

Europe

After nearly a decade of attempted disengagement, the United States is beginning to reinvest military capability and political strength in Europe. The resurgence of Russia, brought into starkest relief in Ukraine, and the continued fight against the (IS) in Iraq, Syria, and Libya brought Europe back into the top tier of U.S. international interests. It is clear why the region matters to the U.S. 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.

Additionally, 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. Many of these ideas, the foundations on which America was built, were brought over by the millions of immigrants from Europe in the 17th, 18th, and 19th centuries. U.S. sacrifice for Europe has been dear. During the 20th century, millions of Americans fought for a free and secure Europe, and hundreds of thousands died.

America's economic ties to the region are likewise important. A stable, secure, and economically viable Europe is in America's economic interest. Regional security means economic viability and prosperity for both Europe and the U.S. For more than 70 years, the U.S. military presence in Europe has contributed to European stability, economically benefiting both Europeans and Americans. The economies of the 28 (soon to be 27) member states of the European Union (EU), along with the

United States, account for approximately half of the global economy. The U.S. and the members of the EU are each other's principal trading partners.

Geographical Proximity. Europe is 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 and up to the Caucasus through Russia and into the Arctic, Europe is ringed 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. Thus, European basing for U.S. forces provides the ability to respond robustly and quickly to challenges to U.S. interests in and near the region.

The Arctic. The *2017 Index of U.S. Military Strength* identified the Arctic as an important operating environment in Europe. This has not changed in the 2018 edition. If anything, Russian activity continues to increase tensions, while the U.S. remains poorly positioned to counter Russia's military buildup.

The Arctic region encompasses the lands and territorial waters of eight countries (Canada, Denmark, Finland, Iceland, Norway, Russia, Sweden, and the United States) spread across three continents. The region is home to some of the world's roughest terrain and waters and some of its harshest weather. The Arctic region is rich in minerals, wildlife, fish, and other natural resources and—importantly—hydrocarbons. Estimates that the region contains up to 13 percent of the world's undiscovered oil reserves and almost one-third of its undiscovered natural gas reserves may be low. In April

2017, the Norwegian Petroleum Directorate announced that the amount of undiscovered oil and gas in the Barents Sea is likely to be twice as large as previously estimated.²

The region represents one of the world's least populated areas, with sparse nomadic communities and very few large cities and towns. Although official population figures are nonexistent, the Nordic Council of Ministers estimates that the figure in 2013 was slightly in excess of 4 million,³ making the Arctic's population slightly bigger than Oregon's and slightly smaller than Kentucky's. Approximately half of the Arctic population lives in Russia, which is ranked 114th ("mostly unfree") out of 180 countries in the *2017 Index of Economic Freedom*.⁴

The melting of Arctic ice during the summer months presents challenges for the U.S. in terms of Arctic security, but it also provides new opportunities for economic development. Less ice will mean new shipping lanes, increased tourism, and further exploration for natural resources. Many of the shipping lanes currently used in the Arctic are a considerable distance from search and rescue facilities, and natural resource exploration that would be considered routine in other locations is complex, costly, and dangerous in the Arctic.

The economic incentives for exploiting these shipping lanes are substantial and will drive Arctic nations to press their interests in the region. For example, using the Northern Sea Route (NSR) along the Russian coast cuts the distance between Rotterdam and Shanghai by 22 percent and saves hundreds of thousands of dollars in fuel costs per ship, especially when oil prices are high. Unlike in the Gulf of Aden, no pirates are currently operating in the Arctic, and piracy is unlikely to be a problem in the future.

There is still a long way to go, however, before the NSR becomes a viable option. In 2016, 19 ships made the journey over the top of Russia,⁵ compared with the more than 16,833 that transited the Suez Canal,⁶ and carried only 214,513 tons of cargo.⁷ The NSR did see an increase in ships and cargo tonnage from

2015–2016, but volume remains well below the volume of just a few years ago. In 2013, 71 vessels carrying a total of 1,355,000 tons of cargo shipped along the route, indicating the unpredictability of future shipping trends in the Arctic.⁸ While shipments between Asian and European ports across the NSR remain minimal, shipments between ports along the NSR in 2016 were 35 percent higher than they were in 2015.⁹

In June 2015, Russia adopted an Integrated Development Plan for the Northern Sea Route 2015–2030. The plan outlines expectations that NSR shipping volume will reach 80 million tons by 2030.¹⁰ Although the current reality casts doubt on these projections, Russia considers the Arctic to be a region of special value and has accorded it high priority, going so far in 2016 as to give the Federal Security Service (FSB) full control of law enforcement activities along the NSR.¹¹

The U.S. has an interest in stability and security in the Arctic because the U.S. is one of the eight Arctic nations. The American commitment to NATO is also relevant because four of the five Arctic littoral powers are in NATO.¹² The U.S., however, is not well positioned in the region. According to Admiral Paul Zukunft, Commandant of the U.S. Coast Guard, "if you look at this Arctic game of chess, if you will, [the Russians have] got us at checkmate, right from the very beginning if it does become a militarized domain."¹³ The importance that each country places on operating in the Arctic is illustrated by the fact that Russia maintains a fleet of nearly 40 polar icebreakers, six of which are nuclear powered, while the U.S. Coast Guard sails only two—one of which is over 40 years old.¹⁴

Threats to Internal Stability. In recent years, Europe has faced turmoil and instability brought about by continued sluggish growth, high government debt, high unemployment, the threat of terrorist attacks, and a massive influx of migrants. Political fragmentation resulting from these pressures and disparate views on how to solve them threaten to erode stability even further.

Russia has sought to seed and inflame discord by weaponizing migrant flows. Former EUCOM Commander General Philip Breedlove said in 2016 that by intentionally targeting civilians in Syria, “Russia and the Assad regime are deliberately weaponizing migration in an attempt to overwhelm European structures and break European resolve.”¹⁵ The migrant crisis was partly a result of Russian actions, and the humanitarian, political, security, and societal ripples are only beginning to extend outward. Denmark’s Defense Minister has underscored how Russian efforts to sow political fragmentation work: “[The Russians] know about internal relations between different NATO countries and are good at fingering sore points.”¹⁶

Economic freedom in the eurozone is seriously undermined by the excessive government spending needed to support elaborate welfare states. Many eurozone countries pursue economic policies that hinder productivity growth and job creation, causing economic stagnation and rapidly increasing levels of public debt. Underperforming countries have not made the structural reforms needed for long-term adjustment. When asked to judge the current state of their national economies, 56 percent of respondents in the EU and 60 percent of respondents in the eurozone characterized it as “totally bad.”¹⁷ Investors are also pessimistic; a recent survey found that “one out of four investors now believes that at least one euro zone member state will quit the single currency in the next 12 months.”¹⁸ European leaders are desperately seeking a way to keep the eurozone together without addressing the root causes of the crisis.

Many among Europe’s political elite believe that deeper European integration, not prudent economic policies, is the answer to Europe’s problem, but there has been a public backlash against deeper political and economic integration across much of Europe. In a June 2016 referendum on EU membership, the United Kingdom voted to leave the European Union. In April 2016, Dutch voters voted against approving an EU–Ukraine Association agreement in a

countrywide referendum, largely seen as a protest vote against the EU. Dissatisfaction with the EU is also evident in France where about half of its voters cast their ballots in the first round of presidential elections 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.¹⁹ This outcome is hardly surprising; according to a 2016 Eurobarometer Poll, only 29 percent of people in France have a wholly positive view of the EU, and 31 percent have a negative view.²⁰

In 2016, the eurozone grew by 1.8 percent,²¹ a rate virtually unchanged from 2015’s 1.7 percent. As slow recovery has taken hold, the manufacturing sector is performing especially well.²² Growth and employment disparities, however, remain problematic. Unemployment across the 19-country bloc stands at 9.5 percent, the lowest rate since January 2009 but still very high. Greece has the highest unemployment rate in the EU: 23.1 percent; Spain’s is 18.0 percent. And youth unemployment in the eurozone is 19.4 percent but reaches 45.2 percent in Greece, 41.5 percent in Spain, 35.2 percent in Italy, 28.8 percent in Croatia, and 25.4 percent in Portugal.²³

In addition, Europe’s banking sector is burdened by \$1.2 trillion in nonperforming loans—three times the amount held by the U.S. banking sector.²⁴ The Italian banking sector’s woes are especially troubling. In February, Italy’s Parliament approved a law giving \$21 billion in taxpayer money to help prop up troubled banks.²⁵ 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.

