

ISSUE BRIEF

Toward Effective Air Defense in Northern Europe

FEBRUARY 2018 GEN. PHILIP M. BREEDLOVE

Northern Europe, particularly the Baltic Sea region, is at the forefront of a new competition between NATO and a revanchist Russia capable and willing to use military force to alter the European security order. Since 2014, both the United States and NATO have responded to the changing security environment in northern Europe with a bolstered exercise program more focused on high-end warfighting and the introduction of NATO's enhanced Forward Presence (eFP) in Estonia, Latvia, Lithuania, and Poland. These efforts provide a foundation, and the beginnings of a deterrence force, for NATO and the region's continued work to build effective and sustainable defense and deterrence in northern Europe. They are, however, in themselves insufficient without additional enablers, sufficient forward logistics, robust command and control, reinforcement arrangements, and planning and capabilities for the air and maritime domain. In this regard, establishing integrated and robust air defense for the Baltic Sea region is the next logical step in protecting NATO's forward presence, pre-positioned equipment, and the United States' and NATO's ability to access and operate in the broader region during a potential crisis or conflict.

The Scowcroft Center for Strategy and Security brings together top policymakers, government and military officials, business leaders, and experts from Europe and North America to share insights, strengthen cooperation, and develop common approaches to key transatlantic security challenges. This issue brief was produced in partnership with the Ministry of Defense of Lithuania, and continues the Transatlantic Security Initiative's longstanding focus on security in northern Europe and in particular the Baltic Sea region.

Effective air defense in northern Europe must start with a thick sensor network and then rely on both ground-based assets and aviation, along with robust command and control, all exercised in a joint setting. No single nation is able to provide all of these elements by itself; therefore, building effective and integrated air defense must be both a NATO and regional effort, supported by contributions from Alliance members. In this context, the Baltic States face a particular challenge given their geography and role as frontline states, and also because of the modest defense resources available and the need to balance investments among many important priorities in building their national defense capacities. However, with an approach that is integrated with the air defense efforts currently underway in the region, and within NATO, the Baltic States could make valuable contributions to their own defense and to the Alliance's ability to reinforce the periphery if required.

The Threat in and from the Air Domain

The air domain is contested in ways that the United States and its NATO allies have not seen since the end of the Cold War. After nearly three

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decades during which NATO air power enjoyed air supremacy and could operate in relative safety, and NATO member forces on the ground did not have to be concerned with attacks from the air, the pendulum is swinging in the other direction. Potential adversaries now field modern and sophisticated air forces, along with long-range strike weapons that can be delivered by either air or ground platforms. As NATO once again focuses on collective defense and deterrence for its members, particularly in northern Europe, the Alliance must once again tackle airborne threats and to advance NATO’s ability to operate in the air domain. While this is an Alliance-wide concern, it has particular urgency for northern Europe and the Baltic States.

A Russian attack on the Baltic States would very likely include an initial phase of major air and long-range strike operations to cut off NATO and attack national forces already assembled in the region, command and control nodes, infrastructure needed to support NATO’s reinforcement efforts, and to provide Russian ground units with close air support. Indeed, current Russian doctrine emphasizes that “strategic objectives can be achieved with mass aerospace strikes early in a conflict with victory achieved without the seizure and occupation of territory by forces.”¹ This type of effort was rehearsed close to the Baltic region during the Russian exercise Zapad 2017 in September. Russia’s ability to conduct sustained air operations has also been demonstrated in Syria, where its air power has been used to great effect.

Russia’s air power options are robust. It maintains considerable air power assets near the Baltic Sea region, including Su-27 and MiG-31 fighters, Tu-22 bombers,

¹ Defense Intelligence Agency, *Russia Military Power: Building a Military to Support Great Power Aspirations* (Washington, DC: Defense Department, 2017), 33.

and Su-34 fighter bombers. Air power is, of course, inherently strategically mobile, so additional aviation assets could be quickly brought to bear in the region during a crisis. In addition, Russia maintains Iskander ballistic missile batteries with considerable range and striking power, which could be used to attack basing areas, assembled forces and command and control nodes, or, through intimidation, to deter NATO from acting during a crisis. Additionally, Russia places great emphasis on the use of cruise missiles, such as Kalibr, which have considerable reach, good precision, and can be fired from air, sea, or ground platforms. Those missiles are already present in the Kaliningrad enclave. From the long-term perspective, Russia continues to renew its air power capabilities with the recent introduction of the Su-35, and the anticipated arrival of the T-50 PAK, Russia’s first fifth-generation fighter.

