

EFFECTIVE DEFENSEOF THE BALTICS



Franklin D. Kramer and Bantz J. Craddock

EFFECTIVE DEFENSEOF THE BALTICS

Franklin D. Kramer and Bantz J. Craddock

ISBN: 978-1-61977-494-0

Cover photos from top left to bottom right: US Air Force/Wikimedia; Bundeswehr/Wikimedia; and US Navy/Wikimedia.

This report is written and published in accordance with the Atlantic Council Policy on Intellectual Independence. The authors are solely responsible for its analysis and recommendations. The Atlantic Council and its donors do not determine, nor do they necessarily endorse or advocate for, any of this report's conclusions.

May 2016

TABLE OF CONTENTS

Executive Summary	1
ntroduction	2
The Russian Challenge	2
Meeting the Challenge	3
Conclusion	13

EXECUTIVE SUMMARY

Effective defense of the Baltic nations of Estonia, Latvia, and Lithuania—and deterrence built upon such defensive capabilities—is one of the key challenges facing NATO and its member nations. Russia's actions, geopolitical rhetoric, and geographic proximity to the Baltics have generated the requirement for a significant defense capability. This issue brief sets forth how such a capability should be achieved, for both conventional and hybrid conflicts. Certain of the capabilities discussed below will also have relevance to issues in NATO's South, and to resilience for nations throughout the Alliance. As set forth in the report NATO's New Strategy, however, such considerations are of equal importance to the threat to the Baltics, and require action by the Alliance.1 NATO, of course, is only one of the West's possible responses to geopolitical challenges, and the proposals below are therefore intended to fit within the overall international context faced by the NATO nations and their partners. The paper, however, focuses specifically on the Baltic defense challenge. In fact, NATO has the capacity to win a conventional war in the Baltics, even in the face of a short-notice Russian attack—if appropriate steps are taken to provide a substantial defense. Accordingly, to build on steps taken by NATO at the 2014 Wales Summit, by ministers since then, and by the United States under the European Reassurance Initiative (ERI), this paper recommends that NATO should take the following actions.

1. Enhance the capacity for warning and analysis to increase NATO responsiveness.

- Provide the necessary technical assets for intelligence, surveillance, and reconnaissance.
- Expand the scope of collection, including the use of open-source information.
- Broaden the nature of analysis, so as to generate appropriate understanding and warning, of both conventional and hybrid conflicts.

To respond to the challenge of conventional conflict:

2. Enhance direct defense of the Baltics.

• Baltic nations should acquire additional short- and intermediate-range air defense systems, and antiarmor systems for their forces.

Franklin D. Kramer, Hans Binnendijk, and Daniel S. Hamilton, NATO's New Strategy (Washington, DC: Atlantic Council, 2015), http://www.atlanticcouncil.org/images/publications/NATOs_ new_strategy_web.pdf.

- On a multiyear basis, Baltic nations' forces should transition to mechanized/armor brigades.
- NATO should create a multinational battalion for each Baltic country (Baltic-US-European).

3. Expand forward presence and reinforcement capabilities that will complement the United States' European Reassurance Initiative.

- Establish prompt ("ten-day") reinforcement capabilities by Europeans—one heavy brigade each from the United Kingdom (UK), Germany, and Poland, and combined support from the Netherlands, Denmark, and Norway.
- Establish an exercise schedule and approach to maintain forces in or close to the Baltics to help resolve time-distance issues—including a European equivalent to the European Reassurance Initiative exercise plan.
- Expand combat air capability in theater (including US, European, and Nordic capabilities), with the Supreme Allied Commander Europe (SACEUR) generating the statement of requirements for effective air capability against Russian forces.
- Evaluate potential "next-ERI" US actions, including how to maximize the value of Marine equipment in Norway, as well as the right force mix and best utilization of Army aviation assets.
- Generate necessary logistics and sustainability planning, and stocks for in-place and reinforcing units.

4. Establish an effective counter anti-access/areadenial capability.

 SACEUR should create theater-wide, counter-A2/ AD (anti-access/area denial) planning, including for combat air; maritime superiority (with nations establishing a maritime framework for the Baltic); infrastructure and host-nation support; and cyber for defending military, telecommunications, and electric grid networks.

5. Undertake critical planning, to be approved by the North Atlantic Council (NAC).

- Plan for effective obstacles and barriers to obstruct Russian force advances—consider smart mines at borders.
- Create cyber planning, including for counterattack as necessary, use cyber as part of collective defense, and utilize (or upgrade) the Cyber Defense Committee for cyber-policy issues, making it comparable to the Nuclear Planning Group.

 Create planning for required actions to target military activities emanating from Russia (including Kaliningrad), as part of collective defense.

To respond to the challenge of hybrid war:

- 6. Create sections and/or designated staff focused on hybrid conflict at NATO headquarters, Allied Command Operations, and Allied Command Transformation.
- 7. Establish Resilience Support Teams to provide support to nations in conjunction with hybrid conflict.
- 8. Have nations establish national "Resilience Working Groups" to deal with hybrid aggression and to work with NATO Resilience Support Teams.
- 9. NATO and its member states need to bolster coordination with the private sector, including a mechanism that joins the military with the private sector, including critical infrastructure.

INTRODUCTION

Effective defense of the Baltic nations of Estonia, Latvia. and Lithuania—and deterrence built upon such defensive capabilities—is one of the key challenges facing NATO and its member nations. Russia's actions, geopolitical rhetoric, and geographic proximity to the Baltics have generated the requirement for a significant defense capability. NATO thus faces a major challenge to its core purpose of collective defense. NATO needs not only to be able to win a war, but also to deter one, as the failure to do so would be devastating even if fought conventionally and would be catastrophic if such a war escalated to a nuclear exchange. In fact, however, NATO has the capacity to win a conventional war in the Baltics, even in the face of a short-notice Russian attack-if appropriate steps are taken to provide a substantial defense. The steps set forth below are all within the capacity of the NATO nations, including relevant financial considerations, and would not undercut other important NATO objectives, in the South or elsewhere. The Warsaw Summit should set these efforts in place, thereby ensuring that NATO will provide the collective defense for which the Alliance was formed.

THE RUSSIAN CHALLENGE

Conventional defense of the Baltics is one of the significant challenges NATO faces. NATO's capacity to undertake such a defense has been seriously questioned by respected officials and analysts. NATO's

Supreme Allied Commander in Europe, wearing his US European Command hat, has testified to the need for the "development and fielding of credible and persistent deterrent capabilities." More recently, he said, "the strategic threat presented by [Vladimir] Putin's Russia requires we readdress our force allocation processes to provide... credible assurance." A recent RAND study stated,

As currently postured, NATO cannot successfully defend the territory of its most exposed members. Across multiple games using a wide range of expert participants in and out of uniform playing both sides, the longest it has taken Russian forces to reach the outskirts of the Estonian and/or Latvian capitals of Tallinn and Riga, respectively, is 60 hours.⁴

The threat to the Baltic nations arises from a combination of geography; improved Russian capabilities; a Russian willingness to use force, including in hybrid and conventional conflict; and an increasingly hostile attitude toward NATO on the part of the Russian government.

