which will afford us the ability to rapidly respond with air power in the event of a contingency.[314]

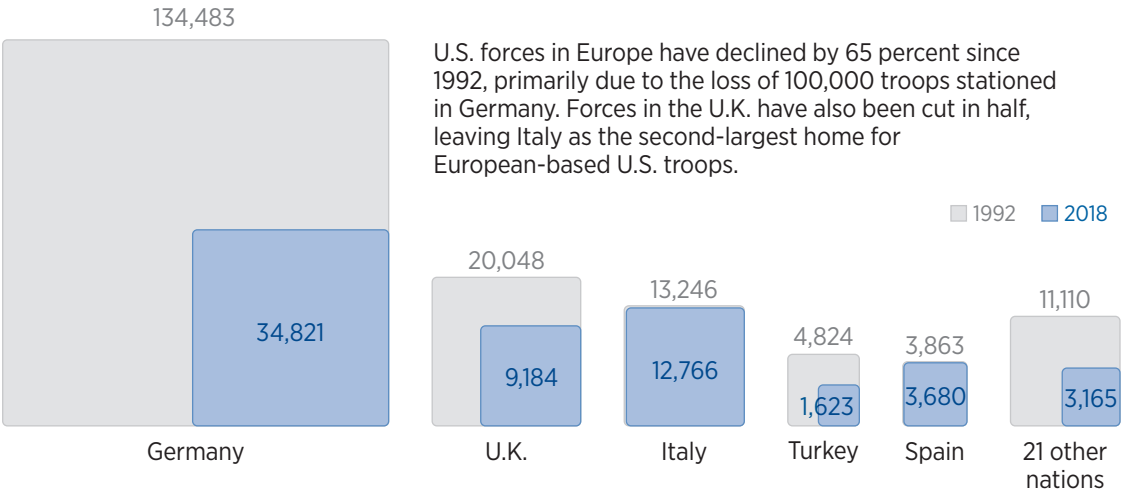
U.S. Marine Forces Europe. MARFOREUR was established in 1980. It was originally a "designate" component command, meaning that it was only a shell during peacetime but could bolster its forces during wartime. Its initial staff was 40 personnel based in London. By 1989, it had more than 180 Marines in 45 separate locations in 19 countries throughout the European theater. Today, the command is based in Boeblingen, Germany, and 140 of the 1,500 Marines based in Europe are assigned to MARFOREUR.[315] It was also dual-hatted as Marine Corps Forces, Africa (MARFORAF), under U.S. Africa Command in 2008.

In the past, MARFOREUR has supported U.S. Marine units deployed in the Balkans and the Middle East. It also supports the Norway Air Landed Marine Air Ground Task Force, the Marine Corps' only land-based prepositioned stock. The Marine Corps has enough prepositioned stock in Norway to "to equip a fighting force of 4,600 Marines, led by a colonel, with everything but aircraft and desktop computers,"[316] and the Norwegian government covers half of the costs of the prepositioned storage. The stores have been utilized for Operation Iraqi Freedom and current counter-ISIS operations, as well as humanitarian and disaster response.[317] The prepositioned stock's proximity to the Arctic region makes it of particular geostrategic importance. In 2016, 6,500 pieces of equipment from the stock were utilized for the Cold Response exercise.[318] The U.S. is currently studying whether equipment for 8,000 to 16,000 Marines could be stored in Norway and whether equipment could be stored in ways that would make it possible to deploy it more rapidly.[319] Norway must approve any U.S. request to increase the amount of prepositioned material in the country.[320]

Crucially, MARFOREUR provides the U.S. with rapid reaction capability to protect U.S. embassies in North Africa. The Special-Purpose Marine Air-Ground Task Force–Crisis Response–Africa (SPMAGTF) is currently located in Spain, Italy, and Romania and provides a response force of 1,550 Marines. Six of the unit's 12 Ospreys and three of its C-130s were sent back to the U.S. to bolster Marine capabilities in the U.S.[321] Marine Corps General Joseph Dunford, current Chairman of the Joints Chief of Staff, said in 2016 that this reduction in strength "does reduce the [unit's]

CHART 6

U.S. Presence in Europe Has Declined



NOTE: 2018 figures are as of March.
SOURCES: U.S. Department of Defense, Defense Manpower Data Center, "DoD Personnel, Workforce Reports & Publications: Historical Reports–Military Only–1950, 1953–1999," https://www.dmdc.osd.mil/appj/dwp/dwp_reports.jsp (accessed August 10, 2018), and U.S. Department of Defense, Defense Manpower Data Center, "DoD Personnel, Workforce Reports & Publications: Military and Civilian Personnel by Service/Agency by State/Country," https://www.dmdc.osd.mil/appj/dwp/dwp_reports.jsp (accessed August 10, 2018).

heritage.org

flexibility, it reduces the depth."[322] The SP-MAGTF helped with embassy evacuations in Libya and South Sudan and conducts regular drills with embassies in the region.

In July 2015, Spain and the United States signed the Third Protocol of Amendment to the U.S.–Spanish Agreement for Defense and Cooperation, which allows the U.S. Marine Corps to station up to 2,200 military personnel, 21 aircraft, and 500 nonmilitary employees permanently at Morón Air Base. The Defense Department stated that "a surge capability was included in the amendment of another 800 dedicated military crisis-response task force personnel and 14 aircraft at Morón, for a total of 3,500 U.S. military and civilian personnel and 35 aircraft."[323]

The Marine Corps also maintains a Black Sea Rotational Force (BSRF) composed of approximately 400 Marines, based in Romania, that conduct training events with regional partners.

U.S. Special Operations Command Europe. SOCEUR is the only subordinate unified command under EUCOM. Its origins are in the Support Operations Command Europe, and it was initially based in Paris. This headquarters provided peacetime planning and operational control of special operations forces during unconventional warfare in EUCOM's area of responsibility. SOCEUR has been headquartered in Panzer Kaserne near Stuttgart, Germany, since 1967. It also operates out of RAF Mildenhall. In June 2018, U.S. Special Operations Command Chief General Tony Thomas stated that the U.S. plans to "move tactical United States special operations forces from the increasingly crowded and encroached Stuttgart installation of Panzer Kaserne to the more open training grounds of Baumholder,"[324] a move that is expected to take a few years.

Due to the sensitive nature of special operations, publicly available information is

scarce. However, it has been documented that SOCEUR elements participated in various capacity-building missions and civilian evacuation operations in Africa; took an active role in the Balkans in the mid-1990s and in combat operations in the Iraq and Afghanistan wars; and most recently supported AFRICOM's Operation Odyssey Dawn in Libya. SOCEUR also plays an important role in joint training with European allies; since June 2014, it has maintained an almost continuous presence in the Baltic States and Poland in order to train special operations forces in those countries.

The FY 2019 DOD budget request included just under $200 million for various special operations programs and functions through EDI.[325] This funding is intended to go to such projects as enhancement of special operations forces' staging capabilities and prepositioning in Europe, exercise support, enhancement of intelligence capabilities and facilities, and partnership activities with Eastern and Central European allies' special operations forces.

EUCOM has played an important role in supporting other combatant commands such as CENTCOM and AFRICOM. Of the 65,000 U.S. troops based in Europe, almost 10,000 are there to support other combatant commands. The facilities available in EUCOM allowed the U.S. to play a leading role in combating Ebola in western Africa during the 2014 outbreak.

In addition to CENTCOM and AFRICOM, U.S. troops in Europe have worked closely with U.S. Cyber Command (CYBERCOM) to implement Department of Defense cyber policy in Europe and to bolster the cyber defense capabilities of America's European partners. This work has included hosting a number of cyber-related conferences and joint exercises with European partners.

Cyber security in Europe has improved. This improvement includes operationalization of EUCOM's Joint Cyber Center in 2017. EUCOM has also supported CYBERCOM's work inside NATO by becoming a full member of the NATO Cooperative Cyber Defense Center of Excellence in Tallinn, Estonia.

Key Infrastructure and Warfighting Capabilities

One of the major advantages of having U.S. forces in Europe is the access to logistical infrastructure that it provides. For example, EUCOM supports the U.S. Transportation Command (TRANSCOM) with its array of air bases and access to ports throughout Europe. EUCOM supported TRANSCOM with work on the Northern Distribution Network (NDN), which supplied U.S. troops in Afghanistan during major combat operations there. Today, Mihail Kogalniceanu Air Base in Romania is a major logistics and supply hub for U.S. equipment and personnel traveling to the Middle East region.[326]

Europe is a mature and advanced operating environment. America's decades-long presence in Europe means that the U.S. has tried and tested systems that involve moving large numbers of matériel and personnel into, inside, and out of the continent. This offers an operating environment that is second to none in terms of logistical capability. For example, there are more than 166,000 miles of rail line in Europe (not including Russia), and an estimated 90 percent of roads in Europe are paved. The U.S. enjoys access to a wide array of airfields and ports across the continent.

EDI has supported infrastructure improvements across the region. One major EDI-funded project is a replacement hospital at Landstuhl in Germany. When completed in 2022, the new permanent facility "will provide state-of the-art combat and contingency medical support to service members from EUCOM, AFRICOM and CENTCOM."[327] EDI funds are also contributing to creation of the Joint Intelligence Analysis Center, which will consolidate intelligence functions formerly spread across multiple bases and "strengthen EUCOM, NATO and UK intelligence relationships."[328]

Some of the world's most important shipping lanes are also in the European region. In fact, the world's busiest shipping lane is the English Channel, through which pass 500 ships a day, not including small boats and pleasure craft. Approximately 90 percent of the world's trade travels by sea. Given the high volume of

maritime traffic in the European region, no U.S. or NATO military operation can be undertaken without consideration of how these shipping lanes offer opportunity—and risk—to America and her allies. In addition to the English Channel, other important shipping routes in Europe include the Strait of Gibraltar; the Turkish Straits (including the Dardanelles and the Bosporus); the Northern Sea Route; and the Danish Straits.

The biggest danger to infrastructure assets in Europe would be any potential NATO conflict with Russia in one or more of NATO's eastern states. In such a scenario, infrastructure would be heavily targeted in order to deny or delay the alliance's ability to move the significant numbers of manpower, matériel, and equipment that would be needed to retake any territory lost during an initial attack.

Conclusion

Overall, the European region remains a stable, mature, and friendly operating environment. Russia remains the preeminent threat to the region, both conventionally and nonconventionally, and the impact of the migrant crisis, continued economic sluggishness, threat from terrorism, and political fragmentation increase the potential for internal instability. The threats emanating from the previously noted arc of instability that stretches from the eastern Atlantic Ocean to the Middle East and up to the Caucasus through Russia and into the Arctic have spilled over into Europe itself in the form of terrorism and migrants arriving on the continent's shores.

America's closest and oldest allies are located in Europe. The region is incredibly important to the U.S. for economic, military, and political reasons. Perhaps most important, the U.S. has treaty obligations through NATO to defend the European members of that alliance. If the U.S. needs to act in the European region or nearby, there is a history of interoperability with allies and access to key logistical infrastructure that makes the operating environment in Europe more favorable than the environment in other regions in which U.S. forces might have to operate.

The past year saw continued U.S. reengagement with the continent both militarily and politically along with modest increases in European allies' defense budgets and capability investment. Despite initial concerns by allies, the U.S. has increased its investment in Europe, and its military position on the continent is stronger than it has been for some time. NATO's renewed focus on collective defense resulted in a focus on logistics, newly established commands that reflect a changed geopolitical reality, and a robust set of exercises. NATO's biggest challenges derive from continued underinvestment from European members, a tempestuous Turkey, disparate threat perceptions within the alliance, and the need to establish the ability to mount a robust response to both linear and nonlinear forms of aggression.