Since 2015, the continent has also had to deal with a large migrant crisis. 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. While a tenuous agreement with Turkey in March 2016 has largely capped migrant flows through the Balkans and Greece, arrivals have not stopped altogether. Rather, they have decreased and shifted to a different theater.

In the first three months of 2017, over 20,000 migrants arrived in Europe via the Mediterranean Sea, 80 percent landing in Italy.²⁶ This represents a significant drop from the first three months of 2016, when over 160,000 migrants arrived via the Mediterranean, yet the numbers are still significant. Instability in Libya, significant flows of migrants traveling from sub-Saharan Africa, and the relative closure of the route to Europe through Turkey mean that flows from North Africa are currently the primary route for migrants arriving in Europe. According to the EU's Frontex border agency, "While the number of migrants from Asia and the Middle East decreased, 2016 was marked with an increase in migratory pressure from Africa, in particular on the route from Libya to Italy." Frontex also notes that although 2016 saw a decrease in illegal border crossings from the previous year, the 511,371 detections of illegal border crossings in 2016 remains well above the 282,933 in 2014, the year before the migrant crisis began in earnest.²⁷

The migrant crisis and the response of European governments have led to some increased instability. They have buoyed fringe political parties in some European nations and already have imposed financial, security, and societal costs. In Germany, for example, the Federal Ministry of Finance expects to spend over \$86 billion from 2017–2020 "feeding, housing and training refugees as well as helping their home countries to stem the flow."²⁸ The Swedish government will spend at least €6.1 billion (approximately \$7.9 billion) a year on migrants until 2020, well above initial estimates.²⁹

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.³⁰ 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 on to the Greek and Turkish coast guards and to Frontex.³¹

Europe has also faced a series of terrorist attacks over the past year including a Christmas market attack in Berlin and high-profile attacks in London, Nice, and Stockholm. In May, 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.³² 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 U.S. facilities overseas. In April 2016, for example, an IS sympathizer was convicted in the United Kingdom of planning to carry out terrorist attacks on U.S. military personnel stationed in the U.K.³³

U.S. Returning to Europe. Continued Russian aggression in Ukraine and more aggressive air and naval patrolling incidents in the Baltic Sea region have 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."³⁴ 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, the U.S. returned a rotational armored brigade combat team (BCT) in January 2017. Moving 4,000 soldiers and 90 tanks back to Europe for a scheduled nine-month deployment exposed some logistics shortcomings.³⁵ Units from the BCT deployed to Bulgaria, Germany, Poland, Romania, and initially to the Baltic States.³⁶ Major General Timothy McGuire, Deputy Commanding General, U.S. Army Europe, characterized the deployment as "a tangible sign of the United

States' commitment to maintaining peace on this continent.”³⁷ The BCT's training with allies included taking part in the Saber Guardian 17 exercises, which consisted of 40,000 troops from over 20 nations.³⁸

It is important to note that basing limitations and the cost of permanently stationing large units overseas (especially when accompanied by families) led the Army to adopt a heel-to-toe rotational policy, according to which an armor brigade will arrive to replace one going back to the U.S. so that there is no break in coverage. The first iterations of this new policy revealed how much had been forgotten about the skills needed to execute such a deployment. Before its anticipated deployment in September 2017, for example, Dagger Brigade reportedly faced both equipment and manpower issues that made preparing for deployment especially challenging.³⁹

In addition to back-to-back rotations of armor, the U.S. deployed an Aviation Brigade consisting of 2,200 soldiers and 86 aircraft for a nine-month rotation beginning in February 2017.⁴⁰ Based in Germany, the aviation brigade forward deployed five Black Hawks and 50 troops to Lielvarde Air Base in Latvia and five Black Hawks and 50 troops to Mihail Kogalniceanu Air Base in Romania. In April, eight F-35As deployed overseas for the first time to the U.K. for month-long training and maneuvers with British and Dutch forces.⁴¹ At the end of April, two F-35s arrived at Amari airbase in Estonia for exercises.⁴² The same month, a training deployment brought two F-35s to Bulgaria.⁴³ According to General Scaparrotti, the F-35 deployment “shows we are serious about territorial integrity and will defend our interests with the most advanced capabilities our nation has to offer.”⁴⁴

The U.S. Army has prepositioned additional equipment across Europe as part of Operation Atlantic Resolve. A prepositioning site in Eysgelshoven, 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.”⁴⁵ A second site in Dülmen,

Germany, opened in May 2017 and will hold equipment for an artillery brigade.⁴⁶ 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 2021.⁴⁷

The naval component of OAR 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. For example, BALTOPS 2016, the 44th iteration of exercises across the Baltic Sea region, involved more than 5,000 personnel, 43 ships, and more than 60 aircraft from Belgium, Denmark, Estonia, Finland, France, Germany, Italy, Latvia, Lithuania, the Netherlands, Norway, Poland, Portugal, Spain, Sweden, the United Kingdom, and the United States.⁴⁸

In June 2014, in an effort to bolster OAR's transatlantic security measures, the U.S. announced a \$1 billion European Reassurance Initiative (ERI). For fiscal year (FY) 2017, the Obama Administration proposed that ERI funding be increased to \$3.4 billion,⁴⁹ but a continuing resolution (CR) for FY 2017 hampered some ERI efforts and fostered uncertainty. A practical example is the addition of a 30mm cannon to Stryker vehicles. The upgraded vehicles for the “dragoons” resulted from a recognition that Russian upgrades have placed U.S. forces at an “unacceptable risk” without the cannon upgrade.⁵⁰ However, ammunition for the cannon is considered a new program and cannot be started under a CR. Colonel Glenn Dean, Program Manager for the Army's Stryker brigade combat team at Program Executive Office Ground Combat Systems, warned in April that “if the CR does not lift next month I will not have combat ammunition when I field that vehicle next year.”⁵¹ A budget request submitted in May sought \$4.8 billion in ERI funds, an increase of \$1.4 billion.⁵²

Testifying in March 2017, General Scaparrotti was clear about the importance of ERI funding for returning to a posture of deterrence:

Thanks in large measure to ERI, over the last 12 months EUCOM has made demonstrable progress. U.S. tanks have returned to European soil. U.S. F-15s and F-22s have demonstrated air dominance throughout the theater. U.S. naval forces have sailed throughout European waters. EUCOM has operationalized its Joint Cyber Center. With the approval of former Secretary [Ashton] Carter, EUCOM delivered the first new operational plan for the defense of Europe in over 25 years.

ERI also supports high-end exercises and training, improved infrastructure, and enhanced prepositioning of equipment and supplies, while State Department and DOD funds build partner capacity throughout Europe.⁵³

EUCOM states that ERI funding in 2017 will expand the scope of the “28 joint and multinational exercises, which annually train more than 18,000 U.S. personnel alongside 45,000 NATO Allies and Partnership for Peace personnel across 40 countries.”⁵⁴ In 2016, the U.S. Air Force alone took part in 50 exercises and training deployments in the region.⁵⁵ In April 2017, U.S. F-22s and F-35s exercised in Virginia with Royal Air Force Typhoons and French Rafales to improve air combat integration involving advanced aircraft.⁵⁶ In June, U.S., British, Polish, Lithuanian, and Croatian troops taking part in Saber Strike 17 exercised securing the Suwalki Gap for the first time.⁵⁷

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.⁵⁸

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 2020.⁵⁹ Canada, Estonia, Latvia, Lithuania, and the U.K. also participate in JMTG–U.⁶⁰ The U.S. also participates in the Ukrainian-hosted peacekeeping exercise Rapid Trident and the naval exercise Sea Breeze, held in the Black Sea.⁶¹

Nevertheless, U.S. commanders still do not have everything they need for proper deterrence. General Scaparrotti has testified that “I need intelligence, surveillance and reconnaissance in greater numbers than I have now because to deter properly I have to be able to have a good base line of Russia, in particular, so I know when things change and can posture my forces properly.”⁶² Because Russian exercises could provide cover for a planned invasion, the U.S. increased its presence in the Baltic region during Russia’s planned Zapad exercises in September, including taking over air policing, positioning more ships in the Baltic Sea, and potentially deploying a Patriot missile battery temporarily to Lithuania.⁶³

There also are nonmilitary threats to the territorial integrity of NATO countries that the alliance has only recently begun to find ways to address. The most likely threat may come not from Russian tanks rolling into a country but from Russian money, propaganda, and establishment of pro-Russia NGOs and other advocacy groups, all of which can be leveraged to undermine a state. Russia’s aggressive actions in Ukraine have proven how effective these asymmetrical methods can be in creating instability, especially when coupled with conventional power projection.