- The geographic point is obvious. Russia borders each of the Baltic nations, which themselves are quite small so the grounds for engagement are limited—Tallinn and Riga are only 200 and 210-275 kilometers, respectively, from the Russian border.⁵
- As to capabilities, the RAND wargaming effort determined that, under current circumstances, Russian forces would substantially outgun the lighter NATO forces currently promptly available to defend the Baltics, noting that "all Russia's forces are motorized, mechanized, or tank units ... Russia also enjoys an overwhelming advantage in tactical and operational fires."⁶

- 5 Ibid, p. 3.
- 6 Ibid, p. 5.

² Philip Breedlove, "Full Committee Hearing on 'How Is DOD Responding to Emerging Security Challenges in Europe?" testimony to US House of Representatives Committee on Armed Services, February 25, 2015, http://docs.house.gov/ Committee/Calendar/ByEvent.aspx?EventID=103011.

³ Philip Breedlove, "Statement of General Philip Breedlove, Commander, US Armed Forces Europe," statement to the US Senate Committee on Armed Services, March 1, 2016, http://www.armed-services.senate.gov/imo/media/doc/ Breedlove_03-01-16.pdf.

⁴ David A. Shlapak and Michael W. Johnson, Reinforcing Deterrence on NATO's Eastern Flank: Wargaming the Defense of the Baltics (Santa Monica, Calif.: RAND Corporation, 2016), p. 1, https://www.rand.org/content/dam/rand/pubs/research_reports/RR1200/RR1253/RAND_RR1253.pdf.

- Russia's actions in Ukraine and Syria have demonstrated its willingness to use force, including on short notice.
- Russia has put NATO at the top of its list of threats, and has regularly exercised its forces with NATO as its adversary.⁷ The Russian exercise Zapad 2013 is generally consistent with what the RAND game showed—Russia has the ability to move substantial forces in a relatively short time, focused as an attack against NATO.⁸

Russia has also focused on the nature of hybrid conflict, and on how hybrid and conventional conflict overlap. In Russian General Valery Gerasimov's words,

In the 21st century we have seen a tendency toward blurring the lines between the states of war and peace. Wars are no longer declared and, having begun, proceed according to an unfamiliar template . . . The focus of applied methods of conflict has altered in the direction of the broad use of political, economic, informational. humanitarian. and nonmilitary measures—applied in coordination with the protest potential of the population. All this is supplemented by military means of a concealed character, including carrying out actions of informational conflict and the actions of special-operations forces. The open use of forces—often under the guise of peacekeeping and crisis regulation—is resorted to only at a certain stage, primarily for the achievement of final success in the conflict.9

- 7 Danila Galperovich, "New Russian Strategy Document Calls NATO a 'Threat," Voice of America, January 5, 2016, http:// www.voanews.com/content/new-russian-strategy-documentcalls-nato-a-threat/3132196.html. The document can be found in Russian at http://publication.pravo.gov.ru/Document/ View/0001201512310038.
- There are multiple analyses of Zapad 2013. For example, see Liudas Zdanavičius and Matthew Czekaj, eds., Russia's Zapad 2013 Military Exercise: Lessons for Baltic Security (Washington, DC: Jamestown Foundation, 2015), http://www.jamestown. org/uploads/media/Zapad_2013_-_Full_online_final.pdf. In the foreword, Glen E. Howard and Jānis Bērziņš write, "The two principal participants in the exercises—Russia and Belarus contributed more than 75,000 men, who were engaged in simulated operations in the air, on land and at sea. The deployment of these forces and the execution of the exercises took place on a theater-wide level, in close proximity to the Baltic states. As such, Zapad 2013 essentially targeted the military frontiers of NATO members and partners, from Poland to the eastern Baltic Sea." Other analysts have used somewhat lower numbers, depending on how they defined the exercise, though they still used multiples of ten thousand (including the "tens of thousands" cited elsewhere in the Jamestown Foundation study).
- 9 Mark Galeotti, "The 'Gerasimov Doctrine' and Russian Non-Linear War," In Moscow's Shadows, February 2013, both a translation and a commentary, https://inmoscowsshadows.

MEETING THE CHALLENGE

Despite the significant issues for collective defense raised by the Russian actions noted above, an effective defense of the Baltics is nonetheless well within NATO's capacity. The RAND analysis makes an important, but relatively obvious, point: larger, heavier forces generally will prevail over lighter, smaller forces especially in meeting engagements with no other significant defensive capabilities available. But the calculus can be turned in NATO's favor.

There are five key steps NATO should take:

- 1. Enhance capacity for warning and analysis to increase NATO responsiveness.
- Provide direct defense capabilities for the Baltic nations.
- 3. Enhance forward presence and reinforcement.
- 4. Establish an effective counter anti-access/areadenial capability.
- Undertake critical planning with respect to key military measures including establishing obstacles and barriers, utilizing cyber for defense and counter-attack, and planning to deal with secondechelon and other forces supporting an attack.

Enhance Capacity for Warning and Analysis to Increase NATO Responsiveness

One of the fundamental issues for NATO will be the ability to have warning of potential Russian actions, so that countervailing steps may be taken to enhance deterrence and, if necessary, provide successful defense. In a recent interview, General Philip Breedlove stated, "And so now we have to refocus our intelligence and redevelop those indications and warnings that make sure we don't get surprised." He expanded on that point in his testimony before the Senate Armed Services Committee:

We need to develop what we call indications and warnings so that we can be predictive of what our opponents might do. . . . We need to be able to accurately predict when we need

wordpress.com/2014/07/06/the-gerasimov-doctrine-and-russian-non-linear-war/.