Scoring the European Operating Environment

As noted at the beginning of this section, various considerations must be taken into account in assessing the regions within which the U.S. may have to conduct military operations to defend its vital national interests. Our assessment of the operating environment utilized a five-point scale, ranging from "very poor" to "excellent" conditions and covering four regional characteristics of greatest relevance to the conduct of military operations:

1. **Very Poor.** Significant hurdles exist for military operations. Physical infrastructure is insufficient or nonexistent, and the region is politically unstable. The U.S. military is poorly placed or absent, and alliances are nonexistent or diffuse.

2. **Unfavorable.** A challenging operating environment for military operations is marked by inadequate infrastructure,

weak alliances, and recurring political instability. The U.S. military is inadequately placed in the region.

3. **Moderate.** A neutral to moderately favorable operating environment is characterized by adequate infrastructure, a moderate alliance structure, and acceptable levels of regional political stability. The U.S. military is adequately placed.

4. **Favorable.** A favorable operating environment includes good infrastructure, strong alliances, and a stable political environment. The U.S. military is well placed in the region for future operations.

5. **Excellent.** An extremely favorable operating environment includes well-established and well-maintained infrastructure; strong, capable allies; and a stable political environment. The U.S. military is exceptionally well placed to defend U.S. interests.

The key regional characteristics consist of:

a. **Alliances.** Alliances are important for interoperability and collective defense, as allies would be more likely to lend support to U.S. military operations. Various indicators provide insight into the strength or health of an alliance. These include whether the U.S. trains regularly with countries in the region, has good interoperability with the forces of an ally, and shares intelligence with nations in the region.

b. **Political Stability.** Political stability brings predictability for military planners when considering such things as transit, basing, and overflight rights for U.S. military operations. The overall degree of political stability indicates whether U.S. military actions would be hindered or enabled and considers, for example, whether transfers of power in the region are generally peaceful and whether there have been any recent instances of political instability in the region.

c. **U.S. Military Positioning.** Having military forces based or equipment and supplies staged in a region greatly facilitates the United States' ability to respond to crises and, presumably, achieve successes in critical "first battles" more quickly. Being routinely present in a region also assists in maintaining familiarity with its characteristics and the various actors that might try to assist or thwart U.S. actions. With this in mind, we assessed whether or not the U.S. military was well positioned in the region. Again, indicators included bases, troop presence, prepositioned equipment, and recent examples of military operations (including training and humanitarian) launched from the region.

d. **Infrastructure.** Modern, reliable, and suitable infrastructure is essential to military operations. Airfields, ports, rail lines, canals, and paved roads enable the U.S. to stage, launch operations from, and logistically sustain combat operations. We combined expert knowledge of regions with publicly available information on critical infrastructure to arrive at our overall assessment of this metric.

For Europe, scores this year remained steady, with no substantial changes in any individual categories or average scores. The *2018 Index* again assesses the European Operating Environment as "favorable":

- Alliances: **4—Favorable**
- Political Stability: **4—Favorable**
- U.S. Military Positioning: **3—Moderate**
- Infrastructure: **4—Favorable**

Leading to a regional score of: **Favorable**

Operating Environment: Europe

	VERY POOR	UNFAVORABLE	MODERATE	FAVORABLE	EXCELLENT
Alliances				✓	
Political Stability				✓	
U.S. Military Posture			✓		
Infrastructure				✓	
OVERALL				✓	

Endnotes

1. On March 29, 2017, Great Britain began a two-year process of formal withdrawal from the EU by invoking Article 50 of the Treaty on European Union.
2. Trisha Thomas, "NATO: Russia Uses Syrian War to Boost Mediterranean Presence," Associated Press, May 8, 2018, https://www.military.com/daily-news/2018/05/08/nato-russia-uses-syrian-war-boost-mediterranean-presence.html (accessed June 25, 2018).
3. Clare Downey, "European Union Economy Records Fastest Economic Growth in a Decade," Sky News, February 14, 2018, https://news.sky.com/story/european-union-economy-records-fastest-economic-growth-in-a-decade-11250315 (accessed June 25, 2018); Deutsche Welle, "Eurozone: Slower Growth, Stagnant Unemployment," May 2, 2018, http://www.dw.com/en/eurozone-slower-growth-stagnant-unemployment/a-43618515 (accessed June 25, 2018).
4. News release, "Euro Area Unemployment at 8.5%," Eurostat, May 2, 2018, p. 1, http://ec.europa.eu/eurostat/documents/2995521/8853183/3-02052018-AP-EN.pdf/ab3f9296-2449-4816-b1db-1faf6a15b79a (accessed June 25, 2018).
5. Ibid.
6. Ibid., p. 2.
7. Paul Hannon, "IMF Urges Action on Europe's Generation Gap," *The Wall Street Journal*, January 24, 2018, https://www.wsj.com/articles/imf-urges-action-on-europes-generation-gap-1516784401 (accessed June 25, 2018).
8. William Horobin and Paul Hannon, "Europe's Economic Growth, Aided by France, Outpaces U.S.," *The Wall Street Journal*, January 30, 2018, https://www.wsj.com/articles/french-economy-accelerates-at-fastest-pace-in-six-years-1517303003 (accessed June 25, 2018).
9. Nicholas Comfort, Giovanni Salzano, and Sonia Sirletti, "Five Charts That Explain How European Banks Are Dealing With Their Bad-Loan Problem," Bloomberg, February 13, 2018, https://www.bloomberg.com/news/articles/2018-02-14/get-a-grip-on-europe-s-bad-loan-problem-with-these-five-charts (accessed June 25, 2018).
10. Ibid.
11. European Commission, *Public Opinion in the European Union*, Standard Eurobarometer 88, Autumn 2017, p. 63, http://ec.europa.eu/commfrontoffice/publicopinion/index.cfm/Survey/getSurveyDetail/instruments/STANDARD/surveyKy/2143 (accessed August 21, 2018).
12. Kalina Oroschakoff, "We've Got Too Many Migrants: Survey," Politico, September 16, 2018, https://www.politico.eu/article/we-got-too-many-migrants-survey-europe-migration/ (accessed June 29, 2018).
13. Deutsche Welle, "NATO Commander: Russia Uses Syrian Refugees as 'Weapon' Against West," March 2, 2016, http://www.dw.com/en/nato-commander-russia-uses-syrian-refugees-as-weapon-against-west/a-19086285 (accessed June 23, 2017).
14. Deutsche Welle, "Refugee Numbers in Germany Dropped Dramatically in 2017," January 16, 2018, http://www.dw.com/en/refugee-numbers-in-germany-dropped-dramatically-in-2017/a-42162223 (accessed June 29, 2018).
15. Reuters, "Number of Migrants in Germany Hits Record High," April 12, 2018, https://uk.reuters.com/article/uk-germany-immigration/number-of-migrants-in-germany-hits-record-high-idUKKBN1HJ2BQ (accessed June 29, 2018).
16. Steve Scherer, "Italy's Homeless, Jobless Migrants Shunned by Politicians," Reuters, January 24, 2018, https://mobile.reuters.com/article/amp/idUSKBN1FD2BD?__twitter_impression=true (accessed June 29, 2018).
17. Harriet Torry, "Are Migrants a Burden or Boon to the German Economy? It Could Depend on the Skills Gap," *The Wall Street Journal*, April 4, 2017, https://blogs.wsj.com/economics/2017/04/04/are-migrants-a-burden-or-boon-to-the-german-economy-it-could-depend-on-the-skills-gap/ (accessed June 29, 2018).
18. Rebecca Seales, "Migrants in Germany: Should They Be Paid to Go Home?" BBC News, December 15, 2017, http://www.bbc.com/news/world-europe-42235232 (accessed June 29, 2018).
19. Friedrich Geiger, "Germany's Efforts to Integrate Migrants Into Its Workforce Falter," *The Wall Street Journal*, updated September 15, 2016, https://www.wsj.com/articles/germanys-efforts-to-integrate-migrants-into-its-workforce-falter-1473948135 (accessed June 29, 2018).
20. Richard Milne, "Sweden's Immigrants Struggle with Jobs and Integration," *Financial Times*, March 26, 2017, https://www.ft.com/content/838d60c2-0961-11e7-97d1-5e720a26771b (accessed June 29, 2018).
21. Simon Nixon, "Limbo Lingers for the European Union," *The Wall Street Journal*, May 9, 2018, https://www.wsj.com/articles/limbo-lingers-for-the-european-union-1525900286?mod=nwsrl_corrections&cx_refModule=nwsrl (accessed Jun e 29, 2018).

22. European Commission, Migration and Home Affairs, "Temporary Reintroduction of Border Control," last updated June 29, 2018, https://ec.europa.eu/home-affairs/what-we-do/policies/borders-and-visas/schengen/reintroduction-border-control_en (accessed June 29, 2018).
23. Matthew Goodwin, Twitter Post, May 11, 2018, 4:09 AM, https://twitter.com/goodwinmj/status/994897239003844608?lang=en (accessed June 29, 2018).
24. Eliza Mackintosh and Judith Vonberg, "A Record Number of French Voters Cast Their Ballots for Nobody," CNN, May 8, 2017, http://www.cnn.com/2017/05/08/europe/french-voters-spoiled-ballots-abstained/index.html?sr=twCNN050817french-voters-spoiled-ballots-abstained0442PMVODtopLink&linkId=37346306 (accessed June 1, 2017).
25. "Germany's Election Results in Charts and Maps," *Financial Times*, September 25, 2017, https://www.ft.com/content/e7c7d918-a17e-11e7-b797-b61809486fe2 (accessed May 11, 2018).
26. Ibid.
27. Ibid.
28. North Atlantic Treaty Organization, "Assistance for the Refugee and Migrant Crisis in the Aegean Sea," last updated June 27, 2016, http://www.nato.int/cps/en/natohq/topics_128746.htm (accessed July 10, 2017).
29. News release, "Statement by the NATO Secretary General on NATO Support to Assist with the Refugee and Migrant Crisis," North Atlantic Treaty Organization, February 25, 2016, http://www.nato.int/cps/en/natohq/opinions_128372.htm?selectedLocale=en (accessed June 1, 2017).
30. John Vandiver, "NATO's New Southern Hub in Italy to Be Fully Operational in July," *Stars and Stripes*, June 11, 2018, https://www.stripes.com/news/nato-s-new-southern-hub-in-italy-to-be-fully-operational-in-july-1.532131#.WyCv884yNNc.twitter (accessed June 29, 2018).
31. Hilary Clarke and Nicole Chavez, "French Officer Who Swapped Places with a Hostage in Terror Attack Dies," CNN, March 24, 2018, https://www.cnn.com/2018/03/24/europe/france-trebes-officer-dead/index.html (accessed June 29, 2018).
32. "Attaques terroristes dans l'Aude : revivez le fil de cette journée dramatique" (Terrorist attacks in Aude: relive the thread of this dramatic day), *LeParisien*, March 23, 2018, http://www.leparisien.fr/faits-divers/direct-coups-de-feu-sur-un-crs-et-prise-d-otages-dans-un-super-u-de-l-aude-23-03-2018-7624818.php (accessed June 29, 2018).
33. Deutsche Welle, "Number of Salafists in Germany Has Doubled in Past Five Years," April 4, 2018, http://m.dw.com/en/number-of-salafists-in-germany-has-doubled-in-past-five-years/a-43243111?maca=en-Twitter-sharing&xtref=https%253A%252F%252Ft.co%252FY7NKV83ETU%253Famp%253D1sharing&xtref=https%253A%252F%252Ft.co%252FY7NKV83ETU%253Famp%253D1 (accessed July 3, 2018).
34. U.S. Department of State, Bureau of Consular Affairs, U.S. Passports and International Travel, "Europe Travel Alert: The Department of State Alerts U.S. Citizens to the Continued Threat of Terrorist Attacks Throughout Europe," updated May 1, 2017, https://travel.state.gov/content/passports/en/alertswarnings/Europe.html (accessed July 12, 2017).
35. Alexis Flynn, "ISIS Sympathizer Found Guilty of Planning Attack Against U.S. Military in U.K.," *The Wall Street Journal*, April 1, 2016, http://www.wsj.com/articles/isis-sympathizer-found-guilty-of-planning-attack-against-u-s-military-in-u-k-1459514064 (accessed June 1, 2017).
36. International Institute for Strategic Studies, *The Military Balance 2017: The Annual Assessment of Global Military Capabilities and Defence Economics* (London: Routledge, 2017), p. 65.
37. Stenographic transcript of *Hearing to Receive Testimony on United States European Command*, Committee on Armed Services, U.S. Senate, March 23, 2017, p. 14, https://www.armed-services.senate.gov/imo/media/doc/17-24_03-23-17.pdf (accessed August 8, 2017).
38. Frederico Bartels and Daniel Kochis, "Congress Should Transform the European Deterrence Initiative into an Enduring Commitment," Heritage Foundation *Backgrounder* No. 3319, May 29, 2018, pp. 5–6, https://www.heritage.org/sites/default/files/2018-05/BG3319_2.pdf.
39. General Curtis M. Scaparrotti, U.S. Army, Commander, United States European Command, statement on EUCOM posture before the Committee on Armed Services, U.S. Senate, March 8, 2018, http://www.eucom.mil/mission/eucom-posture-statement-2018 (accessed June 29, 2018).
40. Caroline Houck, "Army Chief: The US Needs More Troops in Europe," *Defense One*, November 15, 2017, https://www.defenseone.com/threats/2017/11/army-chief-us-needs-more-troops-europe/142580/ (accessed June 29, 2018).