U.S. Nuclear Weapons in Europe. The U.S. maintains tactical 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.⁶⁴

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 it is anticipated will add at least 20 years to their life span.⁶⁵ In March 2017, the U.S. carried out a successful test 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 US strategic nuclear triad well into the future for both bombers and dual-capable aircraft supporting North Atlantic Treaty Organization (NATO)."⁶⁶

In addition, NATO is a nuclear alliance. According to its July 2016 Warsaw Summit Communiqué:

The circumstances in which NATO might have to use nuclear weapons are extremely remote. If the fundamental security of any of its members were to be threatened however, NATO has the capabilities and resolve to impose costs on an adversary that would be unacceptable and far outweigh the benefits that an adversary could hope to achieve.⁶⁷

Important Alliances and Bilateral Relations in Europe

The United States has a number of important multilateral and bilateral relationships in Europe. First and foremost is NATO, the world's most important and arguably most successful defense alliance, but other relationships also have a significant impact on the ability of the U.S. to operate in and through the European region.

The North Atlantic Treaty Organization.

NATO is an intergovernmental, multilateral security organization originally designed to defend Western Europe from the Soviet Union. It is the organization that 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.

Beginning in 2002, when alliance operations began in Afghanistan, NATO turned its focus toward out-of-area operations, including counterpiracy operations off the Horn of

Africa and an intervention in Libya that led to the toppling of Muammar Qadhafi. More recently, Russian aggression has led to a renewed focus within NATO on collective defense alongside moderate increases in defense spending for some European NATO members.

NATO continues to refocus on collective defense, while some voices within the alliance are arguing for a greater focus on counterterrorism.⁶⁸ In February 2016, at the request of Germany, Greece, and Turkey, NATO's Standing NATO Maritime Group 2 (SNMG2) deployed to the Aegean Sea to help stop illicit trafficking in people, drugs, weapons, and other contraband in the Mediterranean. In October 2016, NATO's Operation Active Endeavor, created in 2011, was terminated and was succeeded by Operation Sea Guardian, which has a mission of "maritime situational awareness, counterterrorism and capacity building."⁶⁹

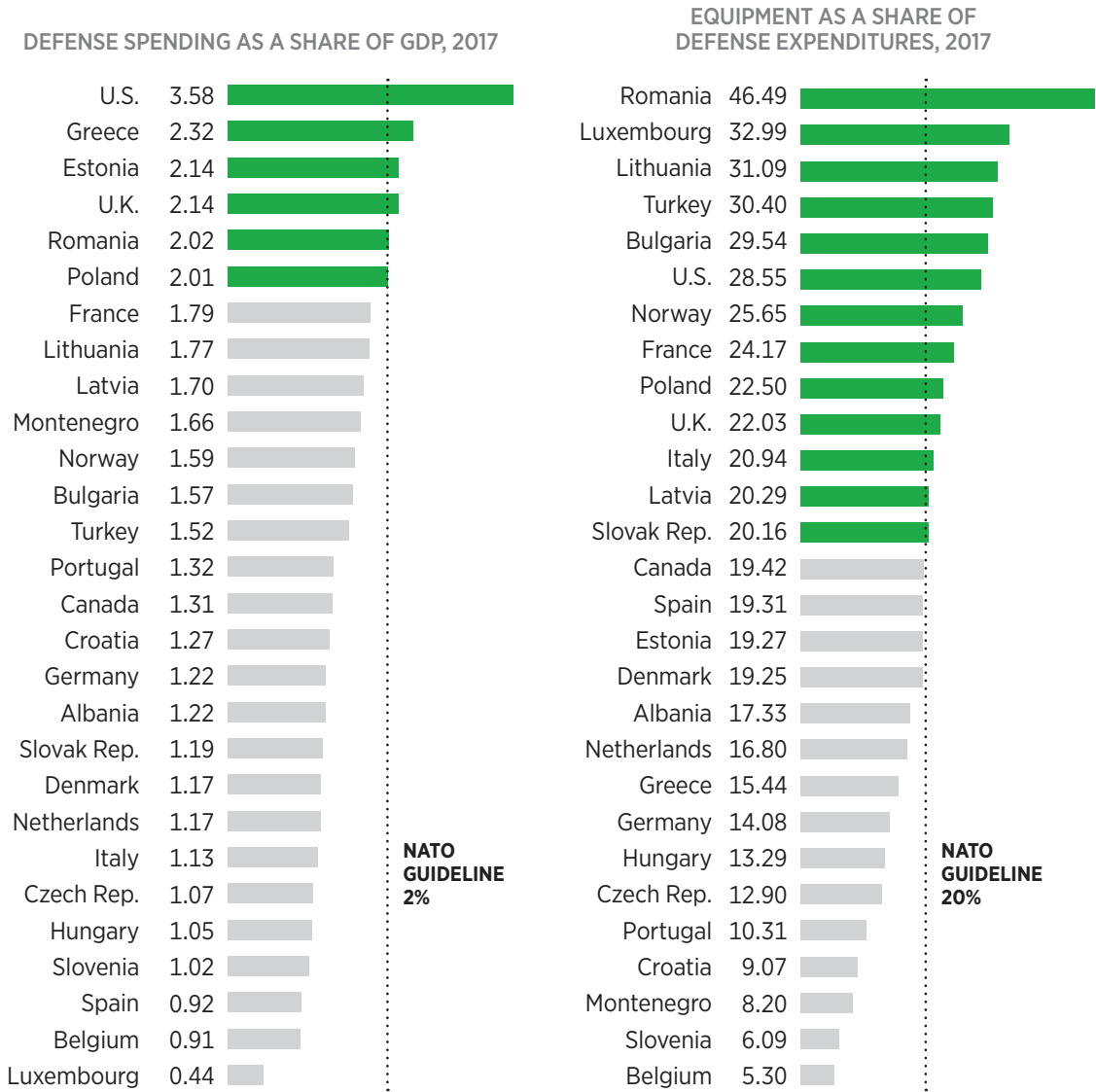
Despite the ongoing debate within the alliance over the degree of threat posed by migrant flows and illicit activity in the Mediterranean Sea versus that of Russian aggression, it is clear that NATO continues to view Russia as a threat.⁷⁰

The shift back to collective defense began at the 2014 Wales summit, when the alliance introduced a Readiness Action Plan (RAP) 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."⁷¹ As part of the RAP, following the 2014 Wales summit, NATO announced the creation of a Very High Readiness Joint Task Force (VJTF), "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."⁷² A rotational plan for the VJTF's land component was established to maintain this capability through 2023.⁷³ The VJTF also represents a significant improvement in deployment time. Part of the VJTF can deploy within 48 hours, a marked improvement over the month the VJTF's predecessor, the Immediate Response Force, needed to deploy.⁷⁴ According

CHART 1

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 four of the 28 countries—the U.S., the U.K., Poland, and Romania—do both.