Along with long-range strike systems and manned aviation, NATO and the northern European nations must consider the emerging threats from unmanned aerial systems, whether large or small. These types of systems are being used by Russia and are a priority in terms of further development. Unmanned systems have been used to provide intelligence, surveillance, and reconnaissance for strikes and battle damage assessments in both Syria and Ukraine. Russia is also fielding increasingly capable electronic warfare systems, which were put on display during the most recent Zapad exercise.

Russia’s growing anti-access/area-denial (A2/AD) network in the Baltic Sea region is also part of NATO’s air defense problem. Russia’s A2/AD network includes long-range surface-to-air missile systems, such as the S-400, with associated sensors and command and control. The coverage provided by S-400 and similar systems stretches into the airspace of NATO allies and partners in the Baltic Sea region, which would challenge NATO’s ability to achieve air superiority, let alone air supremacy, over its Baltic members.

In addition to the wartime challenge of Russian aviation and long-range strike systems, the Baltic Sea region has become a focal point for increased Russian air activity in peacetime. Since 2014, there have been many close encounters between NATO and Russian aircraft in the region, where Russia violates aviation safety protocols. At times Russian aircraft have flown dangerously close to commercial aircraft flying in the area. Russian aircraft also continue to practice high-



As part of NATO’s Baltic Air Policing mission, two American F-15s fly over Lithuania during a training mission, April 2014. Photo credit: US Air Force/Flickr.

profile strike exercises against targets in both Sweden and Denmark.

Current and Future Posture and Capabilities in the Region

While the Baltic Sea region consists of a number of small and medium-sized states, it is not without capabilities in terms of air power and air defense, with additional capabilities expected in the coming years. NATO member Poland and NATO partner Sweden are both planning to introduce the Patriot surface-to-air missile system, which adds a medium-range air defense capability to the region, and provides some capacity to contend with the ballistic missile threat as well. Denmark has plans to introduce the F-35 into service, while both Poland and Germany are considering options for their next generation of fighter jets that would be able to operate in a contested environment.

The Baltic States have also made national investments in modest air defense capabilities. Lithuania recently started acquisition of the mid-range air defense system

NASAMS (National Advanced Surface-to-Air Missile System) while Latvia invested in the short-range and portable Stinger system. Estonia received the first batch of the Mistral short-range missile system in 2015. In addition, in 2017, allied ground-based air defense systems, or components of them, have been deployed to the Baltic states for exercises, including a US Patriot battery in Lithuania, and in Sweden during the exercise Aurora 17.

NATO air power has been present in the Baltic region since 2004, when Estonia, Latvia, and Lithuania joined the Alliance. Intended to guard the sovereignty of Baltic airspace, the air policing mission today is flown out of two air bases in Lithuania and Estonia, and usually includes eight jets from NATO-member air forces. Since 2014 and the annexation of Crimea, the Air Policing effort has at times been expanded with as many as sixteen aircraft. The United States has also participated in this effort, either as part of a planned rotation or in response to increased Russian activities in the broader region. Outside of the NATO Air Policing



A Russian Sukhoi Su-35 jet fighter in flight, August 2009. *Photo credit: Aleksandr Markin/Wikimedia.*

effort, the United States has also had a more frequent presence in the Baltic Sea region, occasionally with F-35s.

From a broader perspective, it is important to note that the European Phased Adaptive Approach (EPAA) is proceeding apace, including with installations in Poland. While intended for the threat of ballistic missiles from rogue nations, the system also has applicability to a broader range of challenges.

This renewed focus on air defense capabilities and capacities in northern Europe is happening within a broader context of increased interest in air defense across NATO. The Black Sea region is facing similar challenges to those found in the Baltic Sea region, and Romania, for example, recently announced the procurement of its own Patriot system.

The Way Ahead for Air Defense in Northern Europe

Air defense currently constitutes a weak link in the emerging defense and deterrence construct in northern Europe and the Baltic Sea region. The Russian challenge, from and through the air, is very real and continues to evolve. New capabilities, in terms of manned and unmanned systems as well as precision strike systems, will make this challenge tougher over time. NATO and the region, however, are not without capabilities, capacities, and possibilities that could be combined into a coherent air defense construct for northern Europe.