41. This was announced early in 2016. See Reuters, "U.S. to Deploy Armored Brigade Combat Teams to Europe," March 30, 2016, https://www.reuters.com/article/us-usa-military-europe-idUSKCN0WW23P (accessed August 21, 2018). In early 2017, the Army initiated a program to rotate units from CONUS to Europe and back, emphasizing the heel-to-toe aspect, meaning that the replacing unit would arrive before departure of the current unit so as to achieve a constant presence in Europe. The program began in January 2017 with the 10th CAB, followed by the 1st CAB in November 2017 and the 4th CAB in June 2018. See Specialist Thomas Skaggs, "10th Combat Aviation Brigade Returns from Successful Rotation in Europe," U.S. Army, November 15, 2017, https://www.army.mil/article/196979/10th_combat_aviation_brigade_returns_from_successful_rotation_in_europe (accessed August 21, 2018), and Staff Sergeant Adrian Patoka, "Third Atlantic Resolve Aviation Brigade Arrives in Europe," U.S. Department of Defense, June 22, 2018, https://www.defense.gov/News/Article/Article/1558059/third-atlantic-resolve-aviation-brigade-arrives-in-europe/ (accessed August 21, 2018).
42. Fact Sheet, "1st Air Cavalry Brigade, 1st Cavalry Division," U.S. Army Europe Public Affairs Office, October 17, 2017.
43. Racheal Wardwell, "Fort Carson Announces 2018 Summer Deployment," KOAA News 5, April 18, 2018, http://www.koaa.com/story/37988139/fort-carson-announces-2018-summer-deployment (accessed June 29, 2018).
44. Tara Copp, "Norway Extends Marine Corps Rotations to 2018," *Stars and Stripes*, June 21, 2017, https://www.stripes.com/news/norway-extends-marine-corps-rotations-to-2018-1.474667 (accessed June 22, 2018).
45. Gwladys Fouche, "Norway to Invite More U.S. Marines, for Longer and Closer to Russia" Reuters, June 12, 2018, https://www.reuters.com/article/us-norway-us-russia/norway-to-invite-more-u-s-marines-for-longer-and-closer-to-russia-idUSKBN1J8149?utm_campaign=trueAnthem:+Trending+Content&utm_content=5b1fd69a04d30124f2870dac&utm_medium=trueAnthem&utm_source=twitter (accessed June 21, 2018).
46. Idrees Ali, "With an Eye on Russia, U.S. Navy Re-Establishing Its Second Fleet," Reuters, May 4, 2018, https://www.reuters.com/article/us-usa-defense-navy-russia/with-an-eye-on-russia-u-s-navy-re-establishing-its-second-fleet-idUSKBN1I52CJ (accessed June 22, 2018).
47. Sgt. 1st Class Jacob McDonald, "Prepositioned Equipment Site Officially Opens in Netherlands," U.S. Army, December 16, 2016, https://www.army.mil/article/179831/prepositioned_equipment_site_officially_opens_in_netherlands (accessed June 5, 2017).
48. Sgt. 1st Class Jacob A. McDonald, "Ribbon Cut on Second Prepositioned Equipment Site," U.S. Army, May 11, 2017, https://www.army.mil/article/187565/ (accessed July 12, 2017).
49. Dan Stoutamire, "Army to Move Brigade's Worth of Firepower into Poland," *Stars and Stripes*, April 26, 2017, https://www.stripes.com/news/army-to-move-brigade-s-worth-of-firepower-into-poland-1.465372#.WQyodoWcHcv (accessed July 12, 2017).
50. U.S. Army Europe, "Army Prepositioned Stock–Europe," August 3, 2017, https://www.army.mil/standto/2017-08-03 (accessed June 29, 2018).
51. U.S. Department of Defense, Office of the Secretary of Defense (Comptroller), *Department of Defense Budget Fiscal Year (FY) 2019: European Deterrence Initiative*, February 2018, pp. 12, 13, and 23, http://comptroller.defense.gov/Portals/45/Documents/defbudget/fy2019/fy2019_EDI_JBook.pdf (accessed June 29, 2018).
52. Shawn Snow, "US Plans $200 Million Buildup of European Air Bases Flanking Russia," *Air Force Times*, December 17, 2017, https://www.airforcetimes.com/flashpoints/2017/12/17/us-plans-200-million-buildup-of-european-air-bases-flanking-russia/ (accessed June 29, 2018).
53. Ibid.
54. Ibid.
55. Nancy Montgomery, "No Permanent Basing for Navy Sub Hunters in Iceland Despite Construction Projects," *Stars and Stripes*, January 9, 2018, https://www.stripes.com/news/no-permanent-basing-for-navy-sub-hunters-in-iceland-despite-construction-projects-1.505835 (accessed June 29, 2018).
56. Scaparrotti, statement on EUCOM posture, March 8, 2018.
57. U.S. Department of Defense, National Guard Bureau, "State Partnership Program," June 2018, http://www.nationalguard.mil/Portals/31/Documents/J-5/InternationalAffairs/StatePartnershipProgram/SPP%20Partnership%20Map_Jun%202018.png (accessed August 21, 2018).
58. United States Army Europe, 7th Army Training Command, "Joint Multinational Training Group–Ukraine: Train on Defense," http://www.7atc.army.mil/JMTGU/ (accessed August 21, 2018).
59. General Curtis M. Scaparrotti, Commander, United States European Command, statement before the Committee on Armed Services, U.S. Senate, March 23, 2017, p. 17, https://www.armed-services.senate.gov/imo/media/doc/Scaparrotti_03-23-17.pdf (accessed June 29, 2018).

60. Malcolm Chalmers and Simon Lunn, "NATO's Tactical Nuclear Dilemma," Royal United Services Institute *Occasional Paper*, March 2010, p. 1, https://rusi.org/sites/default/files/201003_op_natos_tactical_nuclear_dilemma.pdf (accessed September 6, 2016).
61. Geoff Ziezulewicz, "B61-12 Life Extension Program Receives NNSA Approval," United Press International, August 2, 2016, http://www.upi.com/Business_News/Security-Industry/2016/08/02/B61-12-life-extension-program-receives-NNSA-approval/3261470147434/ (accessed June 29, 2018).
62. Tom O'Connor, "The U.S. Is Building a Nuclear Bomb That's More Accurate Than Ever," *Newsweek*, April 18, 2017, http://www.newsweek.com/us-build-better-nuclear-missile-585686 (accessed June 5, 2017).
63. Oriana Pawlyk, "Air Force Advances Testing of New Nuclear Gravity Bomb: General," Military.com, May 1, 2018, https://www.military.com/dodbuzz/2018/05/01/air-force-advances-testing-new-nuclear-gravity-bomb-general.html (accessed June 29, 2018).
64. North Atlantic Treaty Organization, "Readiness Action Plan," last updated September 21, 2017, http://www.nato.int/cps/on/natohq/topics_119353.htm (accessed June 29, 2018).
65. North Atlantic Treaty Organization, "NATO Response Force," last updated January 16, 2017, https://www.nato.int/cps/ua/natohq/topics_49755.htm (accessed June 29, 2018).
66. News release, "Wales Summit Declaration," North Atlantic Treaty Organization, September 5, 2014, http://www.nato.int/cps/en/natohq/official_texts_112964.htm (accessed June 6, 2016).
67. North Atlantic Treaty Organization, *The Secretary General's Annual Report: 2016*, p. 14, http://www.nato.int/nato_static_fl2014/assets/pdf/pdf_2017_03/20170313_SG_AnnualReport_2016_en.pdf#page=13 (accessed July 12, 2017).
68. Jens Ringsmose and Sten Rynning, "Can NATO's New Very High Readiness Joint Task Force Deter?" Norwegian Institute of International Affairs *Policy Brief* No. 15/2016, 2016, p. 2, https://brage.bibsys.no/xmlui/bitstream/handle/11250/2392132/NUPI_Policy_Brief_15_16_Ringmose_Rynning.pdf (accessed July 14, 2017).
69. Ibid.
70. Sam Jones, "NATO Rapid Unit Not Fit for Eastern Europe Deployment, Say Generals," *Financial Times*, May 15, 2016, https://www.ft.com/content/7ac5075c-1a96-11e6-b286-cddde55ca122 (accessed June 6, 2016).
71. Ringsmose and Rynning, "Can NATO's New Very High Readiness Joint Task Force Deter?" p. 2.
72. Italian Ministry of Defence, "NATO: Italy Takes the Lead of NRF Land Component," January 10, 2018, https://www.difesa.it/EN/Primo_Piano/Pagine/so.aspx (accessed June 29, 2018).
73. Julian E. Barnes, "NATO Fears Its Forces Not Ready to Confront Russian Threat," *The Wall Street Journal*, March 28, 2018, https://www.wsj.com/articles/nato-moves-toward-readying-more-troops-to-confront-russian-threat-1522290156 (accessed June 29, 2018).
74. Fact Sheet, "NATO's Enhanced Forward Presence," North Atlantic Treaty Organization, February 2018, https://www.nato.int/nato_static_fl2014/assets/pdf/pdf_2018_02/20180213_1802-factsheet-efp.pdf (accessed June 29, 2018).
75. North Atlantic Treaty Organization, "Boosting NATO's Presence in the East and Southeast," last updated March 2, 2018, https://www.nato.int/cps/en/natohq/topics_136388.htm?selectedLocale=enhttps://www.nato.int/nato_static_fl2014/assets/pdf/pdf_2018_02/20180213_1802-factsheet-efp.pdf (accessed June 29, 2018).
76. Fact Sheet, "NATO's Enhanced Forward Presence."
77. Ibid.
78. Ibid.
79. North Atlantic Treaty Organization, Multinational Division North East, "Landcom Soldiers in Elbląg," February 22, 2018, https://mndne.wp.mil.pl/en/articlesnews-u/2018-02-226-landcom-soldiers-in-elblag/ (accessed June 29, 2018).
80. Baltic News Service, "Baltic Countries Sign Agreement on Fast Movement of NATO Forces," Latvian Information Agency, February 15, 2017, http://www.leta.lv/eng/defence_matters_eng/defence_matters_eng/news/CEB6CED4-EA2D-404C-8814-A8765D6BA915/ (accessed July 12, 2017).
81. North Atlantic Treaty Organization, Allied Joint Force Command, "NATO Force Integration Unit (NFIT) Fact Sheet," https://jfcbs.nato.int/page5725819/nato-force-integration-units/nato-force-integration-units-fact-sheet (accessed June 29, 2018).
82. Ibid.