NOTES: Figures are estimates for 2017 based on 2010 prices and exchange rates. Iceland is not listed because it has no military.
SOURCE: NATO, "Defence Expenditures of NATO Countries (2010–2017)," June 29, 2017, p. 3, http://www.nato.int/nato_static_fl2014/assets/pdf/pdf_2017_06/20170629_170629-pr2017-111-en.pdf (accessed July 25, 2017).

to an assessment published by the Norwegian Institute of International Affairs, the entire NATO Response Force (NRF), of which the VJTF is a part, 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.”⁷⁵

This does not mean, however, that the VJTF and NRF are without their problems. For instance, NATO reportedly believes that the VJTF would be too vulnerable during its deployment phase to be utilized in Poland or the Baltics.⁷⁶ Another concern is the 26,000 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.⁷⁷

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). In Estonia, the United Kingdom serves as the framework nation, with contributions from France in 2017 and Denmark in 2018. In Latvia, Canada is the framework nation, with Albania, Italy, Poland, Slovenia, Slovakia,⁷⁸ and Spain providing contributions. Germany serves as the framework nation in Lithuania, with contributions from Belgium, Luxembourg, the Netherlands, Norway, and Croatia and France beginning in 2018. In Poland, the United States serves as the framework nation, with Romania and the United Kingdom contributing troops.⁷⁹ EFP troops are under NATO command and control; a multinational divisional headquarters will be created in Elblag, Poland, to coordinate the battalions.⁸⁰ In February, the Baltic States signed an agreement to facilitate the movement of NATO forces among the countries.⁸¹

At its July 2016 Warsaw Summit, NATO agreed to create a multinational framework brigade based in Craiova, Romania, under the control of Headquarters Multinational Division Southeast.⁸² In February 2017, following a defense minister–level meeting of the North

Atlantic Council, NATO Secretary General Jens Stoltenberg announced that “[e]ight Allies have committed to provide brigade staff. And five Allies have committed land and air forces for training and air policing.” Stoltenberg also announced new maritime measures that include “an increased NATO naval presence in the Black Sea for enhanced training, exercises and situational awareness, and a maritime coordination function for our Standing Naval Forces when operating with other Allied forces in the Black Sea region.”⁸³ In April 2017, four Royal Air Force Typhoons arrived in Romania for a four-month air policing deployment.⁸⁴

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. NATO has expressed plans to spend \$3.24 billion “to upgrade its satellite and computer technology over the next three years.”⁸⁵

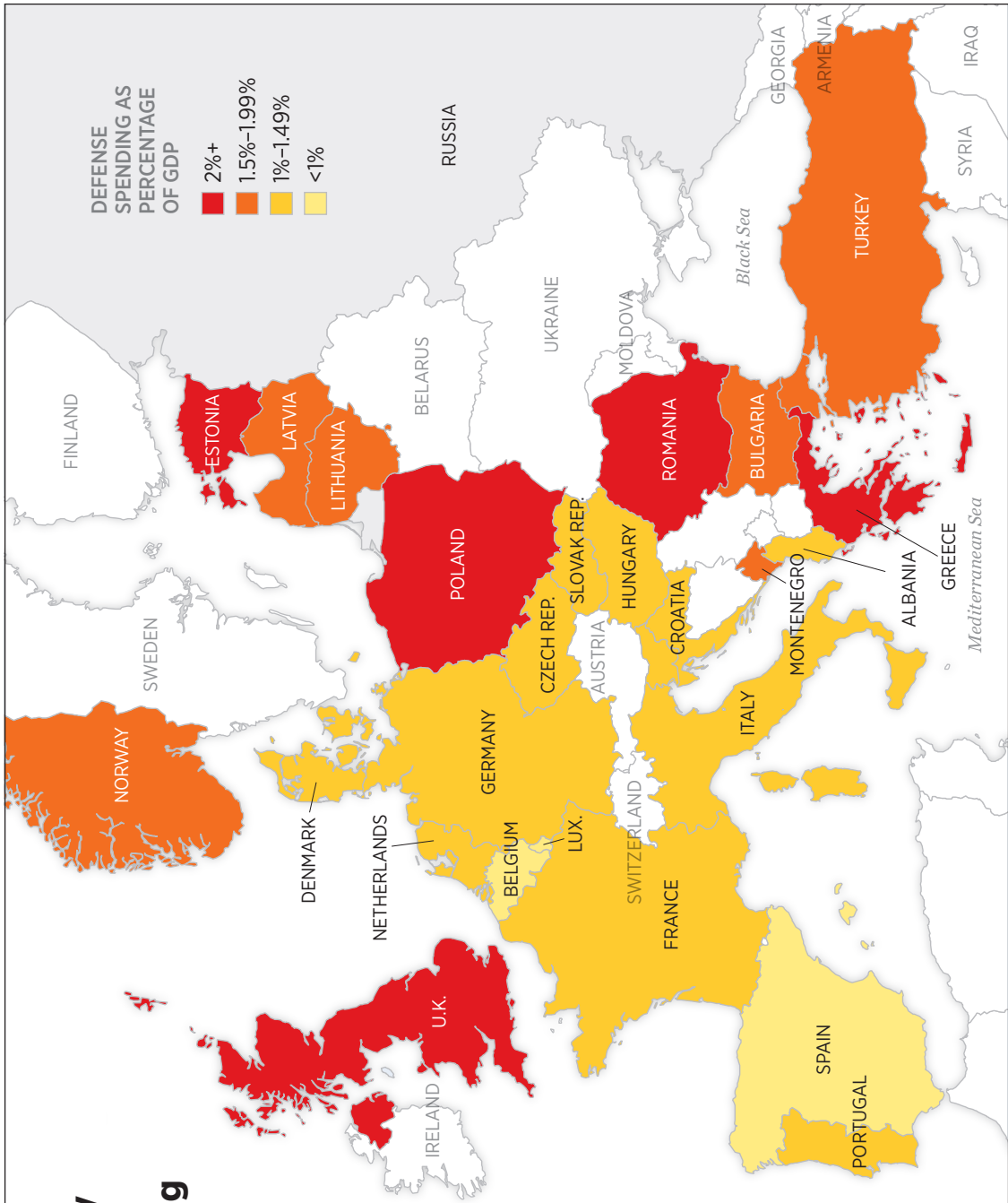
The broad threat that Russia poses to Europe’s common interests makes military-to-military cooperation, interoperability, and overall preparedness for joint warfighting especially important in Europe, yet they are not uniformly implemented. For example, day-to-day interaction between U.S. and allied officer corps and joint preparedness exercises have been more regular with Western European militaries than with frontier allies in Central Europe, although the crisis in Ukraine has led to new exercises with eastern NATO nations. In the event of a national security crisis in Europe, first contact with an adversary might still expose America’s lack of familiarity with allied warfighting capabilities, doctrines, and operational methods.

Ballistic Missile Defense. At the Warsaw summit, NATO announced the initial operating capability of the Ballistic Missile Defense (BMD) system.⁸⁶ An Aegis Ashore site in Deveselu, Romania, became operational in May 2016.⁸⁷ Other components include a forward-based early-warning BMD radar at Kürecik, Turkey; BMD-capable U.S. Aegis ships forward deployed at Rota, Spain;⁸⁸ and a second Aegis Ashore site in Redzikowo, Poland, which broke

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)," June 29, 2017, p. 3, http://www.nato.int/nato_static_f2014/assets/pdf/pdf_2017_06/20170629_170629-pr2017-111-en.pdf (accessed July 25, 2017).