To meet the challenge, northern Europe requires interoperable and integrated systems that together offer a layered air defense capability. Some of these components can be delivered by EPAA or by the national capabilities of major NATO allies, but there are important roles that the Baltic States can play as well. This is increasingly possible given the growing availability of defense resources in Lithuania, Latvia,

and Estonia, as well as across the broader region. By 2020, the Baltic region is expected to spend some \$2 billion on defense, with a significant amount going toward investments in new capabilities.

Given these strategic and resource considerations, the Baltic States and NATO should consider the following recommendations:

Alliance-Wide

Transition the NATO Air Policing Mission into an Air Defense Mission. NATO's Air Policing mission over the Baltic States has served the region and NATO well since 2004. However, given the new circumstances in the region and NATO's return to collective defense and deterrence, it is now time to transition this effort to an air defense mission instead. This would include the increased presence of NATO-member fighter jets and airborne surveillance assets, bolstered command and control functions, and new rules of engagement for the units deployed in the mission to deter and defend against aggression in the region.

Add an Air Defense Element to the eFP Groups. Many of the nations leading and participating in the eFP groups in Estonia, Latvia, Lithuania, and Poland have their own national surface-based air defense capabilities, ranging from short to long range assets. These national capabilities could be leveraged for exercises in the region, and could initially build familiarity and interoperability with the operational environment.

Consider the Baltic Sea Maritime Domain for Air Defense. The Baltic States themselves offer little in the way of strategic depth. Sea-based air defense assets in the Baltic Sea would offer an opportunity for deepening the air defense network in the region during a crisis. This would require exercises to ensure integration and interoperability, as well as a forward naval presence on a rotational basis in the Baltic Sea by NATO-member sea-based air defense assets.

Baltic Cooperation and Integration

Create a Regional Approach for Baltic Air Defense. The Baltic States are small nations with limited means. But given the positive trends in defense spending in the region, the aggregate availability of resources for defense investment is considerable. A regional approach should be leveraged that would pool the available resources to procure larger and more capable air defense systems, including medium-range systems, for the region. A regional approach to air defense could

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be based along Lithuania's budding medium-range air defense capability, which was recently acquired. A Baltic initiative on air defense should be initiated with a scoping exercise on what is affordable and effective given available resources and the capabilities already available or being introduced in the broader Baltic Sea region. Polish-Baltic cooperation should also be explored, as well as a US role to facilitate the cooperation.

Contribute to Air Domain Awareness. As part of a joint Baltic approach to air defense, Estonia, Latvia, and Lithuania should consider how they can contribute to better air domain awareness, which is key to effective air defense. Adding additional sensors in the Baltic States, and sharing the resulting air picture with NATO and other nations in the broader region, would do much to help thicken the sensor network in the region, NATO members could also contribute additional sea- and air-based defenses.

Link NATO Air Defense Mission to Baltic Ground-Based Air Defense. Effective air defense for the Baltic States would require closer integration between NATO's Air Defense mission and the ground-based air defense systems currently in the region. This could be done by linking the sensors supporting national air defense systems with the command and control nodes supporting the Baltic Air Defense mission.

Consider a Baltic Contribution to EPAA. Building national capabilities for defense against ballistic missiles would be cost-prohibitive for the Baltic States, even when considering the increased availability of defense resources in Estonia, Latvia, and Lithuania. However, the Baltic States should consider a national contribution to the overall EPAA effort currently underway. Baltic sensor systems could contribute to the EPAA sensor network to enhance early warning capacities, for example. EPAA sensors could also contribute information to a Baltic air defense network.

Conclusion and the US Role

NATO has taken important steps to increase defense and deterrence in northern Europe, but more work remains to be done. One of the most urgent requirements is integrated air defense, an effort that will require investments at the national and NATO levels. This will necessitate close coordination to ensure that sensors, shooters, and command and control systems are available and aligned to provide layered air defense. The United States has a role to play as a leader of the transatlantic alliance, with air defense capabilities and capacities that are unrivaled. The United States can also help energize regional cooperation through participation in exercises, planning, and capabilities development in the region. Early US leadership in

regional exercises is key to catalyzing investments and cooperation, which could later be transitioned to NATO.

The air defense challenge in northern Europe, particularly in the Baltic States, is considerable. But it can be overcome through careful and coordinated investments and cooperation. This will require political will, resources, but most importantly strong leadership.

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