83. Boris Toucas, "NATO and Russia in the Black Sea: A New Confrontation?" Center for Strategic and International Studies, March 6, 2017, https://www.csis.org/analysis/nato-and-russia-black-sea-new-confrontation (accessed June 6, 2017); news release, "Warsaw Summit Communiqué Issued by the Heads of State and Government Participating in the Meeting of the North Atlantic Council in Warsaw 8–9 July 2016," North Atlantic Treaty Organization, July 9, 2016, http://www.nato.int/cps/en/natohq/official_texts_133169.htm (accessed July 11, 2017).

84. Fergus Kelly, "NATO Launches New Multinational Division in Romania," The Defense Post, October 9, 2017, https://thedefensepost.com/2017/10/09/nato-romania-multinational-division-southeast/ (accessed June 29, 2018).

85. Robin Emmott, "NATO Launches Black Sea Force as Latest Counter to Russia," Reuters, October 9, 2017, https://www.reuters.com/article/us-russia-nato/nato-launches-black-sea-force-as-latest-counter-to-russia-idUSKBN1CE0MJ (accessed June 29, 2018).

86. David Pugliese and Aaron Mehta, "NATO's Tanks, AWACS Programs See Membership Increase," *Defense News*, February 14, 2018, https://www.defensenews.com/smr/munich-security-forum/2018/02/14/natos-tanker-awacs-programs-see-membership-increase/ (accessed June 29, 2018).

87. Ibid.

88. Christopher Woody, "A Convoy of US Army Howitzers Got Stopped by German Police, and It Points to a Major Problem NATO Has in Europe," *Business Insider*, January 12, 2018, http://www.businessinsider.com/us-army-howitzers-stopped-in-germany-nato-logistics-problems-2018-1 (accessed June 29, 2018).

89. North Atlantic Treaty Organization, "NATO Defence Ministers Take Decisions to Strengthen the Alliance," last updated February 15, 2018, https://www.nato.int/cps/ua/natohq/news_152125.htm (accessed June 29, 2018).

90. Reuters, "Germany Chooses Ulm for New Proposed NATO Logistics Command," March 20, 2018, https://www.reuters.com/article/us-nato-germany/germany-chooses-ulm-for-new-proposed-nato-logistics-command-idUSKBN1GW1QM (accessed June 29, 2018).

91. Fact Sheet, "Key NATO and Allied Exercises in 2018," North Atlantic Treaty Organization, June 2018, https://www.nato.int/nato_static_fl2014/assets/pdf/pdf_2018_04/20180425_1804-factsheet_exercises_en.pdf (accessed June 29, 2018).

92. Robin Emmott, "NATO to Spend 3 Billion Euros on Satellite, Cyber Defenses," Reuters, March 27, 2017, http://mobile.reuters.com/article/idUSKBN16Y0P5 (accessed June 6, 2017).

93. Bruno Lete and Piret Pernik, "EU–NATO Cybersecurity and Defense Cooperation: From Common Threats to Common Solutions," German Marshall Fund of the United States *Policy Brief* No. 38, December 2017, p. 3, http://www.gmfus.org/publications/eu-nato-cybersecurity-and-defense-cooperation-common-threats-common-solutions (accessed June 29, 2018).

94. Defence Connect, "Australia Joins NATO Cyber Centre," May 3, 2018, https://www.defenceconnect.com.au/intel-cyber/2240-australia-joins-nato-cyber-centre (accessed June 29, 2018).

95. News release, "Warsaw Summit Communiqué."

96. Robin Emmott, "U.S. Activates Romanian Missile Defense Site, Angering Russians," Reuters, May 12, 2016, http://www.reuters.com/article/us-nato-shield-idUSKCN0Y30JX (accessed June 6, 2017).

97. Fact Sheet, "NATO Ballistic Missile Defence," North Atlantic Treaty Organization, July 2016, http://www.nato.int/nato_static_fl2014/assets/pdf/pdf_2016_07/20160630_1607-factsheet-bmd-en.pdf (accessed June 6, 2017).

98. Lisa Ferdinando, "Work Joins Groundbreaking for Ballistic Missile Defense Site in Poland," U.S. Department of Defense, May 13, 2016, https://www.defense.gov/News/Article/Article/759662/work-joins-groundbreaking-for-ballistic-missile-defense-site-in-poland/ (accessed August 8, 2017).

99. Marcin Goclowski and Lidia Kelly, "Poland Says U.S. Missile Shield Site Delayed Until 2020," Reuters, March 22, 2018, https://www.reuters.com/article/us-poland-defence-usa/poland-says-u-s-missile-shield-site-delayed-until-2020-idUSKBN1GY2RE (accessed June 29, 2018).

100. Fact Sheet, "NATO Ballistic Missile Defence."

101. Russian Embassy in Norway and Norway Today, "Russia Threatens Norway to Stay out of NATO Missile Defense," Atlantic Council, March 21, 2017, http://www.atlanticcouncil.org/blogs/natosource/russia-threatens-norway-to-stay-out-of-nato-missile-defense (accessed June 6, 2017).

102. Gerard O'Dwyer, "Denmark Progresses in NATO Ballistic Missile Defense Role," *Defense News*, April 22, 2016, http://www.defensenews.com/story/defense/air-space/strike/2016/04/22/denmark-progresses-nato-ballistic-missile-defense-role/83391868/ (accessed June 6, 2017).

103. Danish Ministry of Defence, "Agreement for Danish Defence 2018–2023," last updated March 16, 2018, http://www.fmn.dk/eng/allabout/Pages/danish-defence-agreement.aspx (accessed June 30, 2018).

104. "Ballistic Missile Defense Exercise Begins off Scotland," *Naval Today*, September 25, 2017, https://navaltoday.com/2017/09/25/ballistic-missile-defense-exercise-begins-off-scotland/ (accessed June 30, 2018).

105. "German Navy to Modernize Its Sachsen-Class Frigates with New Radar to Join NATO BMD," *Navy Recognition*, December 23, 2016, http://www.navyrecognition.com/index.php/news/defence-news/2016/december-2016-navy-naval-forces-defense-industry-technology-maritime-security-global-news/4719-german-navy-to-modernize-its-f124-sachsen-class-frigates-with-new-radar-to-join-nato-bmd.html (accessed July 12, 2017).

106. Fact Sheet, "NATO Ballistic Missile Defence."

107. George Allison, "UK Looks to Industry for New Ground-Based Ballistic Missile Defence Radar Capability," *UK Defence Journal*, July 18, 2017, https://ukdefencejournal.org.uk/uk-issues-request-information-industry-new-ground-based-ballistic-missile-defence-radar/ (accessed June 30, 2018).

108. Ibid.

109. "Future Belgian Navy Frigates May Have Ballistic Missile Defense Capabilities," *Navy Recognition*, January 5, 2017, http://www.navyrecognition.com/index.php/news/defence-news/2017/january-2017-navy-naval-forces-defense-industry-technology-maritime-security-global-news/4766-future-belgian-navy-frigates-may-have-ballistic-missile-defense-capabilities.html (accessed June 30, 2018).

110. Megan Eckstein, "Navy, NATO Forces Conduct Integrated Air and Missile Defense Exercise off Scotland," U.S. Naval Institute News, October 16, 2017, https://news.usni.org/2017/10/16/navy-nato-forces-conduct-integrated-air-missile-defense-exercise-off-scotland (accessed June 30, 2018).

111. Ibid.

112. Michael Shurkin, "The Abilities of the British, French, and German Armies to Generate and Sustain Armored Brigades in the Baltics," RAND Corporation *Research Report* No. 1629-A, 2017, pp. 1 and 9, https://www.rand.org/content/dam/rand/pubs/research_reports/RR1600/RR1629/RAND_RR1629.pdf (accessed July 11, 2017).

113. Tim Hepher and Andrea Shalal, "Exclusive: Europe's A400M Army Plane May See Some Features Axed," Reuters, February 12, 2018, https://www.reuters.com/article/us-airbus-a400m-exclusive/exclusive-europes-a400m-army-plane-may-see-some-features-axed-idUSKBN1FW1TR?utm_campaign=trueAnthem:+Trending+Content&utm_content=5a81ca6f04d301505b09c4bb&utm_medium=trueAnthem&utm_source=twitter (accessed June 30, 2018).

114. Ibid.

115. The North Atlantic Treaty, Article 3, April 4, 1949, last updated April 9, 2018, http://www.nato.int/cps/en/SID-857936BB-66246E10/natolive/official_texts_17120.htm (accessed June 30, 2018).

116. News release, "Defence Expenditure of NATO Countries (2010–2017)," North Atlantic Treaty Organization, March 15, 2018, p. 3, https://www.nato.int/nato_static_fl2014/assets/pdf/pdf_2018_03/20180315_180315-pr2018-16-en.pdf (accessed June 30, 2018).

117. North Atlantic Treaty Organization, *The Secretary General's Annual Report: 2017*, March 15, 2018, p. 32, https://www.nato.int/nato_static_fl2014/assets/pdf/pdf_2018_03/20180315_SG_AnnualReport_en.pdf (accessed June 30, 2018).

118. News release, "Defense Expenditure of NATO Countries (2010–2017)," p. 3.

119. Andrea Shalal and Sabine Siebold, "Less than Half of German Submarines and Warplanes Ready for Use," Reuters, February 27, 2018, https://www.reuters.com/article/us-germany-military/less-than-half-of-german-submarines-and-warplanes-ready-for-use-idUSKCN1GB27B (accessed June 30, 2018).

120. Tobias Buck, "German Military: Combat Ready?" *Financial Times*, February 15, 2018, https://www.ft.com/content/36e2cd40-0fdf-11e8-940e-08320fc2a277 (accessed April 24, 2018).

121. Ibid.

122. John Vandiver, "Report: Europe's Armies Too Slow for a Baltic Clash," *Stars and Stripes*, April 13, 2017, http://www.military.com/daily-news/2017/04/13/report-europes-armies-too-slow-baltic-clash.html (accessed June 6, 2017).

123. North Atlantic Treaty Organization, *The Secretary General's Annual Report: 2017*, p. 103,

124. North Atlantic Treaty Organization, Resolute Support Mission, "Resolute Support Mission (RSM): Key Facts and Figures," April 2018, https://www.nato.int/nato_static_fl2014/assets/pdf/pdf_2018_04/20180425_2018-04-RSM-Placemat.pdf (accessed June 30, 2018).

125. Radio Free Europe/Radio Liberty, "German Lawmakers Approve Troop Increase for Afghanistan," March 22, 2018, https://www.rferl.org/a/germany-approves-troop-increase-afghanistan/29116022.html (accessed June 30, 2018).

126. Associated Press, "Germany Extends Military Missions in Iraq, Afghanistan, Mali," *U.S. News & World Report*, March 7, 2018, https://www.usnews.com/news/world/articles/2018-03-07/germany-extends-military-missions-in-iraq-afghanistan-mali (accessed June 30, 2018).