¹⁰ Philip Breedlove, "Gen. Philip Breedlove on How NATO Should Deal with Russia," interview with National Public Radio, November 2, 2015, http://www.npr.org/2015/11/02/453885621/gen-philip-breedlove-on-how-nato-should-deal-with-russia.



to bring forces over to solve a problem . . . to deter it. . . . Indications and warning is based on a solid understanding of the day-to-day intelligence. We need to understand what is normal so that we can see the spike out of normal that says, wait a minute, we need to deploy the very high readiness joint task force. Or we need to deploy elements of our rapid reaction capability. So to develop that I&W [indications and warning], we need to first establish a solid base of understanding and that will take more intel capability and ISR [intelligence, surveillance, and reconnaissance] than we currently have allocated.¹¹

The requirement for indications and warning relates to both hybrid and conventional conflicts. Indeed, as the preceding quotes from General Gerasimov indicate, the movement from conventional to hybrid is now an established part of Russian military thinking. NATO can, however, generate effective warning if appropriate steps are taken. A starting point is the substantial experience the United States

has in developing indications and warning, which in recent years has been focused on the Korean peninsula. A key lesson from South Korea is the need to integrate all types of intelligence capabilities. That approach is reflected in the description of the 501st Military Intelligence Brigade, based in South Korea, which "conducts theater level multi-discipline intelligence for Joint and Combined Warfighters." As the brigade describes itself,

The brigade . . . along with its five battalions, is a uniquely configured military intelligence organization incorporating all forms of traditional and developing intelligence collection. analysis and dissemination technologies. The 501st MI Brigade is the only Army unit of its kind containing organic assets that span the full array of intelligence disciplines: imagery, signals, measurement and signatures, and human intelligence.¹³

The key point is not to suggest that the 501st Brigade's structure needs to be replicated for NATO, but rather that using integrated assets of all types is required for effective indicators and warning.

[&]quot;Hearing to Receive Testimony on United States European Command," testimony of General Philip Breedlove before the Senate Armed Services Committee, March 1, 2016, pp. 44-45, http://www.armed-services.senate.gov/imo/media/doc/16-20_03-01-16.pdf.

^{12 501}st Military Intelligence Brigade, http://8tharmy.korea.army.mil/501MI/.

¹³ Ibid.

South Korea presents a classic potential conventional conflict. In the Baltics, however, NATO faces the prospect of both hybrid and conventional warfare. Accordingly, NATO will have to expand conventional approaches to intelligence collection and analysis to achieve appropriate results. In particular, that means having warning of hybrid efforts, and of the potential movement from hybrid to conventional conflict.

Doing so will require some new types of thinking. The Defense Science Board (DSB) undertook an analysis of deficiencies in US intelligence approaches to counterinsurgency, a problem with issues analogous to those presented by hybrid warfare. The finding was that, too often, approaches would

- "focus narrowly on . . . technical collection capabilities and systems rather than on the wider capabilities needed to support COIN [counterinsurgency]";
- "[exclude] other collection sources (e.g. Open Source Intelligence (OSINT), Human Intelligence (HUMINT))"; and
- "not [invest] adequately in the development of social and behavioral sciences information that is critically important."

As it expands its intelligence efforts, NATO needs to avoid replicating those problems. Instead, as the DSB stated, a key is to "identify meaning[ful] patterns of activity" and "understand

what is 'normal' in a particular environment, helping to spot trends that represent anomalies that may portend . . . changes and the rise of instability." For that effort to succeed, it is critical that NATO create a "comprehensive set of intelligence requirements" and "develop and train people to do Advanced Analysis" that includes "language, deep cultural awareness" and "[being] placed in the field in order to be best postured for intelligence operations and conflicts." 16

The Secretary
General and
SACEUR should
establish an
integrated
intelligence
section that uses
all sources of
intelligence...

This is not to deny the importance of technical intelligence, surveillance, and reconnaissance capabilities, and nations will need to provide the systems to meet the deficiencies noted by General Breedlove. Rather, technical capabilities need to be combined with those that focus on hybrid conflict, and analysis needs to go beyond conventional military indicators. NATO does start with an important advantage, in that the Baltic nations themselves will have valuable information and insights. But, in addition to the technical requirements, NATO also needs to ensure that it is providing the broad approach to information and warning required by the prospect of hybrid conflict and its potential to move to conventional conflict.

The Secretary General and SACEUR should establish an integrated intelligence section that uses all

sources of intelligence, beyond just technical capabilities (and, particularly, which understands to utilize open-source capabilities). Moreover—at Allied Command Operations. NATO headquarters, or both-there should be an analogous effort focused on analysis that includes relevant social science behavioral insights. Precisely how to create such capabilities can be left to the Secretary General and SACEUR. As discussed below, NATO should establish Resilience Support Teams (RST); perhaps, part of the intelligence function could sit with them. However it is accomplished, a broad approach

to intelligence collection and analysis is necessary.

Provide Direct Defense Capabilities for the Baltic Nations

In seeking to create an effective defense for the Baltics, it makes good sense to fully take account of a fundamental point made by the RAND study and other analysts—namely, that the forces in the Baltics, and those currently expected to reinforce them, are too few and too light to deal effectively with a Russian advance. A first place to look for improvement is the forces of the Baltic nations themselves. These are small forces, and quite light. The forces were designed to be light because when the Baltics joined NATO a Russian contingency was seen as a remote possibility; lighter forces were planned to be effective in an expeditionary mode as a complement to other NATO

¹⁴ Defense Science Board Task Force on Defense Intelligence, Counterinsurgency (COIN) Intelligence, Surveillance, and Reconnaissance (ISR) Operations (Washington, DC: Office of the Under Secretary of Defense for Acquisition, Technology and Logistics, 2011), pp. vi-vii, http://www.acq.osd.mil/dsb/ reports/ADA543575.pdf.

¹⁵ Ibid, pp. ix-x.

¹⁶ Ibid.

nations' capabilities. Now, however, the light nature of the forces makes them poorly suited to defend against a heavy-force invasion from Russia.

To enhance their capabilities, the Baltic nations should undertake a two-step effort. In the near term, their forces should continue to acquire and train on short and intermediate range anti-armor and air-defense systems.¹⁷ There are numerous such systems, such as Javelin and Stinger, in the inventories of NATO and partner countries, and the Baltic countries have begun such training and acquisition programs.¹⁸ Acquiring a significant number of additional systems would demand new funding, but a reasonable amount could be acquired if the Baltics would each fund their defense budgets by at least 2 percent of their gross domestic product, as the NATO nations pledged to do at the 2014 Wales Summit—a target that Estonia met in 2015, but Latvia and Lithuania did not.19 If the Baltic nations are unwilling to significantly contribute to their own defense, there will be little incentive for others to do so on their behalf.

In the medium term, the Baltic nations each need to convert their light forces to heavy forces. Each country should convert existing forces and slightly expand them so each has one heavy brigade—mechanized, armor, or a mix. However, it should be recognized that these are small countries and their defense budgets are likewise small, even if they hit the 2 percent target (in 2015, the budgets ranged from \$288 million to \$476 million in US dollars).²⁰ Accordingly, the proposed conversion will require some outside funding assistance. Such costs would be entirely manageable if undertaken over a five-year period, if the Baltics expand their own defense budgets as suggested above, and if these frontline states are given assistance from other NATO nations.