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ground in May 2016 and is expected to be operational next year.⁸⁹ Ramstein Air Base in Germany hosts a command and control center.⁹⁰

In January, the Russian embassy in Norway threatened that if the country contributes ships or radar to NATO BMD, Russia “will have to react to defend our security.”⁹¹ 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.”⁹²

In 2011, the Netherlands announced “plans to upgrade four air-defense frigates with extended long-range missile defense early-warning radars.”⁹³ A decision on a BMD upgrade path for Dutch *Iver Huitfeldt*-class frigates is expected next year according to Chief of the Naval Staff Rear Admiral Frank Trojahn.⁹⁴ 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.⁹⁵ In November 2015, the U.K. stated that it plans to build new ground-based BMD radar as a contribution.⁹⁶ It also has been reported that Belgium intends to procure M-class frigates that “will be able to engage ex-atmospheric ballistic missiles.”⁹⁷ Belgium and the Netherlands are jointly procuring the frigates, although the Dutch position on BMD capabilities is not entirely clear. NATO BMD is expected to be fully operational by 2025.⁹⁸

Quality of Armed Forces in the Region

As an intergovernmental security alliance, NATO is only as strong as its member states. Of NATO’s 29 members, 27 are European. European countries collectively have more than 2 million men and women in uniform, yet by some estimates, only 100,000 of them—a mere 5 percent—have the capability to deploy beyond their national borders.⁹⁹

A 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. There are also 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.”¹⁰⁰

Article 3 of the 1949 North Atlantic Treaty, NATO’s founding document, states that members at a minimum will “maintain and develop their individual and collective capacity to resist armed attack.”¹⁰¹ Only a handful of NATO members can say that they are living up to their Article 3 commitment. In 2016, only five of 28 NATO member states (Estonia, Greece, Poland, the U.S., and the U.K.) spent the required 2 percent of gross domestic product (GDP) on defense.¹⁰² Recently, NATO total defense expenditures have moved in an upward direction. In 2015, 15 NATO members increased defense spending in real terms; in 2016, 16 NATO allies raised defense spending as a share of GDP. Put another way, in 2016, NATO members collectively increased spending by 3.8 percent, or \$10 billion (not including the U.S.).¹⁰³ The number of members meeting the 2 percent benchmark is expected to increase to eight by 2018 with Latvia, Lithuania, and Romania meeting the benchmark.

Germany. Germany took a major step forward within NATO by serving as the framework nation for the EFP in Lithuania. Germany has 450 troops and 200 vehicles, including 30 tanks, stationed there.¹⁰⁴ In addition to stationing troops in the Baltics, Germany is the second largest contributor to NATO’s Kosovo Force (KFOR) mission and the third largest

contributor to the Resolute Support mission in Afghanistan.¹⁰⁵ German troops also contribute to NATO's Very High Readiness Joint Task Force, as well as to Baltic Air Policing, with Germany's air force completing back-to-back deployments out of Amari Air Base in Estonia beginning in August 2016.¹⁰⁶

In November, the Bundestag approved a yearlong extension of the mandate for Germany to participate in missions against IS in the Middle East. Six German Tornados fly reconnaissance missions out of Incirlik Air Base in Turkey. A German refueling tanker also flies out of Incirlik.¹⁰⁷ In 2016, German Tornados flew 692 missions and the tanker aircraft flew 315 missions in support of the anti-IS coalition. Germans also have crewed participating AWACS aircraft and have helped to train and equip Peshmerga forces in Iraq.¹⁰⁸ Despite tensions with Turkey, 240 German soldiers remain based at Incirlik, and a further 15–20 Germans stationed at Konya air base are taking part in NATO AWACS missions.¹⁰⁹ However, German contributions come with caveats. According to one report, “German forces are not authorized for combat missions and the contribution is capped at 1,200 soldiers.”¹¹⁰

In 2017, Germany increased its defense spending by €2 billion, although overall spending reached only 1.22 percent of GDP; spending on equipment increased from 14.5 percent in 2016 to 16.2 percent in 2017 but was still below the NATO benchmark of 20 percent.¹¹¹ The German Bundeswehr plans to have spent €130 billion on armaments by 2030.¹¹² In May 2017, the government announced an \$832 million contract to upgrade 102 Leopard 2 tanks from 2019–2023.¹¹³ According to an inspector general's report, however, only 38 percent of Tornado fighters and 52 percent of Eurofighters are fully operational, only one of three A400M Transport Aircraft and four of 14 Mk 41 Sea King helicopters are fully operational, and the Sea Kings are so outdated that repairs must rely on “unconventional spare parts.” Army systems are generally in better condition; 79 percent of Germany's Leopard 2 Main Battle Tanks are fully operational.¹¹⁴

Germany's military faces institutional challenges to procurement, including an understaffed procurement office and the need for special approval by a parliamentary budget committee for any expenditure of more than €25 million.¹¹⁵ In recent years, Germany has put in place a number of joint procurement agreements:

Joint procurement and maintenance programs with Norway on submarines, Lockheed transport aircraft with France, tanker aircraft with Benelux and Norway and drones with France and Italy are all under way. While not all details on these plans are fixed, the defense spending on aircrafts and submarines alone will amount to several billion euros. In addition, Germany is creating joint military structures together with Romania and the Czech Republic. With the United Kingdom, Berlin is currently working on a defense roadmap to deepen cooperation.¹¹⁶

In February, Germany and Norway announced joint development and procurement of naval anti-surface missiles.¹¹⁷ In October, Germany announced plans to purchase five corvettes for its Navy at a total cost of €1.5 billion.¹¹⁸

The Bundeswehr plans to add 5,000 new soldiers to its ranks along with 1,000 civilians and 500 reservists by 2024.¹¹⁹ In April 2017, the Bundeswehr established a new cyber command, which initially will consist of 260 staff but eventually will number around 13,500 by the time it becomes fully operational in 2021.¹²⁰ The Army is a consistent target of cyber-attacks and was subjected to 284,000 such attacks within the first nine weeks of 2017 alone, according to new cyber command head Ludwig Leinhos.¹²¹

In February, Germany decided to replace its short-range air defense systems, a move that could cost as much as €3.3 billion by 2030; once complete, the upgrade will help to close a gap in Europe's short-range air defense weapons identified in 2016.¹²² A report that surfaced in May revealed problems with the procurement of A400M cargo aircraft and has raised questions about whether or not Germany will

have replacement transport aircraft ready by 2021, the year its C-160 fleet is due to be retired.¹²³

Germany also faces the financial and security challenges associated with a very large influx of migrants. In April, Chancellor Angela Merkel stated there was “no doubt” that some refugees are a security threat to Germany.¹²⁴ The country spent €21.7 billion on migrants in 2016, funds that otherwise might have been spent on military capabilities more directly relevant to NATO.¹²⁵

Although Germany is beginning to take on a larger role within NATO and has taken some decisions to strengthen its military capabilities, the 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.”¹²⁶ As long as the public appetite for greater investment in defense and a greater role for Germany as a military power remains tepid, the country will continue to punch below its weight in the security realm.

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. Whether current levels of funding will be sustained, however, is not certain. In July, French Chief of Defense General Pierre de Villiers resigned because of President Emmanuel Macron’s budget plan, which would cut military spending by \$979 million.¹²⁷

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, as well as to invest €1 billion in this effort, by 2019.¹²⁸ French Defense Minister Jean-Yves Le Drian stated in December that “[t]he threats will grow. The frequency and sophistication of attacks is increasing without respite.”¹²⁹ The French Ministry of Defense faced 24,000

external attacks in 2016, double the number faced in 2015.¹³⁰

France withdrew the last of its troops from Afghanistan at the end of 2014, although all French combat troops had left in 2012. All told, France lost 89 soldiers and had 700 wounded in Afghanistan.¹³¹ In September 2014, France launched Opération Chammal, the name given to the French contribution to the campaign against the so-called Islamic State. France currently has 1,200 soldiers deployed in Opération Chammal.¹³² As of the end of January 2017, French planes operating from bases in Jordan and the United Arab Emirates, along with naval aircraft launched from the aircraft carrier *Charles De Gaulle*, had dropped 2,300 bombs against the IS, twice as many as French forces dropped during operations in Libya in 2011.¹³³ French artillery has taken part in supporting the ground offensive against the IS since September 2016.¹³⁴ The pace of the Chammal operation is having a deleterious impact on French forces according to French Air Force Chief of Staff Andre Lanata. 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.”¹³⁵

In Europe, France has deployed 300 troops, along with infantry fighting vehicles and Leclerc main battle tanks, to Estonia,¹³⁶ contributing to NATO’s Enhanced Forward Presence. French troops will deploy to Lithuania in 2018 as part of the battlegroup stationed in that nation.¹³⁷ In addition, 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.¹³⁸ France also has over 1,450 troops in Djibouti, along with Mirage fighters, and troops in Côte d’Ivoire, Gabon, and Senegal.¹³⁹