127. Deutsche Welle, "Berlin Wants to Expand Bundeswehr Training Mission in Iraq," March 15, 2018, http://www.dw.com/en/berlin-wants-to-expand-bundeswehr-training-mission-in-iraq/a-42988772 (accessed June 30, 2018).

128. Ibid.

129. North Atlantic Treaty Organization, Allied Air Command, "Germany Continues Augmenting Baltic Air Policing," January 6, 2017, https://ac.nato.int/archive/2017/germany-continues-augmenting-baltic-air-policing (accessed June 30, 2018).

130. Andrea Shalal, "Equipment Shortages Impair German Military Ahead of Key NATO Mission," Reuters, February 19, 2018, https://www.reuters.com/article/us-germany-military/equipment-shortages-impair-german-military-ahead-of-key-nato-mission-idUSKCN1G31PX (accessed June 30, 2018).

131. Sean Gallagher, "Das boot Ist Kaputt: German Navy Has Zero Working Subs," Ars Technica, December 19, 2017, https://arstechnica.com/tech-policy/2017/12/das-boot-ist-kaputt-german-navy-has-zero-working-subs/ (accessed June 30, 2018).

132. Tyler Rogoway, "The German Navy Decided to Return Their Bloated News Frigate to Ship Store This Christmas," The War Zone, December 23, 2017, http://www.thedrive.com/the-war-zone/17185/the-german-navy-has-decided-to-return-their-new-frigate-to-the-ship-store-this-christmas (accessed June 30, 2018).

133. William Wilkes, "German Engineering Yields New Warship That Isn't Fit for Sea," *The Wall Street Journal*, January 12, 2018, https://www.wsj.com/articles/german-engineering-yields-new-warship-that-isnt-fit-for-sea-1515753000 (accessed June 30, 2018).

134. Ibid.

135. "Germany Returns Lead F125 Frigate to Builder, Report," *Naval Today*, December 22, 2017, https://navaltoday.com/2017/12/22/germany-returns-lead-f125-frigate-to-builder-report/ (accessed June 30, 2018).

136. Deutsche Welle, "Germany's Lack of Military Readiness 'Dramatic,' Says Bundeswehr Commissioner," February 20, 2018, http://www.dw.com/en/germanys-lack-of-military-readiness-dramatic-says-bundeswehr-commissioner/a-42663215 (accessed June 30, 2018).

137. Shalal and Siebold, "Less than Half of German Submarines and Warplanes Ready for Use."

138. Christopher Woody, "Germany Has a 'Massive Problem' That Has Reportedly Knocked Almost All of Its Eurofighter Typhoon Fighter Jets out of Commission," *Business Insider*, May 4, 2018, http://www.businessinsider.com/german-military-fighters-jets-not-ready-for-combat-2018-5 (accessed June 30, 2018).

139. Matthias Gebauer, "Luftwaffe hat nur vier kampfbereite 'Eurofighter'" (German air force only has four fight-ready Eurofighters), *Spiegel Online*, May 2, 2018, http://www.spiegel.de/politik/deutschland/bundeswehr-luftwaffe-hat-nur-vier-kampfbereite-eurofighter-a-1205641.html (accessed July 2, 2018),

140. Niall McCarthy, "The German Military Is Woefully Unprepared for Action," Statista, February 28, 2018, https://www.statista.com/chart/13077/the-german-military-is-woefully-unprepared-for-action/ (accessed June 30, 2018).

141. Ibid.

142. Christopher Woody, "Germany's Military Is Falling Behind, and the US Is Putting It on Notice," *Business Insider*, February 3, 2018, http://www.businessinsider.com/german-military-falls-behind-the-us-puts-it-on-notice-2018-2 (accessed June 30, 2018).

143. Nicholas Fiorenza, "Bundeswehr Outsources Helicopter Training," Jane's 360, January 9, 2018, http://www.janes.com/article/76919/bundeswehr-outsources-helicopter-training (accessed June 30, 2018).

144. Alexander Pearson, "1 in 10 German Military Pilots Lost Helicopter Licenses for Lack of Flight Time," Deutsche Welle, May 3, 2018, http://www.dw.com/en/1-in-10-german-military-pilots-lost-helicopter-licenses-for-lack-of-flight-time/a-43646369 (accessed June 30, 2018).

145. Gareth Jennings, "ILA 2018: All Industry Bids for German Tornado-Replacement Submitted," Jane's 360, April 26, 2018, http://www.janes.com/article/79599/ila-2018-all-industry-bids-for-german-tornado-replacement-submitted (accessed July 1, 2018).

146. Douglas Barrie, "Dogfight over Berlin: Germany's Tornado Replacement Aspirations," International Institute for Strategic Studies, Military Balance Blog, December 21, 2017, https://www.iiss.org/blogs/military-balance/2017/12/berlin (accessed June 29, 2018).

147. Reuters, "Report Shows 1,300 Unfilled Jobs, Strain for German Defense Procurement," December 13, 2017, https://www.reuters.com/article/us-germany-military/report-shows-1300-unfilled-jobs-strain-for-german-defense-procurement-idUSKBN1E72IW (accessed July 1, 2018).

148. Konstantin von Hammerstein and Peter Müller, "U.S. Pressures Germany to Increase Defense Spending," *Spiegel Online*, February 17, 2017, http://www.spiegel.de/international/world/pressure-on-germany-to-increase-defense-spending-for-nato-a-1135192.html?utm_source=dlvr.it&utm_medium=twitter#ref=rss (accessed July 2, 2018).
149. German Government, "Germany and Norway to Extend Naval Forces Cooperation," *Defence Talk*, February 15, 2017, https://www.defencetalk.com/germany-and-norway-to-extend-naval-forces-cooperation-69124/ (accessed July 1, 2018).
150. Reuters, "Germany to Spend 1.5 Bln Euros for More Navy Ships—Navy," October 14, 2016, http://www.reuters.com/article/german-navy-idUSL8N1CK4QI (accessed June 6, 2017).
151. Reuters, "Germany to Increase Army to 198,000 by 2024 Amid NATO Spending Row," February 21, 2017, http://www.reuters.com/article/germany-army-idUSL8N1G65BZ (accessed June 6, 2017).
152. Nina Werkhäuser, "German Army Launches New Cyber Command," Deutsche Welle, April 1, 2017, http://www.dw.com/en/german-army-launches-new-cyber-command/a-38246517 (accessed July 11, 2017).
153. Andrea Shalal, "Germany to Move Ahead on New Short-Range Air Defense System," Reuters, February 2, 2017, http://www.reuters.com/article/us-germany-military-idUSKBN15H1Z9 (accessed June 6, 2017).
154. Sabine Siebold, "Exclusive: Germany Raises Fears over Capabilities of Airbus A400M Aircraft," Reuters, March 29, 2018, https://www.reuters.com/article/us-airbus-a400m-germany-exclusive/exclusive-germany-raises-fears-over-capabilities-of-airbus-a400m-aircraft-idUSKBN1H51CX (accessed July 1, 2018).
155. News release, "Defence Expenditure of NATO Countries (2010–2017)," March 15, 2018, p. 3.
156. Pierre Tran, "Macron Signs French Military Budget into Law. Here's What the Armed Forces Are Getting," *Defense News*, July 17, 2018, https://www.defensenews.com/global/europe/2018/07/16/macron-signs-french-military-budget-into-law-heres-what-the-armed-forces-are-getting/ (accessed August 21, 2018).
157. International Institute for Strategic Studies, *The Military Balance 2018: The Annual Assessment of Global Military Capabilities and Defence Economics* (London: Routledge, 2018), p. 74.
158. Reuters, "FEATURE—Under Threat, France Grooms Army Hackers for Cyberwarfare," April 5, 2017, http://uk.reuters.com/article/france-cyber-idUKL5N1HC2XQ (accessed June 6, 2017).
159. Republic of France, Minstere Des Armées, "Cartes (maps): Opéracion Chammal," updated April 12, 2017, https://www.defense.gouv.fr/english/operations/operations/irak-syrie/cartes/cartes (accessed July 1, 2018).
160. Emmanuel Huberdeau, "French Forces Mark Three Years of Operation Chammal," Air & Cosmos International, September 25, 2017, http://www.aircosmosinternational.com/french-forces-mark-three-years-of-operation-chammal-100671 (accessed July 1, 2018).
161. Chad Garland, "Paratrooper Becomes France's First Combat Death in Anti-ISIS Coalition," *Stars and Stripes*, September 23, 2017, https://www.stripes.com/news/middle-east/paratrooper-becomes-france-s-first-combat-death-in-anti-isis-coalition-1.489322 (accessed July 1, 2018).
162. Tamer El-Ghobashy, Maria Abi-Habib, and Benoit Faucon, "France's Special Forces Hunt French Militants Fighting for Islamic State," *The Wall Street Journal,* May 29, 2017, https://www.wsj.com/articles/frances-special-forces-hunt-french-militants-fighting-for-islamic-state-1496090116 (accessed July 1, 2018).
163. Garland, "Paratrooper Becomes France's First Combat Death in Anti-ISIS Coalition."
164. Nancy A. Youseff and Michael C. Bender, "U.S., U.K. and France Launch Strikes Against Syria," *The Wall Street Journal*, updated April 14, 2018, https://www.wsj.com/articles/u-s-u-k-launch-strikes-against-syria-1523668212 (accessed July 1, 2018).
165. i24NEWS, "France Has Dropped Twice as Many Bombs on IS as in Libya: Airforce Chief," January 30, 2017, https://www.i24news.tv/en/news/international/136413-170130-france-has-dropped-twice-as-many-bombs-on-is-as-in-libya-airforce-chief (accessed July 1, 2018).
166. Fact Sheet, "NATO's Enhanced Forward Presence."
167. Republic of France, Ministere Des Armées, "Cartes des operations et mission militaires (Map of military operations and missions)," updated May 14, 2018, https://www.defense.gouv.fr/english/operations/rubriques_complementaires/carte-des-operations-et-missions-militaires (accessed July 1, 2018).
168. Republic of France, Ministere Des Armées, "Le forces francaises stationnées a Djibouti (French forces stationed in Djibouti)," updated September 20, 2016, http://www.defense.gouv.fr/ema/forces-prepositionnees/djibouti/dossier/les-forces-francaises-stationnees-a-djibouti (accessed July 1, 2018).
169. Republic of France, Ministry for Europe and Foreign Affairs, "France and the United Arab Emirates," https://www.diplomatie.gouv.fr/IMG/pdf/17_2978_2979_en_texte_infographie_ang_accessibleversion_cle04fd3b.pdf (accessed July 1, 2018).