While the Baltic nations have the first responsibility, no one expects the Baltics to provide for their own defense alone—and the other NATO nations will need to take steps to create an effective, integrated defense for the Baltics. An important first step would be to establish multinational battalions in each of the Baltic

17 Pauli Järvenpää, "Can Estonia Be Defended?" *Estonia World*, February 23, 2016, http://estonianworld.com/security/pauli-jarvenpaa-can-estonia-be-defended/.

countries, consisting of a combined battalion staff and line companies from both the host and troopcontributing nations. A battalion is large enough to have useful command-and-control capabilities, as well as supporting capabilities. The United States is already maintaining companies in each Baltic nation. To these, each Baltic nation should add its own company, and European nations should provide a third. As discussed below, the United Kingdom (UK), Germany, and Poland should focus on prompt reinforcement of the Baltics, and should therefore be engaged in the proposed multinational battalions. Likewise, Norway, the Netherlands, and Denmark, with smaller forces, could provide invaluable supporting roles.²¹ The non-Baltic forces can be established on a rotational basis, but any rotation needs to be undertaken so that there are not capabilities gaps created by the rotating of the forces.²² The forces provided should be heavy forces mechanized or armor—and they should be supported with appropriate artillery and air-defense capabilities.

The Warsaw Summit can task SACEUR with developing an appropriate force structure and rotational plan for contributing nations.

Enhance Forward Presence and Reinforcement

The United States has now undertaken, partly through its European Reassurance Initiative, to have four brigades of land forces promptly available at all times for Europe. The United States currently stations the

- 21 It should be noted that Germany has established combined formations with the Netherlands. See "Germany and the Netherlands Increase Military Cooperation," *Below the Turret Ring* (blog), February 6, 2016, http://below-the-turret-ring. blogspot.com/2016/02/germany-and-netherlands-increase. html.
- 22 If it chose to do so, NATO could keep forces in the Baltics on a permanent basis, consistent with the NATO-Russia Founding Act. The relevant paragraph from the NATO-Russia Founding Act provides, "NATO reiterates that in the current and foreseeable security environment, the Alliance will carry out its collective defence and other missions by ensuring the necessary interoperability, integration, and capability for reinforcement rather than by additional permanent stationing of substantial combat forces. Accordingly, it will have to rely on adequate infrastructure commensurate with the above tasks. In this context, reinforcement may take place, when necessary, in the event of defence against a threat of aggression and missions in support of peace consistent with the United Nations Charter and the OSCE governing principles, as well as for exercises consistent with the adapted CFE Treaty, the provisions of the Vienna Document 1994 and mutually agreed transparency measures. Russia will exercise similar restraint in its conventional force deployments in Europe." See "Founding Act on Mutual Relations, Cooperation and Security between NATO and the Russian Federation," NATO, May 27, 1997, http:// www.nato. int/cps/en/natohq/official_texts_25468.htm. The "current and foreseeable security environment" of 1997 has obviously, and dramatically, changed.

[&]quot;2CR and Latvian Forces Fire Javelin Missile," Military. com, http://www.military.com/video/rockets/shoulder-launched-weapons/2cr-and-latvian-forces-fire-javelin-missile/4065728776001.

¹⁹ NATO, press release, "Defence Expenditures of NATO Countries (2008-2015), January 28, 2016, p. 6, http://www.nato.int/ nato_static_fl2014/assets/pdf/pdf_2016_01/20160129_160128pr-2016-11-eng.pdf#page=6.

²⁰ Ibid, p. 3.

173rd Airborne Combat Brigade Team at Vicenza, Italy, and the 2nd Cavalry Regiment (Stryker) at Vilseck, Germany. The ERI now provides the money for a third continuous brigade presence, which will fall in on the activity sets maintained in several NATO nations.²³ In addition, the ERI provides prepositioned equipment for an additional brigade in Western Europe.²⁴ Additionally, the United States maintains a brigade set for the Marines in Norway.²⁵ All of these forces are potentially available for defense of the Baltics; utilizing them in a timely and effective fashion will require appropriate planning.

Of course, other NATO nations are closer than the United States to the Baltics, and have significant heavy-fighting capabilities. In the North, for example, Germany has five brigades of mechanized or armor forces. Poland has ten armored or mechanized brigades, and the United Kingdom—which is the framework nation leading the Joint Expeditionary Force, as set forth in the 2014 Wales Summit Declaration—has three armored infantry brigades. The Netherlands, Denmark, and Norway have forces that could usefully complement those of the larger countries.²⁶ All these forces can be made available for expanded forward presence and reinforcement for defense of the Baltics.

Five steps could be taken that, in light of US efforts under the European Reassurance Initiative, would significantly enhance NATO's capability to defend the Baltics.

First, nearby European nations should create prompt reinforcement capabilities. As one potential approach, one heavy brigade each from Poland, Germany, and the UK could provide reinforcement within ten days (though the SACEUR should review and determine the exact military requirement). Additionally, the

23 The sets are in the Baltic Sea nations: Poland, Romania, and Bulgaria. See Jen Judson, "Hodges: US Army to Bolster Equipment Caches in Europe within a Year," *Defense News*, December 13, 2015, http://www.defensenews.com/story/defense/land/army/2015/12/09/hodges-us-army-bolster-europe-equipment-caches/77059888/.

- 24 Office of the Under Secretary of Defense (Comptroller) Chief Financial Officer, *Defense Budget Overview* (Washington, DC: Department of Defense, 2016), p. 7, http://comptroller.defense.gov/Portals/45/Documents/defbudget/fy2017/FY2017_Budget_Request_Overview_Book.pdf.
- 25 Christopher P. Cavas, "Cave-Dwellers: Inside the US Marine Corps Prepositioning Program-Norway," *Defense News*, February 19, 2016, http://www.defensenews.com/story/defense/ show-daily/modern-day-marine/2015/09/20/inside-us-marinecorps-prepositioning-program-norway/32511065/.
- 26 International Institute for Strategic Studies, The Military Balance 2016 (London: International Institute for Strategic Studies, 2016), https://www.iiss.org/en/publications/ military%20balance/issues/the-military-balance-2016-d6c9.

Netherlands, Denmark, and Norway could either create a combined heavy brigade or undertake to reinforce the brigade sets of the reinforcing countries and the Baltics themselves. As part of this effort, SACEUR would develop prepositioning options, host-nation support, and other infrastructure-reinforcement requirements.