France recently added 11,000 soldiers to its Army.¹⁴⁰ In January 2015, France launched Operation Sentinelle, deploying 11,000 troops to protect the country from terrorist attacks; it is

the largest operational commitment for French forces.¹⁴¹ 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.¹⁴² Along with its successes, however, the operation has placed significant strains on French forces. In a typical year, French soldiers deploy for eight months, two of them as part of Operation Sentinelle. To counteract the strain, the government extended deployment pay to soldiers taking part in Sentinelle and created a new “medal for Protection of the Territory” for troops deployed for 60 days in Sentinelle.¹⁴³

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. Then-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 then-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.”¹⁴⁴

Since the 9/11 terrorist attacks, the United Kingdom has proven itself to be America’s number one military partner. For example, Britain provided 46,000 troops for the 2003 invasion of Iraq. At the height of this commitment, the U.K. also deployed 10,000 troops to one of the deadliest parts of Afghanistan—an area that at its peak accounted for 20 percent of the country’s total violence—while many other NATO allies operated in the relative safety of the North.

In 2015, the U.K. conducted a defense review, 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,¹⁴⁵ 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.¹⁴⁶ 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. Defense Secretary Michael Fallon stated in February 2017 that the U.K. will have an expeditionary force of 50,000 troops by 2025.¹⁴⁷ In recent years, it has increased funding for its highly respected Special Forces.

Provided funding is sustained, by 2020, 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. 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, which 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 defense review 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. The U.S. and U.K. are in discussions with regard to filling the U.K.’s antisubmarine gap until the new P-8s come into service in 2019.¹⁴⁸ In November 2015, a French

maritime patrol aircraft had to assist the Royal Navy in searching for a Russian submarine off the coast of Scotland.¹⁴⁹

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). Nevertheless, the Royal Navy still delivers a formidable capability.

The U.K. will not have an aircraft carrier in service until the first *Queen Elizabeth*-class carrier enters service in the 2020s, although the aircraft meant to operate from them have yet to be acquired. This will be the largest carrier operated in Europe. Two of her class will be built, and both will enter service. 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.¹⁵⁰

The U.K. remains a leader inside NATO, taking over temporary responsibility for the VJTF in January and contributing 3,000 troops.¹⁵¹ In March, 800 British troops arrived in Estonia, where the U.K. is the framework nation for NATO's EFP battalion in that country.¹⁵² U.K. troops also contribute to the American-led battalion in Poland. The Royal Air Force has taken part in Baltic Air Policing four times, including most recently from April–August 2016.¹⁵³ In

May 2017, four RAF Typhoons deployed to Romania for a four-month deployment supporting NATO's Southern Air Policing mission.¹⁵⁴

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 Bosphorus, 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 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. In July 2017, it was reported that "about 50,000 people [had] been arrested and 150,000 state workers including teachers, judges and soldiers, [had] been suspended in the crackdown under emergency rule which was imposed soon after the attempted military takeover."¹⁵⁵ As of April, 10,732 police officers, 7,463 members of the military, and 168 generals

had been arrested.¹⁵⁶ The post-coup crackdown has had an especially negative effect on the military. 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.¹⁵⁷

Although all opposition parties condemned the coup attempt, the failed plot has enabled Erdogan to consolidate more power. A referendum that was approved by a narrow margin in April granted the president's office further powers—such as eliminating the position of prime minister in the government—most of which will come into effect in 2019 after presidential elections.¹⁵⁸ An interim report by election observers from the Organization for Security and Co-operation in Europe found an "uneven playing field" and stated that the two sides of the campaign "did not have equal opportunities."¹⁵⁹ Erdogan's response to the coup has further eroded Turkey's democracy, once considered a model for the region. In March, Turkey blocked some cooperation between NATO and partner countries over a controversy with Austria related to the referendum.¹⁶⁰

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. The U.S. decision in May 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), which Ankara has long regarded as its primary threat.¹⁶¹

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. Although Turkish officials have threatened to close access to the base, they have not yet done so.¹⁶² 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 2015.¹⁶³ 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.

Turkey's military contribution to international security operations still sets it apart from many of the nations of Western Europe. From August 2016–March 2017, Turkey conducted Operation Euphrates Shield, a military intervention in Syria with the goal of creating secure zones along the border that served primarily to stop YPG militias from gaining territory near the Turkish border.¹⁶⁴ Turkish officials have expressed anger over America's backing of Kurdish rebel forces fighting the IS in Syria, and the objectives of Operation Euphrates Shield and proposed future Turkish military involvement in Syria have been called into question because of their lack of alignment with U.S. and other nations' objectives.¹⁶⁵

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.¹⁶⁶ The Turks also have contributed to a number of peacekeeping missions in the Balkans, still maintain 313 troops in Kosovo,¹⁶⁷ 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,¹⁶⁸ making it NATO's second largest after that of the United States. A number of major procurement programs in the works include up to 250 new Altay main battle tanks, 350 T-155 Firtina 155mm self-propelled howitzers, six Type-214 submarines, and more than 50 T-129 attack helicopters.¹⁶⁹

With respect to procurement, the biggest area of contention between Turkey and NATO is Turkey's selection of a missile defense

system. In September 2013, Turkey selected China Precision Machinery Import–Export Corporation (CPMIEC) for a \$3.44 billion deal to provide the system. NATO has said that no Chinese-built system could be integrated into any NATO or American missile defense system. U.S. officials also have warned that any Turkish company that acts as a local subcontractor in the program would face serious U.S. sanctions because CPMIEC has been sanctioned under the Iran, North Korea, and Syria Non-proliferation Act.¹⁷⁰ In November 2015, Turkey cancelled the contract with CPMIEC.¹⁷¹

In April 2017, Turkey’s Foreign Minister stated that the country had an agreement in principle to purchase Russian-made S-400 systems.¹⁷² However, it remains to be seen whether the sale actually goes through, how many units are purchased, and how the S-400s fit into Turkey’s overall air defenses.¹⁷³ In April, Turkish Defense Minister Fikri Işık stated that no S-400s would be integrated into the NATO air defense systems.¹⁷⁴

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 and discourage Ankara’s warming relations with Russia 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 is one of five NATO members to meet the 2 percent of GDP spending benchmark.¹⁷⁵ Although the Estonian armed forces total only 6,400 active-duty service personnel (including the army, navy,

and air force),¹⁷⁶ they are held in high regard by their NATO partners and punch well above their weight inside the alliance. Since 1996, almost 1,500 Estonian soldiers have served in the Balkans. 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 and 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.¹⁷⁷

Estonia has demonstrated that it takes defense and security policy seriously, focusing its defense policy 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 2020.¹⁷⁸ One recent joint procurement is with neighboring Finland to acquire 12 South Korean-built howitzers by 2021.¹⁷⁹ Over the next few years, Estonia will increase from one to two the number of brigades in its order of battle; it also is making efforts to increase its rapid reaction reserve force from 18,000 to 21,000 troops by 2022.¹⁸⁰ This increase and modernization includes the recently created Cyber Defence League, a reserve force that relies heavily on expertise found in the civilian sector. In 2017, in an explicit step to strengthen their bilateral relationship, Estonia and the U.S. signed 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.¹⁸¹

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, Latvia 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.¹⁸²

In July 2016, Latvia's Parliament approved a new National Defense Concept that builds on the 2012 iteration to chart a path to a bright future for the Latvian National Armed Forces. The document 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."¹⁸³ The concept lays out a plan for the future that is described as "strengthening the operational capability of the National Armed Forces, the 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."¹⁸⁴

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 2017, Latvia spent 1.7 percent of GDP on defense, a 22 percent increase over 2016.¹⁸⁵ The government has stated that the NATO benchmark of 2 percent of GDP in defense spending will be met by 2018, and the National Defense Concept lays out a plan to spend no less than 20 percent of the budget on new equipment.¹⁸⁶