170. Jim Garamone, "France Deploys Globally in Counter-Extremism Fight," U.S. Department of Defense, January 17, 2017, https://www.defense.gov/News/Article/Article/1050644/france-deploys-troops-globally-in-counter-extremism-fight (accessed June 7, 2017).
171. Republic of France, Ministere Des Armées, "Cartes des operations et mission militaires."
172. Laura Smith-Spark and Laura Goehler, "Louvre Knife Attack: Soldier Shoots Assailant Near Paris Museum," CNN, February 3, 2017, http://www.cnn.com/2017/02/03/europe/france-paris-louvre-incident/ (accessed July 13, 2017); Alissa J. Rubin and Benoît Morenne, "Gunman Is Killed in Orly Airport in France After Attacking a Soldier," *The New York Times*, March 18, 2017, https://www.nytimes.com/2017/03/18/world/europe/orly-airport-france-shooting.html (accessed July 13, 2017).
173. Marc Leras and Emmanuel Jarry, "Knifeman Yelling 'Allahu Akbar' Shot Dead After Killing Two in France," Reuters, October 1, 2017, https://www.reuters.com/article/us-france-security-marseille/knifeman-yelling-allahu-akbar-shot-dead-after-killing-two-in-france-idUSKCN1C61DC (accessed July 1, 2018).
174. International Institute for Strategic Studies, *The Military Balance 2018*, p. 102.
175. Ibid., p. 74.
176. "On the Frontline with Operation Sentinelle," *Politico*, December 29, 2016, http://www.politico.eu/interactive/french-soldiers-deployed-operation-sentinelle-paris-terror-attacks/ (accessed June 7, 2017).
177. Transcript of Geoffrey Smith interview with Margaret Thatcher, Margaret Thatcher Foundation, January 8, 1990, http://www.margaretthatcher.org/document/109324 (accessed June 7, 2017).
178. News release, "Defence Expenditure of NATO Countries (2010–2017)," North Atlantic Treaty Organization, June 29, 2017, p. 8, http://www.nato.int/nato_static_fl2014/assets/pdf/pdf_2017_06/20170629_170629-pr2017-111-en.pdf (accessed July 1, 2018).
179. News release, "Defence Expenditures of NATO Countries (2009–2016)," North Atlantic Treaty Organization, March 13, 2017, p. 3, https://www.nato.int/nato_static_fl2014/assets/pdf/pdf_2017_03/20170313_170313-pr2017-045.pdf (accessed July 1, 2018).
180. News release, "Defence Expenditure of NATO Countries (2010–2017)," June 29, 2017, p. 8.
181. Malcolm Chalmers, "The UK Defence Modernisation Programme: A Risk and Opportunity," Royal United Services Institute *Commentary*, January 25, 2018, https://rusi.org/commentary/uk-defence-modernisation-programme-risk-and-opportunity (accessed July 1, 2018).
182. Peggy Hollinger, "MoD Faces Funding Gap of up to £21bn, Says UK Spending Watchdog," *Financial Times*, January 31, 2018, https://www.ft.com/content/980de9de-0683-11e8-9650-9c0ad2d7c5b5 (accessed May 2, 2018).
183. Steve McCarthy, "Britain's Defense Capabilities and the Future of Transatlantic Security," Atlantic Council, February 28, 2017, http://www.atlanticcouncil.org/blogs/natosource/britain-s-defense-capabilities-and-the-future-of-transatlantic-security (accessed June 7, 2017).
184. Rajeev Syal, "Armed Forces Facing Biggest Shortfall in Staff for a Decade—Report," *The Guardian*, April 17, 2018, https://www.theguardian.com/uk-news/2018/apr/18/armed-forces-facing-biggest-shortfall-in-staff-for-a-decade-report (accessed July 1, 2018).
185. Ibid.
186. David Bond, "UK Military Chief 'Sympathetic' to Cut in F-35 Fighter Jet Order," *Financial Times*, November 21, 2017, https://www.ft.com/content/696be98e-cec8-11e7-b781-794ce08b24dc (accessed May 2, 2018).
187. Tim Ripley, "UK Aims to Certify P-8 by Early 2019," Jane's 360, November 24, 2017, http://www.janes.com/article/75940/uk-aims-to-certify-p-8-by-early-2019 (accessed July 1, 2018).
188. Shephard Media, "New Facility for RAF's P-8 Poseidon Fleet," April 24, 2018, https://www.shephardmedia.com/news/mil-log/new-facility-rafs-p-8-poseidon-fleet/ (accessed July 1, 2018).
189. Naval Technology, "UK and Norway Advance Cooperation on Maritime Patrol Aircraft," May 4, 2018, https://www.naval-technology.com/news/uk-norway-advance-cooperation-maritime-patrol-aircraft/ (accessed July 1, 2018).
190. Lizzie Dearden, "UK Military Forced to Borrow Nato Planes to Monitor Increasing Activity by Russian Submarines, Shows New Figures," *The Independent*, January 10, 2018, https://www.independent.co.uk/news/uk/home-news/uk-russia-submarines-patrol-planes-nimrod-poseidon-p8-nato-monitor-activity-navy-air-force-security-a8151931.html (accessed July 1, 2018).
191. Joseph Trevithick, "Almost All of the UK's Surface Combatants Are in Port While Germany Has No Working Subs," The War Zone, December 20, 2017, http://www.thedrive.com/the-war-zone/17140/almost-all-of-the-uks-surface-combatants-are-in-port-while-germany-has-no-working-subs (accessed July 1, 2018).
192. BBC News, "HMS Queen Elizabeth Sets Sail from Rosyth for Sea Trials," June 27, 2017, https://www.bbc.com/news/uk-scotland-edinburgh-east-fife-40402153 (accessed July 2, 2018).

193. BBC News, "HMS Queen Elizabeth: UK's Biggest Warship Commissioned," December 7, 2017, http://www.bbc.com/news/av/uk-england-hampshire-42267110/hms-queen-elizabeth-uk-s-biggest-warship-commissioned (accessed July 1, 2018).
194. British Royal Navy, "UK Takes Delivery of Final F-35B Lightning of This Year," December 18, 2017, https://www.royalnavy.mod.uk/news-and-latest-activity/news/2017/december/18/171218-uk-takes-delivery-of-final-f-35b-lightning-of-this-year (accessed July 2, 2018).
195. Reuters, "Trident: UK Parliament Backs Nuclear-Armed Submarine Fleet Renewal," Australian Broadcasting Corporation News, July 18, 2016, http://www.abc.net.au/news/2016-07-19/uk-parliament-backs-trident-nuclear-submarine-renewal/7640160 (accessed July 2, 2018).
196. David Bond, "May Pledges £600m Boost for Nuclear Submarines," *Financial Times*, March 28, 2018, https://www.ft.com/content/2e74f8e8-3296-11e8-ac48-10c6fdc22f03 (accessed May 2, 2018).
197. Tim Ripley, "British Army to Deploy Lynx Wildcat Helicopters to Estonia," Jane's 360, March 7, 2017, http://www.janes.com/article/78422/british-army-to-deploy-lynx-wildcat-helicopters-to-estonia#.WqFkLQR1uhM.twitter (accessed July 2, 2018).
198. North Atlantic Treaty Organization, Allied Air Command, "Baltic Air Policing Augmenting Nations Pass Baton at Ämari, Estonia," August 31, 2016, https://ac.nato.int/archive/2016/baltic-air-policing-augmenting-nations-pass-baton-at-amari--estonia (accessed July 13, 2017).
199. News release, "UK's NATO Southern Air Policing Mission to Begin in May," U.K. Ministry of Defence and The Rt. Hon. Sir Michael Fallon MP, March 27, 2017, https://www.gov.uk/government/news/uks-nato-southern-air-policing-mission-to-begin-in-may (accessed July 2, 2018).
200. George Allison, "Typhoons Return to Black Sea NATO Air Policing Mission," *UK Defence Journal*, April 25, 2018, https://ukdefencejournal.org.uk/typhoons-return-to-black-sea-nato-air-policing-mission/ (accessed July 2, 2018).
201. Press TV, "UK Committing Jets, Troops to Deter 'Assertive Russia,'" November 9, 2017, http://www.presstv.com/Detail/2017/11/09/541565/UK-Williamson-NATO-Russia-Romania-Typhoon-jets (accessed July 2, 2018).
202. North Atlantic Treaty Organization, Resolute Support Mission, "Resolute Support Mission (RSM): Key Facts and Figures."
203. North Atlantic Treaty Organization, *The Secretary General's Annual Report: 2017*, p. 103.
204. North Atlantic Treaty Organization, Allied Maritime Command, "Standing NATO Mine Countermeasures Group Two (SNMCMG2)," https://mc.nato.int/snmcmg2.aspx (accessed July 2, 2018).
205. Helene Cooper, Thomas Gibbons-Neff, and Ben Hubbard, "U.S., Britain and France Strike Syria over Suspected Chemical Weapons Attack," *The New York Times*, April 13, 2018, https://www.nytimes.com/2018/04/13/world/middleeast/trump-strikes-syria-attack.html (accessed July 2, 2018).
206. Hannah Lucinda Smith, "Erdogan Orders Fresh Purge on Military Before Elections as Economic Slump Looms," *The Times*, April 20, 2018, https://www.thetimes.co.uk/article/erdogan-orders-fresh-purge-on-military-before-elections-as-economic-slump-looms-pl6j5jvfq (accessed May 9, 2018).
207. Ibid.
208. Peter Müller and Maximilian Popp, "Purges Have Weakened Once Mighty Turkish Military," *Spiegel Online*, January 18, 2017, http://www.spiegel.de/international/world/purges-have-weakened-once-mighty-turkish-military-a-1130494.html (accessed July 13, 2017).
209. Tulay Karadeniz and Tuvan Gumrukcu, "Turkey's Erdogan Sworn in with New Powers, Names Son-in-Law Finance Minister," Reuters, July 8, 2018, https://www.reuters.com/article/us-turkey-politics-erdogan/turkeys-erdogan-sworn-in-with-new-powers-names-son-in-law-finance-minister-idUSKBN1JY10S (accessed August 20, 2018).
210. Organization for Security and Co-operation in Europe, Office for Democratic Institutions and Human Rights, and Council of Europe, Parliamentary Assembly, "International Referendum Observation Mission, Republic of Turkey—Constitutional Referendum, 16 April 2017: Statement of Preliminary Findings and Conclusions," p. 1, http://www.osce.org/odihr/elections/turkey/311721?download=true (accessed July 13, 2017).
211. Reuters, "Turkey Says Russian S-400 Missile Delivery Brought Forward to July 2019," April 4, 2018, https://www.reuters.com/article/us-russia-turkey-missiles/turkey-says-russian-s-400-missile-delivery-brought-forward-to-july-2019-idUSKCN1HB0IU (accessed July 2, 2018).
212. Ibid.
213. "S-400 Missile System Purchase at Final Stage: Turkish Defense Minister," *Daily Sabah*, April 13, 2017, https://www.dailysabah.com/diplomacy/2017/04/13/s-400-missile-system-purchase-at-final-stage-turkish-defense-minister (accessed June 7, 2017).

214. Jamie McIntyre, "US to Turkey: You Can Buy Russian Air Defenses, but They Really Suck," *Washington Examiner*, April 19, 2018, https://www.washingtonexaminer.com/policy/defense-national-security/us-to-turkey-you-can-buy-russian-air-defenses-but-they-really-suck (accessed July 2, 2018).

215. Ibid.

216. Radio Free Europe/Radio Liberty, "Turkey Dismisses U.S. Warning Against Buying Russian Missile System," April 28, 2018, https://www.rferl.org/a/turkey-cavusoglu-dismisses-us-warning-against-buying-russian-2-400-missile-system-pompeo-done-deal/29197261.html (accessed July 2, 2018).

217. "Turkey Condemns Poison Attack on Ex-spy in UK," *Hurriyet Daily News*, March 27, 2018, http://www.hurriyetdailynews.com/turkey-condemns-poison-attack-on-ex-spy-in-uk-129378 (accessed July 2, 2018).

218. Suzan Fraser and Ayse Wieting, "Turkey, Russia Deepen Ties Amid Troubled Relations with West," *Chicago Tribune*, April 2, 2018, http://www.chicagotribune.com/news/nationworld/ct-turkey-russia-ties-20180402-story.html (accessed July 2, 2018).

219. Sune Engel Rasmussen, "Behind Turkey's Action in Syria: A Fear of Waning Influence," *The Wall Street Journal*, February 16, 2018, https://www.wsj.com/articles/behind-turkeys-actions-in-syria-a-fear-of-waning-influence-1518810799 (accessed July 2, 2018).