Second, and related to the first, an exercise schedule could be developed that maintains significant forces in or near the Baltic; this could help resolve the time/distance equation necessary to respond to Russian short-notice actions. The Warsaw Summit should task SACEUR with establishing an exercise schedule for European forces, along the same lines as the ERI contemplates for American forces, and then integrating the two for maximum interoperability and capability enhancement.

Third, in addition to land forces, NATO will need significant air capabilities, which its member nations have in substantial quantities. Again, SACEUR should develop the requirements for counter-air, air interdiction, and close-air support. Appropriate basing capacities will allow nations farther from the Baltics to more promptly contribute air capabilities. SACEUR will have to evaluate whether nearby bases will be more valuable—as they may be in range of Russian cruise missiles and other attack capabilities—or whether bases farther out, combined with air refueling, would be more valuable. A combination may well be best. In making this evaluation, SACEUR should consider bases in Sweden and Finland, as the two countries have signed memoranda of understanding with NATO that authorize the use of their bases.²⁷ Finally, US air forces

See "Memorandum of Understanding (MOU) between the Government of the Kingdom of Sweden and Headquarters, Supreme Allied Commander Transformation," NATO Unclassified, http://natoutredningen.se/wp-content/ uploads/140904-HNS-MoU-Sweden-NATO.pdf; and "Memorandum of Understanding (MOU) between the Government of the Republic of Finland and Headquarters, Supreme Allied Commander Transformation," NATO Unclassified, https://www.eduskunta.fi/FI/lakiensaataminen/ valiokunnat/ulkoasiainvaliokunta/Documents/HNS_MOU FINLAND.pdf. It is also notable that Sweden and Finland have obligations to the three Baltic countries under the Lisbon treaty (Article 42.7), which provides, "If a Member State is the victim of armed aggression on its territory, the other Member States shall have towards it an obligation of aid and assistance by all the means in their power, in accordance with Article 51 of the United Nations Charter. This shall not prejudice the specific character of the security and defence policy of certain Member States. Commitments and cooperation in this area shall be consistent with commitments under the North Atlantic Treaty Organisation, which, for those States which are members of it, remains the foundation of their collective defence and the forum for its implementation." See "The Lisbon Treaty and Its Implications for CFSP/CSDP," European Parliament, http:// www.europarl.europa.eu/meetdocs/2009_2014/documents/ $a fet/dv/201/201009/20100928 lisbon treaty_cfsp-csdp_en.pdf.$



would very much be involved, and SACEUR should determine the necessary requirement, which (wearing his EUCOM hat) would also involve consideration by the United States of the mix of Air Force, Navy, and Marine air.

Fourth, while the United States has been reducing its forces in Europe since the end of the Cold War, the ERI effort is a reversal of that trend. However, the United States needs to consider the "next ERI" and what steps, if any, would be appropriate. Two that should be considered include the following:

- The United States should consider how to maximize the value of its Marine equipment in Norway. As noted, there is approximately enough there for a Marine Expeditionary Brigade's worth. It may well be that, rather than maintaining all the equipment in caves on land, it would be valuable to put some on roll-on, roll-off (RO-RO) ships, so that it could be available for faster reinforcement. The United States has used the RO-RO approach in the Middle East, and the greater flexibility might have significant benefits for defending the Baltics.
- Also, the United States maintains eleven Army combat aviation brigades in the active force, and approximately eight in the National Guard and reserves (and there are plans to transfer some of the

latter to the active force). Appropriately utilized, combat aviation brigades (especially hunter-killer teams, which marry reconnaissance aircraft with attack aircraft) can be valuable against an armor attack, so long as there are sufficient air defenses to avoid excessive lethality against the helicopters. SACEUR needs to develop the requirements for combat air brigades, and establish the necessary stationing and/or reinforcement plan for them.

Fifth, logistics and sustainability planning—for both Baltic direct defense and NATO forward presence and reinforcement—is key to defense and deterrence. The combat capabilities of the Baltic national, "in place," and early-arriving NATO forces must be sustained throughout what can be expected to be a mid-tohigh-intensity combat environment to create the time duration necessary for reinforcing NATO formations to arrive. This sustainability will necessarily take the form of replaceable combat systems, fuel, and ammunition. The same level of detailed planning and preparation must be undertaken for reinforcing NATO formations. The expected breadth and depth of sustainability packages needed for these forces can be substantial, but large pre-stock points and facilities are inherently more easily targeted, and thus more vulnerable. Sophisticated preparations must be made to counter both direct and indirect targeting of

sustainment packages, and include the consideration of mobile packages on a large scale. Committing to adequate sustainment packages has both defensive and deterrent value. Maintaining a high level of combat capability would stress an attacking force's momentum, through a higher-than-expected rate of attrition or combat loss, and a slowing of the advance rate. The failure of a Russian offensive to meet planimposed rates of advance can be expected to create tension in the Russian command-and-control function. Moreover, the greater the defensive capability generated, the greater the deterrent value caused by increased Russian leadership uncertainty with regard to attacking-force attrition levels and obstacles to achieving planned timelines for geopolitical objectives.

A final point: Should they choose to do so, nations

can move their forces prior to a NATO decision. In other theaters, such as South Korea, the United States has developed so-called "flexible deterrent options," and comparable actions could be undertaken by the United States and other reinforcing nations in the Baltics. Additionally, "to ensure that the Alliance takes advantage of indications and warnings that the Alliance may receive . . . it may not always be timely to wait for full consultation by the NAC. In order to ensure that forces are maximizing their deterrence factor, the Secretary General, in consultation with the SACEUR, should have the authority to move forces under designated circumstances. In

particular, a major buildup on the border of a [Baltic] nation could be a trigger authorizing such movements at the request of the affected nation. The NAC should consider and then create the particulars authorizing such movements."²⁸

Establish an Effective Counter Anti-Access/Area-Denial Capability

One of the important challenges for effective defense of the Baltics is dealing with Russia's anti-access and area-denial capabilities, which might preclude sufficient NATO forces from arriving in the area in a timely fashion. A2/AD has been raised as an important issue by multiple NATO commanders. For example,

General Frank Gorenc, who is dual-hatted as a NATO and US air commander, has stated, "Proliferation and the density of that kind of A2/AD environment is something that we're going to have to take into account" and "is clearly a method of making it very, very difficult to gain access and operate in certain areas." While the urgency of these warnings is warranted, NATO in fact possesses the necessary capabilities to deal with the A2/AD threat, so long as it is recognized that this is a wartime issue, and that such efforts will necessarily take place in the context of high-intensity conventional warfare.