Lithuania. Lithuania is the largest of the three Baltic States, and its armed forces total 17,030 active-duty troops.¹⁸⁷ Lithuania has also shown steadfast commitment to international peacekeeping and military operations. Between 1994 and 2010, more than 1,700 Lithuanian troops were deployed to the Balkans as part of NATO missions in Bosnia, Croatia, and Kosovo. Between 2003 and 2011, Lithuania sent 930 troops to Iraq. Since 2002, just under 3,000 Lithuanian troops have served in Afghanistan, a notable contribution 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.¹⁸⁸

Lithuanian Defense Minister Raimundas Karoblis has stated that Russia's propaganda campaign against Lithuania is a serious threat: "There are real parallels with Crimea's annexation [from Ukraine].... We are speaking of a danger to the territorial integrity of Lithuania."¹⁸⁹ In April 2017, a Lithuanian security services exercise sought to counter a scenario in which Russian special operations forces infiltrated Lithuania after a train traveling through the country broke down and "little green men" disembarked.¹⁹⁰ Also in April, U.S. forces trained with Lithuanian troops with the goal of integrating U.S. forces and capabilities into Lithuanian defense planning.¹⁹¹ Lithuania's most recent intelligence service threat assessment stated that upgrades to Russia's military in neighboring Kaliningrad mean that an invasion of a Baltic country can be launched in as little as 24 hours, sharpening Baltic State concerns about NATO's Article 5 commitment to member states.¹⁹²

In 2017, Lithuania will spend around 1.8 percent of GDP on defense. In February, the State Defense Council proposed 2.07 percent of GDP for defense in 2018; procurements to modernize its military include howitzers, infantry fighting vehicles, air defense systems, and (potentially) transport helicopters.¹⁹³

In addition, Lithuania's 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.¹⁹⁴ In June 2017, a Lithuanian energy company signed an agreement to buy LNG directly from the U.S.¹⁹⁵ In May, 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.¹⁹⁶

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 are reported to rely heavily on Polish troops and ports.¹⁹⁷

Poland has an active military force of almost 100,000, including a 48,000-strong army with 985 main battle tanks.¹⁹⁸ In November, Poland's Parliament approved a new 53,000-strong territorial defense force to protect infrastructure and train in "unconventional warfare tactics."¹⁹⁹ The force will cost €800 million (roughly \$1.04 billion) over three years. It remains to be seen whether the new force will eventually operate under the existing defense command structure and whether the investment in money and manpower would not be better utilized elsewhere.²⁰⁰ Ninety percent of General Staff leadership and 80 percent of Army leadership has left or has been replaced following recent military reforms, introducing a measure of volatility into defense planning.²⁰¹

Poland spent 2 percent of GDP on defense in 2016 and nearly 26 percent on equipment, reaching both NATO benchmarks.²⁰² In April, the defense ministry stated a goal to raise defense spending to the level of 2.5 percent of GDP by 2030.²⁰³ Poland is looking at major equipment purchases including new maritime patrol aircraft and U.S.-made missile defense systems.²⁰⁴

Although Poland's focus is territorial defense, it has 192 troops deployed in Afghanistan as part of NATO's Resolute Support Mission.²⁰⁵ In 2016, Polish F-16s began to fly reconnaissance missions out of Kuwait as part of the anti-IS mission Operation Inherent Resolve.²⁰⁶ Approximately 60 soldiers deployed to Iraq in 2015 as trainers.²⁰⁷ Poland's air force has taken part in Baltic Air Policing seven times since 2006, most recently beginning in May 2017 when four F-16s from the Netherlands took over.²⁰⁸ Poland is part of NATO's EFP in Latvia and has 258 troops taking part in NATO's KFOR mission.²⁰⁹

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:

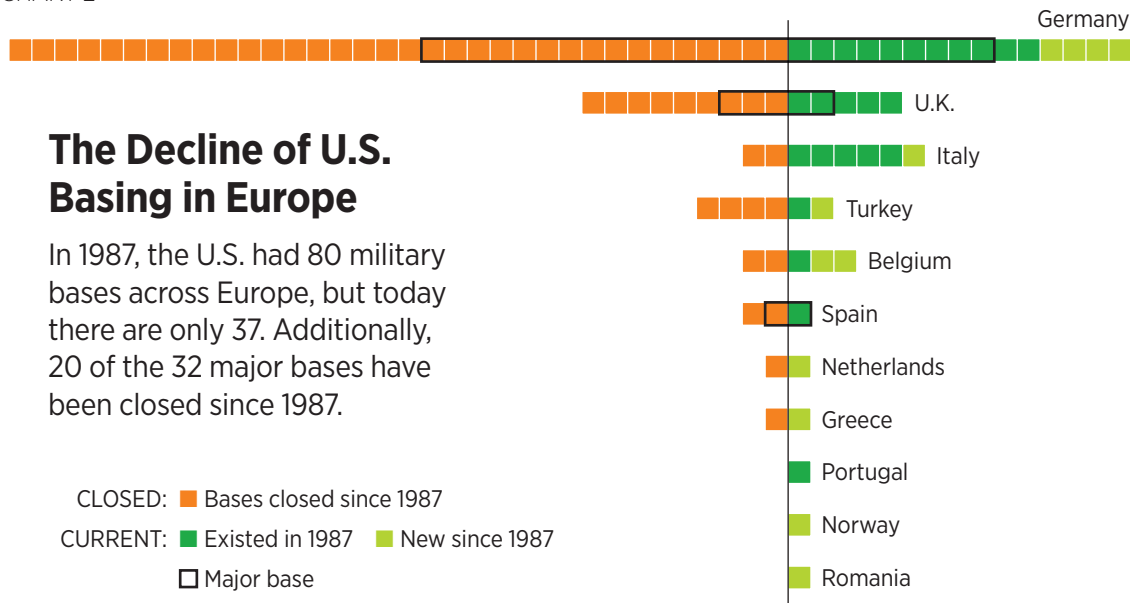
The mature network of U.S. operated bases in the EUCOM AOR provides superb training and power projection facilities in support of steady state operations and contingencies in Europe, Eurasia, Africa, and the Middle East. This footprint is essential to TRANSCOM's global distribution mission and also provides 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.²¹⁰

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 62,000 U.S. forces remain in Europe, an 85 percent decrease in personnel and 75 percent reduction in basing from the height of the Cold War.²¹¹

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 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."²¹²

The U.S. is on pace to have only 17 main operating bases left in Europe,²¹³ primarily in Germany, Italy, the United Kingdom, Turkey, and Spain. The number of U.S. installations has declined steadily since the Cold War when

CHART 2



SOURCES: General Accounting Office, “U.S. Personnel in NATO Europe,” October 6, 1989, <http://www.gao.gov/assets/150/148159.pdf> (accessed August 16, 2017); Stockholm International Peace Research Institute, *United States Military Forces and Installations in Europe* (Oxford: Oxford University Press, 1989), <https://www.sipri.org/publications/1989/united-states-military-forces-and-installations-europe> (accessed August 16, 2017); and Heritage Foundation research.

heritage.org

in 1990, for example, the U.S. Army alone had more than 850 sites in Europe. Today, the total number for all services is approximately 350. In January 2015, the Department of Defense announced the outcome of its European Infrastructure Consolidation review, under which 15 minor sites across Europe were to be closed.²¹⁴ The proposed closures would save \$500 million annually, but carrying them out would cost \$1.4 billion.²¹⁵ In April, EUCOM announced that these base closures were now under review: “Considering the current European security environment, it is a prudent measure to review some of the decisions under the January 2015 European Infrastructure Consolidation effort.”²¹⁶ Currently, the U.S. Army is scouting sites in lower Saxony in northern Germany for the potential basing of an additional 4,000 troops.²¹⁷

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.²¹⁸ In addition, the USS *Mount Whitney*, a *Blue Ridge*-class command ship, is permanently based in the region.²¹⁹ This ship provides a key command-and-control platform that was employed successfully during the early days of the recent Libyan operation.