220. Radio Free Europe/Radio Liberty, "Erdogan Urges U.S. to Reverse Decision on Arming Syrian Kurds," last updated May 10, 2017, https://www.rferl.org/a/turkey-protests-us-arming-syria-kurds/28477965.html (accessed July 13, 2017).

221. David Gardner, Turkey's Action in Syria Threatens Fragile Alliance," *Financial Times*, January 24, 2018, https://www.ft.com/content/f7c3808a-fa19-11e7-9b32-d7d59aace167 (accessed May 9, 2018).

222. McIntyre, "US to Turkey: You Can Buy Russian Air Defenses, but They Really Suck."

223. Gordon Lubold, Felicia Schwartz, and Nancy A. Youssef, "U.S. Pares Back Use of Turkish Base Amid Strains with Ankara," *The Wall Street Journal*, updated March 11, 2018, https://www.wsj.com/articles/u-s-pares-back-use-of-turkish-base-amid-strains-with-ankara-1520766121?mod=e2twp (accessed July 2, 2018).

224. Ibid.

225. Ibid.

226. Oriana Pawlyk, "Air Force General Downplays Possible Restrictions at Incirlik," Military.com, March 18, 2018, https://www.military.com/daily-news/2018/03/18/air-force-general-plays-down-possibility-restrictions-incirlik.html (accessed July 2, 2018).

227. North Atlantic Treaty Organization, *The Secretary General's Annual Report: 2016*, p. 14; Deutsche Welle, "NATO Discussing Request for AWACS Surveillance Aircraft in Syrian Anti-'IS' Fight," January 22, 2016, http://www.dw.com/en/nato-discussing-request-for-awacs-surveillance-aircraft-in-syrian-anti-is-fight/a-18998325 (accessed June 7, 2017).

228. Ozgenur Sevinç, "Term of Spanish Patriot Missile in Turkey Extended Until June," *Daily Sabah*, January 8, 2018, https://www.dailysabah.com/politics/2018/01/09/term-of-spanish-patriot-missiles-in-turkey-extended-until-june (accessed July 2, 2018).

229. North Atlantic Treaty Organization, "Joint Press Conference with NATO Secretary General Jens Stoltenberg and the Minister of Foreign Affairs of Turkey, Mevlüt Çavuşoğlu," last updated April 17, 2018, https://www.nato.int/cps/en/natohq/opinions_153695.htm (accessed July 2, 2018).

230. North Atlantic Treaty Organization, "NATO Ballistic Missile Defense Architecture as of 2017," https://www.nato.int/nato_static_fl2014/assets/pictures/2016_07_160711a-infographics-bmd/20170907_170907-bmd03.jpg (accessed July 2, 2018).

231. North Atlantic Treaty Organization, "Joint Press Conference with NATO Secretary General Jens Stoltenberg and the Minister of Foreign Affairs of Turkey, Mevlüt Çavuşoğlu."

232. Ibid.

233. Joseph Trevithick. "The U.S. Army Wants to Expand a Secretive Missile Defense Site in Turkey," The War Zone, May 25, 2107, http://www.thedrive.com/the-war-zone/10638/the-u-s-army-wants-to-expand-a-secretive-missile-defense-site-in-turkey (accessed July 2, 2018).

234. North Atlantic Treaty Organization, Resolute Support Mission, "Resolute Support Mission (RSM): Key Facts and Figures."

235. North Atlantic Treaty Organization, *The Secretary General's Annual Report: 2017*, p. 103.

236. International Institute for Strategic Studies, *The Military Balance 2018*, p. 157.

237. International Institute for Strategic Studies, *The Military Balance 2016: The Annual Assessment of Global Military Capabilities and Defence Economics* (London: Routledge, 2016), pp. 147–148.

238. "Turkey Starts Construction of Third Reis-Class Submarine," *Naval Today*, February 27, 2018, https://navaltoday.com/2018/02/27/turkey-starts-construction-of-third-reis-class-submarine/ (accessed July 2, 2018).

239. Samuel Cranny-Evans and Lale Sariibrahimoglu," Turkey Upgrades M60A3 in Addition to M60T," Jane's 360, April 4, 2018, http://www.janes.com/article/79000/turkey-upgrades-m60a3-in-addition-to-m60t (accessed July 2, 2019).
240. Ibid.
241. Lale Sariibrahimoglu, "Turkey to No Longer Buy Foreign Defence Systems Except in Urgent Cases." Jane's 360, February 7, 2018, http://www.janes.com/article/77708/turkey-to-no-longer-buy-foreign-defence-systems-except-in-urgent-cases (accessed July 2, 2018).
242. News release, "Defence Expenditure of NATO Countries (2010–2017)," June 29, 2017, p. 8.
243. International Institute for Strategic Studies, *The Military Balance 2018*, p. 98.
244. Simon Newton, "Why NATO's Military Might Is Focused on Estonia," Forces Network, November 5, 2015, http://forces.tv/54579182 (accessed July 13, 2017).
245. Republic of Estonia, Ministry of Defence, and Republic of Estonia, Defence Forces, "National Defence Development Plan (2017–2026)," http://www.kaitseministeerium.ee/riigikaitse2026/arengukava/eng/ (accessed July 12, 2018).
246. Richard Tomkins, "Estonia Consolidates Military Procurement Process," United Press International, January 3, 2017, http://www.upi.com/Defense-News/2017/01/03/Estonia-consolidates-military-procurement-process/9171483458417/ (accessed July 2, 2018).
247. Jarolsław Adamowski, "Estonia Joins Finland in Howitzer Procurement," *Defense News*, February 6, 2017, http://www.defensenews.com/articles/estonia-joins-finland-in-howitzer-procurement (accessed June 7, 2017).
248. Tomkins, "Estonia Consolidates Military Procurement Process."
249. Associated Press, "Estonia to Buy Missiles, Air Defense System in $59M Deal," *Defense News*, June 12, 2018, https://www.defensenews.com/air/2018/06/12/estonia-to-buy-missiles-air-defense-system-in-50m-deal/ (accessed July 2, 2018).
250. Republic of Estonia, Ministry of Defence, and Republic of Estonia, Defence Forces, "National Defence Development Plan (2017–2026)."
251. Brooks Tigner, "Estonia to Incorporate Offensive Capabilities into Its Future Cyber Command," Jane's 360, December 1, 2017, http://www.janes.com/article/76115/estonia-to-incorporate-offensive-capabilities-into-its-future-cyber-command (accessed July 2, 2018).
252. U.S. Embassy in Estonia, "Signing of Defense Cooperation Agreement—Remarks by Ambassador James D. Melville," Tallinn, Estonia, January 17, 2017, https://ee.usembassy.gov/signing-defense-cooperation-agreement-remarks-ambassador-james-d-melville/ (accessed July 13, 2017).
253. John Vandiver, "US Special Ops to Get a Boost for Baltic Mission," *Stars and Stripes*, March 14, 2018, https://www.stripes.com/news/us-special-ops-to-get-a-boost-for-baltic-mission-1.516689 (accessed July 2, 2018).
254. International Institute for Strategic Studies, *The Military Balance 2018*, p. 122.
255. Latvian Public Broadcasting, "Latvia to Invest Annual €50m in Military Infrastructure 2018–2021," January 25, 2018, https://eng.lsm.lv/article/society/defense/latvia-to-invest-annual-50m-in-military-infrastructure-2018-2021.a265564/ (accessed July 2, 2018).
256. Raimonds Bergmanis, Minister of Defence, Republic of Latvia, "The National Defence Concept," approved by Cabinet of Ministers May 24, 2016, and adopted by Parliament June 16, 2016, p. 8, http://mepoforum.sk/wp-content/uploads/2017/01/Latvia-national-defence-concept-2016-en.pdf (accessed July 2, 2018).
257. Olevs Nikers, "Inside Latvia's New State Defense Concept: Riga Declares Its Military Ambitions Ahead of NATO Summit," Jamestown Foundation, *Eurasia Daily Monitor*, Vol. 13, Issue 104 (May 28, 2016), https://jamestown.org/program/inside-latvias-new-state-defense-concept-riga-declares-its-military-ambitions-ahead-of-nato-summit/ (accessed June 7, 2017).
258. Nicholas Fiorenza, "Latvia Plans to Spend EUR234 Million on Defence Procurement in 2018," Jane's 360, February 27, 2018, http://www.janes.com/article/78210/latvia-plans-to-spend-eur234-million-on-defence-procurement-in-2018 (accessed July 2, 2018),
259. Robin Hughes, "Latvia Takes Delivery of First TPS-77 MMR," Jane's 360, March 20, 2018, http://www.janes.com/article/78702/latvia-takes-delivery-of-first-tps-77-mmr (accessed July 2, 2018).
260. Gareth Jennings, "Latvia to Receive Puma UASs from US," Jane's 360, March 27, 2018, http://www.janes.com/article/78886/latvia-to-receive-puma-uass-from-us (accessed July 2, 2018).
261. International Institute for Strategic Studies, *The Military Balance 2018*, p. 122.
262. Remigiusz Wilk, "Latvia Invests in Military Infrastructure," Jane's 360, February 7, 2018, http://www.janes.com/article/77679/latvia-invests-in-military-infrastructure (accessed July 2, 2018).
263. International Institute for Strategic Studies, *The Military Balance 2018*, p. 124.
264. "Lithuania's Defence Budget: Expanded and Expanding," *The Baltic Times*, February 28, 2018, https://www.baltictimes.com/lithuania_s_defence_budget__expanded_and_expanding/ (accessed July 2, 2018).

265. North Atlantic Treaty Organization, *The Secretary General's Annual Report: 2017*, pp. 102–103.

266. "Lithuania's 2018 Defense Budget Should Be 2.06 pct of GDP," *The Baltic Times*, October 11, 2017, https://www.baltictimes.com/lithuania_s_2018_defense_budget_should_be_2_06_pct_of_gdp/ (accessed July 2, 2018).

267. State Security Department of the Republic of Lithuania and Second Investigation Department under the Ministry of National Defence, *National Threat Assessment 2018*, Vilnius, 2018, https://kam.lt/download/61270/eng.pdf (accessed July 2, 2018).

268. Republic of Lithuania, Ministry of National Defence, *Lithuanian Defense Policy*, White Paper, 2017, https://kam.lt/en/defence_policy_1053/important_documents/the_white_paper_on_lithuanian_defence_policy.html (accessed August 21, 2018).

269. "Lithuania PM Says Army Modernization Now More Important than Universal Conscription," *The Baltic Times*, February 8, 2018, https://www.baltictimes.com/lithuanian_pm_says_army_modernization_now_more_important_than_universal_conscription/ (accessed July 2, 2018).

270. Jaroslaw Adamowski, "Fear Factor: As Russia Looms Large, Baltics Up Military Capacity," *Defense News*, August 28, 2017, https://www.defensenews.com/smr/european-balance-of-power/2017/08/28/fear-factor-as-russia-looms-large-baltics-up-military-capacity/ (accessed July 2, 2018).

271. "1st Two Boxers Arrive in Lithuania," *The Baltic Times*, December 15, 2017, https://www.baltictimes.com/1st_two_boxers_arrive_in_lithuania/ (accessed July 2, 2018).

272. Reuters, "Norway to Surpass Russia as Lithuania's Top Gas Supplier in 2016," February 8, 2016, http://mobile.reuters.com/article/idUSL8N15N1UF (accessed June 9, 2017).

273. Reuters, "Lithuania Signs First Deal for U.S. LNG," June 26, 2017, http://mobile.reuters.com/article/amp/idUSKBN19H14M (accessed June 29, 2017).