To analyze the required responses to the A2/AD problem, it is useful—indeed necessary—to unpack the issue into its components. Russia's forces would have interdiction capability in the air, sea, land, space,

and cyber domains. In the air, the keys are combat aircraft and air defense: at sea, the most relevant capabilities are submarine warfare, some surface forces, and anti-ship cruise missiles; on land, there could be attacks on reinforcing forces by cruise missiles, and special forces could create obstacles including infrastructure destruction roadways and bridges; in space, there could be direct anti-satellite attacks, attacks on ground-based stations or jamming and various electronic attacks; and in cyber, there could be multiple efforts to take down networks or destrov or contaminate data. Such efforts could originate from Russia, including Kaliningrad, from naval forces in the north or Baltic Sea,

or from invading land forces. To put it another way, a Russian invasion into the Baltics would be a war, and NATO planning will necessarily have to deal effectively with such a high-intensity, multi-spectral effort.

NATO should task SACEUR with developing the necessary planning to effectively counter any Russian A2/AD actions. NATO already has the capability to make such planning effective, and can do so even more certainly if it takes certain steps:

First, as discussed above, NATO needs to ensure that it has the planning in place for sufficient combat air. Overall, NATO air forces are larger and more capable

ATLANTIC COUNCIL 9

NATO ...

possesses

the necessary

capabilities to

deal with the A2/

AD threat . . . that

... will necessarily

take place in

the context of

high-intensity

conventional

warfare.

²⁸ Kramer, Binnendijk, and Hamilton, *NATO's New Strategy*, op. cit., p. 10.

²⁹ Rick Gladstone, "Air Force General Says Russia Missile Defense 'Very Serious," *New York Times*, January 11, 2016, http://www.nytimes.com/2016/01/12/world/europe/air-force-general-says-russia-missile-defense-very-serious.html? r=0.

than Russian forces, and the key is to bring that capability to bear as promptly as required. Planning for basing, reinforcement, and required munitions is necessary but entirely doable, and NATO should be able to achieve air superiority. One important question is how NATO should seek to degrade, and eventually destroy, the functionality of the air bases from which Russian planes would fly. While that may well be a component of SACEUR's battle plan, political leaders should understand that a combination of air, missile, and cyber attacks might be most productive. Prior analysis and discussion at the North Atlantic Council will be important to allow for appropriate political-military decisions prior to, and in the event of, actual combat.

Second, NATO needs to organize its maritime forces to ensure sea control for reinforcement via the Baltic Sea. A valuable first step would be for the NATO countries surrounding the Baltic to create a maritime framework that would allow them to work together, improving their interoperability and providing a much-enhanced combined capability, which could then operate under NATO command in the event of conflict. Sweden and Finland could be invited to join. The framework nations should develop a robust response to ensure that the Alliance can provide sea control, sea denial, and the ability to undertake amphibious landings to reinforce allies in case of a crisis in the region. This will mean that regional maritime forces should strengthen and sustain a range of capabilities, including maritime intelligence, surveillance, and reconnaissance; anti-submarine warfare; anti-ship mines; mine hunting; and mine warfare.³⁰

Third, NATO needs to develop the infrastructure and host-nation support for the required land forces, including for reinforcement routes to the Baltics. Protection of such routes again would be part of SACEUR planning, and ensuring sufficient capacity—including redundancy—would be an important consideration. Having funds to accomplish this promptly would be important, and NATO needs to recognize the criticality of such more mundane requirements for an effective collective defense.

Fourth, space and cyber assets are found within the forces and assets of both NATO and member nations. On the cyber side, NATO and its nations must have in place, well before a conflict, appropriate measures for the defense and resiliency of key networks—most importantly, the military, telecommunications, and electric grids. NATO should undertake a program of not only improving its own networks, but also utilizing

cyber framework nations to help less-capable nations have the required cyber capabilities in place.³¹

Undertake Critical Planning with Respect to Key Military Measures

An effective defense of the Baltics will also require NATO to think through key elements of a successful military campaign. A number of the steps noted below raise important geopolitical issues that need to be reviewed and determined by the NAC. Three such aspects of a campaign include

- planning for obstacles and barriers to block Russian movement;
- operational cyber planning, including cyber offense as part of an integrated campaign (and, as noted above, to provide defense and resilience to critical infrastructures, particularly the military, telecommunications, and the electric grid); and
- planning for operational effects against Russian military targets within Russia, including Kaliningrad.

First, while obstacles and barriers are certainly insufficient, in and of themselves, to offset a significant force ratio and/or heavy force advantage, such efforts can be very useful where properly utilized. Channeling opposing forces allows for better use of scarce defense assets, and slowing forces allows for greater impact of air, artillery, and other standoff weaponry. One issue that the Baltic nations and NATO will need to consider is the value of obstacles, possibly including smart mines. In South Korea, both South Korea and the United States use mines as part of the deterrent/ defense posture.³² While the theaters are not the same, mining is an effective obstacle (most valuable when used in conjunction with defensive fires). Other types of barriers and obstacles exist, and the military needs to analyze how to incorporate such capabilities into an effective defense. The Baltic nations, of course, would have to decide in the first instance whether and what approaches to obstacles they are willing to undertake. The NAC would also have to review such an approach. If mines were to be used, this would require a change in connection with the international landmine treaty, and would have important geopolitical implications.

³⁰ Franklin D. Kramer and Magnus Nordenman, *A Maritime Framework for the Baltic Sea Region* (Washington, DC: Atlantic Council, 2016), http://www.atlanticcouncil.org/publications/issue-briefs/a-maritime-framework-for-the-baltic-sea-region.

³¹ Cyber framework nations are discussed in the companion paper, "Cyber, Extended Deterrence, and NATO." The essential point is that nations such as the United States or the UK, with highly developed cyber capabilities, should help other NATO nations generate effective cyber resilience.

David Alexander, "US Says Will Abide by Mine Ban Treaty Except on Korean Peninsula," *Reuters*, September 23, 2014, http://www.reuters.com/article/us-usa-defense-landmines-idUSKCNOHI1U920140923.

Second, cyber will be important as part of an integrated military effort, including the use of cyber on the offense. NATO needs to develop a cyberoffensive doctrine, both as part of an integrated military capability and to help ensure the defense and resilience of critical national infrastructure networks. There are many issues—such as release authority and collateral damage considerations—that NATO needs to consider regarding offensive cyber, but NATO has dealt with equally or more sensitive issues in the nuclear arena. Moreover, it should be recognized that cyber has many of the characteristics of electronic warfare. NATO has long had an electronic-warfare doctrine, and the ability to employ such capabilities as necessary in a conflict. NATO should put in place the necessary planning for offensive use of cyber, and should use the Cyber Defence Committee (or an

upgrade) as it does the Nuclear Planning Committee, to organize and recommend appropriate such issues to the NAC.