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.²²⁰ 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 2019.²²¹

The U.S. Navy also keeps a number of submarines in the area that contribute to EU-COM's intelligence, surveillance, and reconnaissance (ISR) capacities, but with increased Russian naval activity, more are needed. In March, General Scaparrotti testified that he did not "have the carrier or the submarine capacity that would best enable me to do my job in EU-COM."²²² Strong 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. 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. In December, P-8s operating out of Italy searched for Russian subs near NATO's Standing Maritime Group assigned to the Mediterranean.²²³

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. The core of USAREUR 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.

Recently, the 2nd Cavalry Regiment Field Artillery Squadron began training on a Q-53 radar system, described as a "game changer."²²⁴ 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.

Beginning in January, the 3rd Armored Combat Team, 4th Infantry Division from Colorado began rotating into Europe for nine months, raising the number of Army BCTs in Europe to three.²²⁵ In May, an Army battalion of around 600 soldiers took part in an exercise to deploy to Europe on short notice as part of U.S. efforts to practice swift redeployments to Europe.²²⁶

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.²²⁷ 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, speaking about the “invaluable” importance of Incirlik Air Base to anti-IS operations in Syria and Iraq, USAF Colonel John Dorrian has said that “the entire world has been made safer by the operations that have been conducted there.”²²⁸ Approximately 39,000 active-duty, reserve, and civilian personnel are assigned to USAFE along with 200 aircraft.²²⁹

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.²³⁰ 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. MARFOREUR 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 support a force of 13,000 Marines for 30 days, and the Norwegian government covers half of the costs of the prepositioned storage. 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.²³¹

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. SPMAGTF has KC-130J Hercules and V-22 Osprey aircraft, but six of the 12 Ospreys were sent back to the U.S. in 2016 as a result of defense budget cuts. Marine Corps General Joseph Dunford, current Chairman of the Joints Chief of Staff, said that this reduction in strength “does reduce the [unit’s] flexibility, it reduces the depth.”²³²

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 non-military 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 Moron, for a total of 3,500 U.S. military and civilian personnel and 35 aircraft.”²³³ In January 2017, 285 Marines began a rotational deployment to Vaernes, Norway, to train and exercise with Norwegian forces.²³⁴ The presence of the Marines led some Russian officials to threaten that Norway could become a target for Russian strategic weapons.²³⁵

The Marine Corps maintains a Black Sea Rotational Force (BSRF) composed of approximately 400 Marines that rotate to the Black Sea region (based in Romania) to conduct training events with regional partners.²³⁶

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. In 1955, the headquarters was reconfigured as a joint task force and renamed Support Operations Task Force Europe (SOTFE) and later Special Operations Task Force

Europe. When French President Charles de Gaulle forced American troops out of France in 1966, SOTFE relocated to its current headquarters in Panzer Kaserne near Stuttgart, Germany, in 1967. It also operates out of RAF Mildenhall. In 1982, it was redesignated for a fourth time as U.S. Special Operations Command Europe.

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.²³⁷

The FY 2018 DOD budget request included over \$105 million for various special operations programs and functions through ERI. 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 partnership activities with Eastern and Central European allies' special operations forces.²³⁸

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.

In the past year, there have been significant improvements in cyber security in Europe. This improvement includes operationalization of EUCOM's Joint Cyber Center.²³⁹ 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 it provides to logistical infrastructure. For example, EUCOM supports the U.S. Transportation Command (TRANSCOM) with its array of airbases 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.²⁴⁰

Europe is a mature and advanced operating environment. America's decades-long presence there 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 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.

ERI has supported infrastructure improvements across the region. Two major projects funded include 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."²⁴¹ ERI 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.”²⁴²

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 Bosphorus); the Northern Sea Route; and the Danish Straits.

Strait of Gibraltar. The Strait of Gibraltar connects the Mediterranean Sea with the Atlantic Ocean and separates North Africa from Gibraltar and Spain on the southernmost point of the Iberian Peninsula. The strait is about 40 miles long and approximately eight miles wide at its narrowest point. More than 200 cargo vessels pass through the Strait of Gibraltar every day, carrying cargoes to Asia, Europe, Africa, and the Americas.

The strait’s proximity to North Africa, combined with its narrowness, has presented security challenges for U.S. and allied warships. In 2002, Moroccan security forces foiled an al-Qaeda plot to attack U.S. and U.K. naval ships in the Strait of Gibraltar using the same tactics that had been used in the attack on the USS *Cole*. A 2014 article in the al-Qaeda English-language publication *Resurgence* urged attacks on oil tankers and cargo ships crossing the Strait of Gibraltar as a way to cause “phenomenal” damage to the world economy.²⁴³

The Turkish Straits (Including the Dardanelles and the Bosphorus). These straits are long and narrow: 40 and 16 miles long, respectively, with the narrowest point in the

Bosphorus, which connects the Black Sea with the Sea of Marmara, only 765 yards wide. Approximately 46,000 ships each year transit the straits, including more than 5,600 tankers.²⁴⁴

The 1936 Montreux Convention gave Turkey control of the Bosphorus and placed limitations on the number, transit time, and tonnage of naval ships from non-Black Sea countries that can use the straits and operate in the Black Sea.²⁴⁵ This places limitations on U.S. Navy operation in the Black Sea. The U.S. Navy spent 207 days in the Black Sea in 2014, 150 days in 2015, and only 58 days in 2016.²⁴⁶

GIUK Gap. This North Atlantic naval corridor between Greenland, Iceland, and the United Kingdom is strategically vital. During the Cold War, Soviet submarines, bombers, and reconnaissance aircraft traversed the GIUK Gap to gain access to the Atlantic Ocean from the northern Russian coast. Recent increased Russian activity through and near the GIUK Gap has led the U.S. to return military assets to Keflavik in southwest Iceland.

The Danish Straits. Consisting of three channels connecting the Baltic Sea to the North Sea via the Kattegat and Skagerrak seas, the Danish Straits are particularly important to the Baltic Sea nations as a way to import and export goods. This is especially true for Russia, which increasingly has been shipping its crude oil exports to Europe through its Baltic ports.²⁴⁷ Russian oil companies have announced plans to stop the use of foreign ports on the Baltic Sea to export crude by 2018, saying that they will focus instead on increased use of Russian ports.²⁴⁸ More than 125,000 ships per year transit these straits.²⁴⁹

Geostrategic Islands in the Baltic Sea. Three other critically important locations are the Åland Islands (Finnish); Gotland Island (Swedish); and Bornholm Island (Danish). The Åland Islands have been demilitarized since the 1856 Treaty of Paris ending the Crimean War and have always been considered the most important geostrategic piece of real estate in the Baltic Sea. Gotland Island is strategically located halfway between Sweden and Latvia in the middle of the Baltic Sea. Sweden maintained a

permanent military garrison on the island for hundreds of years until 2005. At the height of the Cold War, 15,000–20,000 Swedish military personnel were stationed on Gotland.²⁵⁰ Today, Sweden is standing up a 300-strong Battle Group Gotland, to be fully established on the island by 2018. In 2017, Sweden will spend \$45 million to improve the battlegroup's preparedness and anti-aircraft capabilities.²⁵¹ The military facilities will need to be reconstituted, as most were sold for civilian use after 2005. In September 2017, around 1,000 U.S. forces will take part in the Aurora exercise in and around Gotland.²⁵² Bornholm Island is strategically located at the mouth of the Baltic Sea.

In March 2015, Russia carried out a large-scale training exercise with up to 33,000 soldiers, which included the capture of the Åland, Gotland, and Bornholm islands as part of its scenario. Reinforcing the Baltic region would be nearly impossible without control of these islands.

The biggest danger to infrastructure assets in Europe pertains to 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. In such a scenario, the shortcomings of NATO's force posture would become obvious.

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. NATO continued its steady progression toward strengthening its deterrence posture in the East and reaffirmed that it remains a nuclear alliance. NATO's biggest challenges pertain to continued underinvestment from European members, a tempestuous Turkey, and a return to collective defense that is undermined by disparate threat perceptions within the alliance.

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 against threats. 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				✓	

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