274. Reuters, "Baltic States Agree to Link Their Power Grids to EU via Poland," May 8, 2017, http://www.voanews.com/a/baltic-states-to-link-power-grids-to-eu-via-poland/3843362.html?utm_source=dlvr.it&utm_medium=twitter (accessed June 9, 2017).

275. State Security Department of the Republic of Lithuania and Second Investigation Department under the Ministry of National Defence, *National Threat Assessment 2018*, p. 4.

276. Daniel Kochis, "Poland: The Lynchpin of Security on NATO's Front Lines," Heritage Foundation *Issue Brief* No. 4455, August 17, 2015, http://www.heritage.org/research/reports/2015/08/poland-the-lynchpin-of-security-on-natos-front-lines.

277. International Institute for Strategic Studies, *The Military Balance 2018*, p. 135.

278. Christian Davies, "New Polish Military Force Worries Political Opposition," *Politico*, November 16, 2016, http://www.politico.eu/article/new-polish-military-force-worries-political-opposition/ (accessed June 9, 2017).

279. International Institute for Strategic Studies, *The Military Balance 2018*, p. 135.

280. Charlie Gao, "This Is How Poland Plans to Fight Russia in a War," *The National Interest*, March 3, 2018, http://nationalinterest.org/blog/the-buzz/how-poland-plans-fight-russia-war-24731 (accessed July 2, 2018).

281. John R. Schindler, "Poland's Defense Minister Answers the Question: What Does Putin Want?" *Observer*, November 14, 2017, http://observer.com/2017/11/interview-polish-defense-minister-antoni-macierewicz-on-russia-nato/ (accessed July 2, 2018).

282. Gao, "This Is How Poland Plans to Fight Russia in a War."

283. Marek Strzelecki, "Poland Guts Military Command on NATO Front Line," *Stars and Stripes*, February 23, 2017, https://www.stripes.com/news/europe/poland-guts-military-command-on-nato-front-line-1.455528#.WRHPh4WcHcs (accessed June 9, 2017).

284. News release, "Defence Expenditure of NATO Countries (2010–2017)," March 15, 2018, p. 3.

285. Radio Poland, "Poland to Increase Defence Spending," April 25, 2017, http://www.thenews.pl/1/9/Artykul/304138,Poland-to-increase-defence-spending (accessed June 9, 2017).

286. Lidia Kelly, "Poland to Allocate Additional $55 Billion on Defense by 2032: Deputy Minister," Reuters, August 23, 2017, https://www.reuters.com/article/us-poland-military-spending-idUSKCN1B31AB (accessed July 2, 2018).

287. Lidia Kelly, "Poland Signs $4.75 Billion Deal for U.S. Patriot Missile System Facing Russia," Reuters, March 25, 2018, https://www.reuters.com/article/us-raytheon-poland-patriot/poland-united-states-sign-4-75-billion-deal-on-patriot-missiles-idUSKBN1H417S (accessed July 2, 2018).

288. Ibid.

289. Aaron Mehta, "Poland, Canada Join NATO Members in Potential Maritime Surveillance Aircraft Buy," *Defense News*, February 15, 2018, https://www.defensenews.com/smr/munich-security-forum/2018/02/15/poland-canada-join-nato-members-in-potential-maritime-surveillance-aircraft-buy/ (accessed July 2, 2018).

290. International Institute for Strategic Studies, *The Military Balance 2018*, p. 135.
291. North Atlantic Treaty Organization, Resolute Support Mission, "Resolute Support Mission (RSM): Key Facts and Figures."
292. Air Force Master Sgt. Benjamin Wilson, "Weather Station Supports Intelligence, Surveillance, Reconnaissance Mission," U.S. Central Command, May 1, 2017, http://www.centcom.mil/MEDIA/NEWS-ARTICLES/News-Article-View/Article/1168329/weather-station-supports-intelligence-surveillance-reconnaissance-mission/ (accessed July 3, 2018).
293. Kurdistan Regional Government, Representation in Poland, "Poland Sent F-16 Fighter Aircraft, 200 Soldiers to Iraq and Kuwait," June 20, 2016, http://poland.gov.krd/polski-polska-wysyla-sily-zbrojne-do-walki-z-isis/ (accessed July 3, 2018).
294. "Poland Taking over NATO Air-Policing Mission at Lithuanian Air Base from Netherlands," *The Baltic Times*, May 2, 2017, http://www.baltictimes.com/poland_taking_over_nato_air-policing_mission_at_lithuanian_air_base_from_netherlands/ (accessed July 3, 2018).
295. North Atlantic Treaty Organization, *The Secretary General's Annual Report: 2017*, pp. 13 and 104.
296. General Philip Breedlove, Commander, U.S. Forces Europe, statement before the Committee on Armed Services, U.S. Senate, March 1, 2016, pp. 18–19, https://www.armed-services.senate.gov/imo/media/doc/Breedlove_03-01-16.pdf (accessed July 13, 2017).
297. Steven Beardsley, "Hopeful for More Troops, US Scouts Basing Option in Germany," Deutsche Welle, March 9, 2017, http://www.dw.com/en/hopeful-for-more-troops-us-scouts-basing-options-in-germany/a-37871968 (accessed July 3, 2018).
298. U.S. European Command, Communication and Engagement Directorate, Media Operations Division, "U.S. Military Presence in Europe (1945–2016)," current as of May 26, 2016.
299. Breedlove, statement before the Committee on Armed Services, March 1, 2016, p. 20.
300. General Philip Breedlove, Commander, U.S. Forces Europe, statement prepared for the Committees on Armed Services, U.S. Senate and U.S. House of Representatives, April 1, 2014, p. 27.
301. John Vandiver, "EUCOM Gives 'Another Look' at Planned Base Closures," *Stars and Stripes*, April 17, 2017, http://www.military.com/daily-news/2017/04/17/eucom-gives-another-look-planned-base-closures.html (accessed June 12, 2017).
302. "US Army Considers New Base in Northern Germany," *The Local*, March 10, 2017, https://www.thelocal.de/20170310/us-army-to-deploy-more-soldiers-to-germany?utm_content=buffer59ce7&utm_medium=social&utm_source=twitter.com&utm_campaign=buffer (accessed June 12, 2017).
303. "US Destroyer Begins Third Forward Deployed Patrol from Spain," *Naval Today*, March 17, 2017, http://navaltoday.com/2017/03/17/us-destroyer-begins-third-forward-deployed-patrol-from-spain/ (accessed June 12, 2017).
304. Deutsche Welle, "Iceland Agrees to the Return of American Troops," June 30, 2016, http://www.dw.com/en/iceland-agrees-to-the-return-of-american-troops/a-19369461 (accessed July 12, 2017).
305. "U.S. Navy Receives 50th P-8A Poseidon," *Naval Today*, January 6, 2017, http://navaltoday.com/2017/01/06/u-s-navy-receives-50th-p-8a-poseidon/ (accessed June 12, 2017).
306. John Vandiver, "EUCOM Chief: 'We Are Not Keeping Pace' with Russia in Balkans, Arctic," *Stars and Stripes*, March 8, 2018, https://www.stripes.com/news/eucom-chief-we-are-not-keeping-pace-with-russia-in-balkans-arctic-1.515661 (accessed July 3, 2018).
307. *Hearing to Receive Testimony on United States European Command*, p. 41.
308. Thomas Nilsen, "Nuclear Submarines Inshore Norway 3 to 4 Times Monthly," *The Barents Observer*, January 27, 2018, https://thebarentsobserver.com/en/security/2018/01/nuclear-submarines-inshore-norway-3-4-times-monthly#.Wm9cD0kuCDM.twitter (accessed July 3, 2018).
309. Martin Egnash, "New Radar Extends Army's Vision in Europe as Eyes Turn to Russia," *Stars and Stripes*, April 7, 2017, https://www.stripes.com/news/new-radar-extends-army-s-vision-in-europe-as-eyes-turn-to-russia-1.462469#.WQyaeYWcHct (accessed June 12, 2017).
310. John Vandiver, "Army Air Defense Brigade Back in Europe in a Post-Cold War First," *Stars and Stripes*, April 2, 2017, https://www.stripes.com/news/army-air-defense-brigade-back-in-europe-in-a-post-cold-war-first-1.520007 (accessed July 3, 2018).
311. U.S. Air Force, U.S. Air Forces in Europe & Air Forces Africa, "Units," http://www.usafe.af.mil/units/ (accessed July 10, 2017).
312. Richard Sisk, "Turkey Hints at Shuttering Incirlik to US Air Operations," Military.com, January 4, 2017, https://www.military.com/daily-news/2017/01/04/turkey-hints-shuttering-incirlik-us-air-operations.html (accessed July 3, 2018).
313. U.S. European Command, "Our Forces: U.S. Air Forces in Europe," http://www.eucom.mil/about/organization/our-forces/u-s-air-forces-in-europe (accessed July 10, 2017).
314. Scaparrotti, statement on EUCOM posture, March 8, 2018.

315. U.S. European Command, "Our Forces: U.S. Marine Forces Europe," http://www.eucom.mil/about/organization/our-forces/u-s-marine-forces-europe (accessed July 12, 2017).
316. Hope Hodge Seck, "Marines May Move Even More Combat Gear into Norwegian Caves," Military.com, June 16, 2017, https://www.military.com/defensetech/2017/06/16/marines-combat-gear-norwegian-caves (accessed July 3, 2019).
317. Ibid.
318. Ryan Browne, "U.S. Stationing Tanks and Artillery in Classified Norwegian Caves," CNN, updated February 19, 2016, http://edition.cnn.com/2016/02/18/politics/u-s-tanks-artillery-norwegian-caves/ (accessed July 12, 2017).
319. Seck, "Marines May Move Even More Combat Gear into Norwegian Caves."
320. Ibid.
321. Hope Hodge Seck, "With MEU Delayed by Hurricane, Task Force Alone for Africa Response," Military.com, January 18, 2018, https://www.military.com/daily-news/2018/01/18/meu-delayed-hurricane-task-force-alone-africa-response.html (accessed July 3, 2018).
322. Michael S. Darnell, "Marines Cutting 6 Ospreys from Crisis Response Task Force," *Stars and Stripes*, May 4, 2016, https://www.stripes.com/news/marines-cutting-6-ospreys-from-crisis-response-task-force-1.407781#.WRs8CmgrLcs (accessed June 12, 2017).
323. Cheryl Pellerin, "U.S., Spain Agree to Make U.S. Crisis Force Deployment Permanent," U.S. Department of Defense, June 18, 2015, http://www.defense.gov/News/Article/Article/604842 (accessed June 12, 2017).
324. John Vandiver, "Special Forces, SEAL Units to Join Mix of Elite Troops at Rural Baumholder," *Stars and Stripes*, June 13, 2018, https://www.stripes.com/news/special-forces-seal-units-to-join-mix-of-elite-troops-at-rural-baumholder-1.532491 (accessed June 22, 2018).
325. U.S. Department of Defense, Office of the Secretary of Defense (Comptroller), *Department of Defense Budget Fiscal Year (FY) 2019: European Deterrence Initiative*, pp. 21–25.
326. Dan Stoutamire, "Romanian Air Base Proving Crucial as US Hub Ahead of Major Exercises," *Stars and Stripes*, April 18, 2017, https://www.stripes.com/news/romanian-air-base-proving-crucial-as-us-hub-ahead-of-major-exercises-1.464105#.WPZirOR1rcs (accessed June 12, 2017).
327. General Curtis M. Scaparrotti, Commander, United States European Command, statement before the Subcommittee on Military Construction, Veterans Affairs, and Related Agencies, Committee on Appropriations, U.S. Senate, May 2, 2017, unclassified "Resource Requirements—Addendum," p. [1], (accessed June 29, 2018).
328. Ibid., p. [2].