Third, it should be apparent that once a military conflict starts a proper defense will require the capacity to target military activities emanating from Russia, including Kaliningrad. examples may make the point. In terms of A2/AD, the air-defense forces located in Kaliningrad will pose a significant threat to NATO forces. Similarly, as part of an invasion of the Baltics, Russian combat air would fly from bases in Russia. There are multiple ways to respond to such actions. For example, for Kaliningrad,

possibilities include the use of artillery, cruise missiles, cyber and electronic warfare, special forces, air-toground weapons, land forces, or a combination. The military planning should be done by the SACEUR, but the key point for political leaders is that a successful military effort would require actions taken against Russian forces inside Russian borders. During the Cold War, NATO developed an "Air-Land" approach that included targeting the "second echelon." Without suggesting that the particulars of an effective defense of the Baltics would be precisely the same, it should be apparent that, if Russia starts a conflict, it cannot expect sanctuary for its military efforts while it is attacking inside a NATO country. This is a key issue that the NAC should consider in advance.

Hybrid War and NATO Resilience Support Teams³³

It is hard to know how a war in the Baltics might actually start, but the hybrid conflict actions undertaken by Russia in Ukraine, Georgia, and Estonia all are suggestive. In each case, Russia utilized actions below the level of full-out conventional conflict. If Russia decided to seek geopolitical objectives in the Baltics, it might begin hybrid efforts as the first step to determine the effectiveness of NATO resistance. A variety of steps could be undertaken, sequentially or in combination. Agitators could be activated and/or inserted into areas with Russian minorities demanding greater rights. Information operations could be enhanced, through outlets such as RT or other channels,

> inciting populations in the Baltics and propagandizing those in other NATO countries. Cyberattacks on critical infrastructures—including government and military facilities, telecommunications, and electric grids-could multiply. Special operations teams could begin to infiltrate, both with critical infrastructure as targets and to support agitators and efforts at

> violent incitement.

Moving from a hybrid situation to a conventional conflict is far less a step than from no conflict to a bolt-from-the-blue attack. Hybrid actions offer the potential for escalation and miscalculation. Accordingly, NATO has a great interest in deterring such actions and, if they do occur, in resolving

them short of war. Once a conflict starts, there can be no certainty as to how it will develop. But preparation and development of capabilities to respond to hybrid actions could help control and limit their effectiveness, as well as the potential for escalation to conventional conflict. NATO has stated that it has developed a hybrid strategy, though that strategy has not been made public. The Secretary General has, however, publicly stated,

ATLANTIC COUNCIL 11

NATO needs to

develop a cyber-

offensive doctrine.

both as part of an

integrated military

capability and

to help ensure

the defense and

resilience of

critical national

infrastructure

networks.

³³ This section draws on Kramer, Binnendijk, and Hamilton, NATO's New Strategy, op. cit. Subsequent articles dealing with Resilience Support Teams include Hans Binnendijk, Daniel S. Hamilton, and Charles L. Barry, Alliance Revitalized: NATO for a New Era, Center for Transatlantic Relations, School of Advanced International Studies, Johns Hopkins University, 2016, and Julianne Smith and Jerry Hendrix, Assured Resolve: Testing Possible Challenges to Baltic Security, Center for a New American Security, 2016.

Enhanced intelligence and surveillance is a key part of NATO's response to hybrid threats, from the south and from the east. We now have a detailed implementation plan for our hybrid strategy. NATO is improving its ability to identify, recognise and attribute hybrid actions and to respond quickly. We also took steps to increase our Allies' resilience in areas that are vital in any crisis. By setting baseline requirements in areas such as: continuity of government; energy supplies; food and water resources; telecoms and cyber networks; and transportation systems. Resilience is primarily a national responsibility. But both NATO and the European Union have a role in providing tools and advice in specific areas. So to be more effective in countering hybrid threats, we are committed to working even more closely with the European Union.³⁴

The following discussion proposes four specifics to be incorporated into NATO's hybrid strategy. As noted, if adopted, they offer the prospect of controlling hybrid conflict and deterring conventional war.

First, both at the NATO headquarters and under the two major commanders, there should be sections and/or staff devoted to the analysis and planning for hybrid warfare. At NATO headquarters, there will be a multiplicity of policy issues to be evaluated. Allied Command Operations should handle operational planning (which would then devolve to lower-level organizations). Allied Command Transformation should carry out innovative analysis and experimentation to support effective policies and operations.

Second, NATO needs to create an operating capability, called Resilience Support Teams, to assist nations in dealing with hybrid conflict. As has previously been proposed in *NATO's New Strategy*,³⁵ Resilience Support Teams established by NATO could offer support to NATO member national authorities, particularly "in such areas of emergency preparedness including assessments; intelligence sharing, support and analysis; border control; assistance to police and military in incident management including containing riots and other domestic disturbances; helping effectuate cross-border arrangements with other NATO members; providing protection for key critical infrastructures including energy; and, in the cyber

arena, support to and enhancement of NATO's Cyber Response Team. . . . In certain countries, Resilience Support Teams could be collocated with NATO Force Integration Units, and help national responses with NATO military activities, especially special operations activities."³⁶

RSTs should be relatively small, and should be designed to coordinate with national authorities. The team can include "capabilities that . . . can apply toward hybrid threats." The structure of the team could change over time, potentially with sub-elements deployed at different times and for different periods, all subject to the needs of the requesting country. The teams themselves could also be different for different countries.

Third, in order to make RSTs most effective, each nation should have a national "Resilience Working Group," which would focus on the ability to integrate national resources to be able to respond to a hybrid scenario, and to provide a key point of contact for outside assistance. Responding effectively to hybrid conflict will require political and other civil efforts, along with military and nonmilitary security measures. "To do so effectively, however, requires coordination among multiple institutions."38 Establishing national working group "is necessary to ensure the most effective coordination. Indeed, it is highly improbable that the proposed NATO Resilience Support Teams could be effective unless there is a useful national organization available to support its efforts. Coordination, integration, and exercises at the national level will make outside support from NATO most useful."39 Finally, in addition to their national working groups, the Baltic nations should coordinate their efforts, as any Russian activity would likely take place across national borders.

Fourth, NATO and its member states need to bolster coordination with the private sector, as previously recommended:

"The most important reason why private entities need to be incorporated is their operational capabilities. In the Cold War era, governments were the key actors and also the key targets. Now, governments are still key actors and targets, but so are private entities. Private entities operate key elements of the security structure. In cyber, the networks

³⁴ Jens Stoltenberg, "Press Conference by NATO Secretary General Jens Stoltenberg," speech delivered following the meeting of the North Atlantic Council," February 11, 2016, http://www.nato.int/cps/en/natohq/opinions_127972. htm?selectedLocale=en.

³⁵ Kramer, Binnendijk, and Hamilton, NATO's New Strategy, op. cit.

³⁶ Hans Binnendijk, Daniel S. Hamilton, and Charles L. Barry, Alliance Revitalized, op. cit., p. xxxvii-xxxviii.

³⁷ Julianne Smith and Jerry Hendrix, Assured Resolve, op. cit., p. 14.

³⁸ Kramer, Binnendijk, and Hamilton, NATO's New Strategy, op. cit.

³⁹ Ibid



are operated by private entities, which have created key elements such as the underlying operating systems and maintain critical data. Accordingly, a mechanism is needed that joins the public, including the military, with the private. The key firms would likely include the telecommunications companies, other key structural firms, such as those providing operating systems and other critical capabilities, and the key data holding firms. Specific areas of focus might be the requirements to ensure that the electric grid would operate satisfactorily in the event of a conflict or that significant financial institutions would be able to withstand a determined attack. NATO should make sure that all can work together in an effective security posture."40

There are numerous mechanisms to achieve effective public-private operational integration. Most important is to recognize that effective military action entails significant dependence on private infrastructure. Accordingly, both at NATO and in nations, there needs to be established operational working arrangements,

which can coordinate actions prior to, and in the event of, conflict.

CONCLUSION

The defense of the Baltics is a challenging proposition, but one well within the capabilities of the NATO nations. The steps outlined above would allow for such a defense in the face of Russian hybrid and/or conventional aggression. By taking such steps, NATO would not only ensure its military effectiveness, but increase deterrence, and therefore contribute significantly to stability in Europe.

Franklin D. Kramer is a Distinguished Fellow and Board Member at the Atlantic Council, and a former Assistant Secretary of Defense.

General (Ret.) Bantz J. Craddock is a former NATO Supreme Allied Commander Europe, and a Board Member at the Atlantic Council.

⁴⁰ Kramer, Binnendijk, and Hamilton, *NATO's New Strategy*, op. cit., p. 13.

Atlantic Council Board of Directors

CHAIRMAN

*Jon M. Huntsman, Jr.

CHAIRMAN EMERITUS, INTERNATIONAL ADVISORY BOARD

Brent Scowcroft

PRESIDENT AND CEO

*Frederick Kempe

EXECUTIVE VICE CHAIRS

*Adrienne Arsht

*Stephen J. Hadley

VICE CHAIRS

*Robert J. Abernethy

*Richard Edelman

*C. Boyden Gray

*George Lund

*Virginia A. Mulberger

*W. DeVier Pierson

*John Studzinski

TREASURER

*Brian C. McK. Henderson

SECRETARY

*Walter B. Slocombe

DIRECTORS

Stéphane Abrial Odeh Aburdene Peter Ackerman Timothy D. Adams Bertrand-Marc Allen John R. Allen Michael Andersson Michael S. Ansari Richard L. Armitage David D. Aufhauser Elizabeth F. Bagley Peter Bass *Rafic A. Bizri Dennis C. Blair *Thomas L. Blair Myron Brilliant Esther Brimmer

*R. Nicholas Burns

William J. Burns

*Richard R. Burt Michael Calvey James E. Cartwright John E. Chapoton Ahmed Charai Sandra Charles Melanie Chen George Chopivsky Wesley K. Clark David W. Craig *Ralph D. Crosby, Jr. Nelson W. Cunningham Ivo H. Daalder *Paula J. Dobriansky Christopher J. Dodd Conrado Dornier Thomas J. Egan, Jr. *Stuart E. Eizenstat Thomas R. Eldridge Julie Finley Lawrence P. Fisher, II Alan H. Fleischmann *Ronald M. Freeman Laurie S. Fulton Courtney Geduldig *Robert S. Gelbard Thomas H. Glocer *Sherri W. Goodman Mikael Hagström Ian Hague Amir A. Handjani John D. Harris, II Frank Haun Michael V. Havden Annette Heuser *Karl V. Hopkins Robert D. Hormats Miroslav Hornak *Mary L. Howell Wolfgang F. Ischinger Reuben Jeffery, III *James L. Jones, Jr.

George A. Joulwan

Stephen R. Kappes

Lawrence S. Kanarek

Maria Pica Karp Sean Kevelighan Zalmay M. Khalilzad Robert M. Kimmitt Henry A. Kissinger Franklin D. Kramer Philip Lader *Richard L. Lawson *Jan M. Lodal Jane Holl Lute William J. Lynn Izzat Majeed Wendy W. Makins Mian M. Mansha Gerardo Mato William E. Mayer T. Allan McArtor Eric D.K. Melby Franklin C. Miller James N. Miller *Judith A. Miller *Alexander V. Mirtchev Karl Moor Michael J. Morell Georgette Mosbacher Steve C. Nicandros Thomas R. Nides Franco Nuschese Joseph S. Nye Hilda Ochoa-Brillembourg Sean C. O'Keefe Ahmet M. Oren *Ana I. Palacio Carlos Pascual Alan Pellegrini David H. Petraeus Thomas R. Pickering Daniel B. Poneman Daniel M. Price Arnold L. Punaro Robert Rangel Thomas J. Ridge

Charles O. Rossotti

Robert O. Rowland

Harry Sachinis John P. Schmitz **Brent Scowcroft** Rajiv Shah Alan J. Spence James G. Stavridis Richard J.A. Steele *Paula Stern Robert J. Stevens John S. Tanner *Ellen O. Tauscher Karen Tramontano Clyde C. Tuggle Paul Twomey Melanne Verveer Enzo Viscusi Charles F. Wald Jay S. Walker Michael F. Walsh Mark R. Warner Maciei Witucki Neal S. Wolin Mary C. Yates Dov S. Zakheim

HONORARY DIRECTORS

David C. Acheson
Madeleine K. Albright
James A. Baker, III
Harold Brown
Frank C. Carlucci, III
Robert M. Gates
Michael G. Mullen
Leon E. Panetta
William J. Perry
Colin L. Powell
Condoleezza Rice
Edward L. Rowny
George P. Shultz
John W. Warner
William H. Webster

*Executive Committee Members

List as of May 4, 2016

Atlantic Council

The Atlantic Council is a nonpartisan organization that promotes constructive US leadership and engagement in international affairs based on the central role of the Atlantic community in meeting today's global challenges.

© 2016 The Atlantic Council of the United States. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means without permission in writing from the Atlantic Council, except in the case of brief quotations in news articles, critical articles, or reviews. Please direct inquiries to:

Atlantic Council

1030 15th Street, NW, 12th Floor, Washington, DC 20005

(202) 463-7226, www.AtlanticCouncil.org